## SET -C PAPER 9

## "Financial Services & Capital Markets"

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Disclaimer: - All the important topics are highlighted in the ICAI Module on the basis of my memory and discussion with some other people, it is also advised to go through whole module once then focus on the highlighted topics. I also wrote "exam" adjacent to the topics which came into my exam.

ALL THE BEST!!

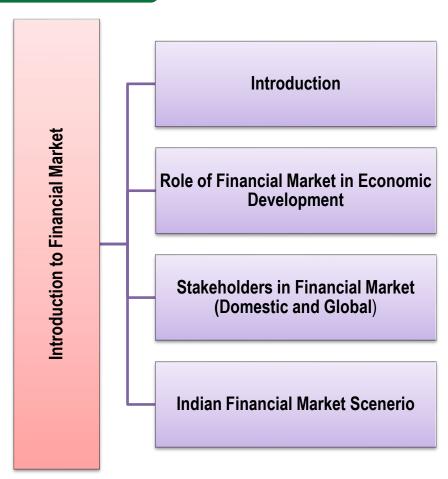
# INTRODUCTION TO FINANCIAL MARKETS

#### **LEARNING OUTCOMES**

#### After going through the chapter student shall be able to understand:

- Introduction to Financial Markets
- □ Role of Financial Market in Economic Development of a country
- □ Stakeholders in Financial Market (Domestic and Global)
- Indian Financial Market Scenario

### CHAPTER OVERVIEW []





#### 1. INTRODUCTION TO FINANCIAL MARKETS



Financial markets are a marketplace that provides an avenue for the sale and purchase of financial assets such as equity stocks, bonds, foreign exchange, commodities, derivatives, etc.

#### 1.1 Major types of financial markets

#### 1.1.1 Stock market

The stock market is the market for trading in equity stocks of companies. Typically, dividend yield in stocks is on the lower side, as dividend is declared as a percentage of the face value of the stock whereas the price in the secondary market runs up. That is, as a percentage of market price, the return to the investor is on the lower side. Gains come from capital price appreciation in the secondary market. This market is volatile, as the price in the secondary market reflects expectations going forward on the economy and corporate earnings.

#### 1.1.2 Bond market

The bond market offers an avenue for companies and the government to raise money to finance a project or a deficit, with a defined repayment timeline. In a bond market, investors buy bonds from a company, and the company returns the amount of the bonds on the stipulated date, along with the coupon or interest payment as agreed.

#### 1.1.3 Commodities market

The commodities market is a market where traders and investors buy and sell natural resources or commodities such as corn, oil, pulses, meat, gold, etc. Prices for goods that will be delivered at a specific future date are determined in the present on the commodities future market.

#### 1.1.4 Currency Markets

The currency market is a market for traders of currencies. It is a boon to the importers and exports and others having foreign currency exposure. It provides the opportunity for participants to hedge their currency exposures, provides depth to the market, making cross currency transactions and hedging a reality.

#### 1.1.5 Money Market

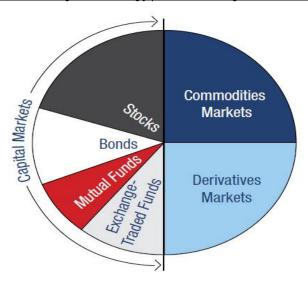
- It is a market for short term source of funds.
- Money market instruments have maturity of less than 1 year. exam.
- The basic objective is to manage liquidity in the economy.
- The RBI along with other commercial banks are the key players in this market.
- It plays an important part in controlling inflation.

#### 1.1.6 Derivatives market

This market deals in derivatives or contracts whose value is based on the market value of the asset being traded, called the underlying. The commodities futures mentioned above are an example of a derivative. Currency and equity derivatives are popular. Further, according to one study, India and China top the world's commodity market.



Source: https://www.accountingfoundation.org/jsp/Foundation/Page/FAFSectionPage&cid=1351027541272



#### 1.2 Importance of Financial Markets

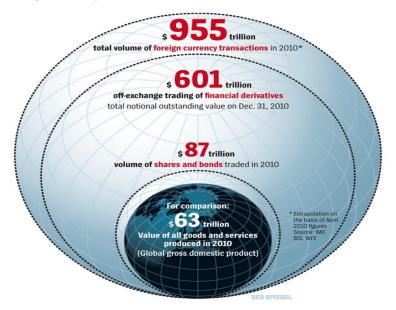
There are many social benefits that financial markets facilitate, including:

- They provide individuals, companies, governments, and quasi-government organizations access to capital.
- People with surplus funds for investment get channels for investment and are assured of fair treatment as there is a regulator i.e., transfer of funds from surplus units to deficit units. For instance, people with extra money access the stock market despite being aware of the risk inherent in it as they look for higher return and assured of transparency in the market because of the presence of SEBI.

Financial markets create jobs as there are many people involved in direct and indirect activities. For instance, the involvement of the brokers, underwriters, merchant bankers, custodians, depositories etc. in the financial markets.

#### 1.3 Size of the Global Financial Market

The biggest markets are those of derivatives, though conventionally we tend to think of Equity or Bond markets as large. Globally, derivatives markets are much more developed.



Source: Google to https://topforeignstocks.com/2011/08/23/how-big-is-the-global-financial-industry/

The chart above shows that the notional amount of financial derivatives outstanding is much higher than the traded volume of stocks and bonds.



#### 2. ROLE OF FINANCIAL MARKET IN ECONOMIC **DEVELOPMENT OF A COUNTRY**

For economic development, a country needs capital, and the capital markets discussed above e.g., equities, bonds, etc. channelize those resources. Through the financial market or capital market system, funds flow from those who have surplus funds to those who have a shortage of funds, either by direct, market-based financing or by indirect, bank-based finance. Without a properly functioning stock market, price discovery of corporations would not happen and resource mobilization through IPOs would be hampered. How a financial market helps to boost an economic of a country has been highlighted in the following points:

- The financial market is a mode of channelizing savings to investments.
- It helps in creating more capital for the industries.
- Which in turn creates more jobs because of the increase in production.
- More jobs increase the standard of living which leads to more demand for goods and services.
- Which further leads to more capex and the process goes on.
- Further this process helps generate more taxes for the Government.
- More tax collection facilitates more spending by the Government.
- Which in turn creates more jobs and more demand again.
- And the process goes on.

#### 2.1 Functions of Financial Markets exam

The role of financial markets in the success and strength of an economy is immense. Some important functions of financial markets are:

#### ✓ Puts savings into more productive use

Money in the savings account should be put to productive use. Financial institutions like banks loan it out to individuals and companies that need it for say home loan, study loan, business purposes, big projects, etc. Further, savings as such do not have any meaning; it is investment that puts it to productive use.

#### ✓ Determines the price of securities

Once a security is listed, buyers and sellers trade in it, and the traded price reflects the prospects of the company whose instruments are being traded. This is called price discovery. Prices of securities are determined in financial markets, which is an important function.

#### ✓ Makes financial assets liquid

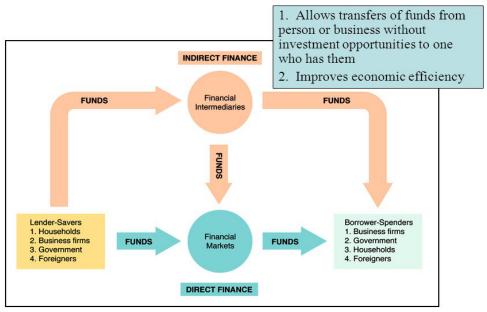
Buyers and sellers can decide to trade their securities anytime, provided there is a counterpart. Financial markets provide this avenue, and that creates liquidity in the security. This imparts liquidity to investors and incentivizes them to invest.

#### ✓ Lowers the cost of transactions

In financial markets, various types of information regarding securities can be acquired without the need to spend. The Exchanges and market participant associations disseminate relevant

information. The companies also can disseminate information, but they would put forth only what they want to propagate, not what is useful for investors.

#### **Function of Financial Markets**



Source: Google to https://slideplayer.com/slide/5737595/

Financial markets facilitate the flow of savings and investment in the economy for generation of capital and the production of goods and services.

#### 2.2 The linkages in financial flows

As we see in the diagram above, households save and invest through financial institutions. Apart from households, the corporate or business sectors also may have surplus from time to time, which is invested through financial institutions. For economic development of a country, the business sector and the government need resources, which are mobilized by the financial institutions and markets? The government may need to borrow from the market, which is facilitated by financial markets. Resources may be mobilized from abroad as well, depending on the relative growth potential of the two economies.

The resources, i.e., funds, are deployed in the real economy by the government and private sector business firms, for creation of capacities and for running the wheel i.e., necessary revenue expenditure. The production of business firms is consumed by the household sector. Government

taxes are collected from the business sector. Economic development happens through increasing the size of the pie shown above, which is denoted by the GDP growth rate, by generating efficiencies in the production process and increasing the speed of the cycle. While generating efficiencies is the job of the participants in the production process, the resource that moves the wheel is finance.

Financial markets provide this resource. It must be done at an optimum cost; it should be low enough to incentivize producers to raise resources and high enough for households to save. The more efficient financial markets are, the more efficient is this process of price discovery.

#### 2.3 Contribution of market to economy

The state of development of the financial markets reflects the state of development of the economy, and vice versa. It is a relationship of symbiosis, as the market and the economy feed from each other.

According to Baily and Elliott, there are three major functions of the financial system:

**Credit Provision** - Credit supports economic activity. Governments can invest in infrastructure projects by reducing the cycles of tax revenues and correcting spends, businesses can invest more than the cash they have, and individuals can purchase homes and other utilities without having to save the entire amount in advance. Banks and other financial service providers give this credit facility to all stakeholders.

**Liquidity provision** - Banks and other financial providers protect businesses and individuals against sudden cash needs. Banks provide the facility of demand deposits which the business or individual can withdraw at any time. Similarly, they provide credit and overdraft facilities to businesses. Moreover, banks and financial institutions offer to buy or sell securities as per need and often in large volumes to fulfill sudden cash requirements of the stakeholders.

**Risk management services** - Finance provides risk management from the risks of financial markets and commodity prices by pooling risks. Derivative transactions enable banks to provide this risk management. These services are extremely valuable even though they receive a lot of flak due to excesses during financial crisis.

According to Global Financial Development Report of World Bank of 2014, "Fundamentally, financial sector development concerns overcoming "costs" incurred in the financial system. This process of reducing costs of acquiring information, enforcing contracts, and executing transactions results in the emergence of financial contracts, intermediaries, and markets. Different types and combinations of information, transaction, and enforcement costs in conjunction with different regulatory, legal and

tax systems have motivated distinct forms of contracts, intermediaries, and markets across countries in different times."

According to Levine, "The five key functions of a financial system in a country are: (i) information about possible investments and capital allocation; (ii) monitoring investments and the exercise of corporate governance after providing financing; (iii) facilitation of the trading, diversification, and management of risk; (iv) mobilization and pooling of savings; and (v) promoting the exchange of goods and services." exam



## 3. STAKEHOLDERS IN FINANCIAL MARKET (DOMESTIC AND GLOBAL) exam

Various stakeholders in the financial market can be categorized into following four segments:

- (i) Primary stakeholders in financial market
  - Shareholders
  - Lenders
  - Companies
  - Mutual fund Organizations/holders/fund managers
- (ii) Service providers in financial market
  - Merchant Bankers
  - Brokers
  - Underwriters
  - Depositories
  - Custodians

#### (iii) Regulators in financial market

- Securities and Exchange Board of India (SEBI)
- Reserve Bank of India
- Insurance Regulatory and Development Authority of India (IRDAI) exam.
- Pension Fund Regulatory and Development Authority (PFRDA)
- (iv) Administrators to facilitate the financial market

- Association of Mutual funds of India (AMFI)
- Foreign Exchange Dealers Association of India (FEDAI) exam
- Fixed Income Money Market and Derivative Association of India (FIMMDA)
- Association of Investment Bankers of India (AIBI)

#### (i) Primary stakeholders in financial market

(a) Shareholders: In simple language, shareholders are the owners of a company. So, a shareholder is any person such as an individual, company or other institution who holds at least one share out of the company's total shares. As shareholders are owners of the company, they benefit when the share prices increase. In the same way, the shareholders lose out when the company's shares plummet.

The shareholders participate in the financial market (secondary market) by buying and selling shares. Their actions depend upon which way the market is behaving. If the market price is low, they tend to buy more shares. On the other hand, if the market price of shares is high, they will sell more shares to make a profit. Thus, they provide the much-needed liquidity in the stock market.

- (b) Lenders: A lender in relation to a financial market is either a company or any other form of corporation that issues bonds or debentures to make its end meet. Funds are available to another with the expectation that the funds will be repaid, in addition to any interest and/or fees, either in increments or as a lump sum. They also provide the much-needed liquidity in the financial market by facilitating the flow of funds from deficit spending to surplus spending sectors.
- (c) Corporates: Corporates raise money either through the share market route or through the bond market route. Raising money by issuing shares to the public generally helps the companies to amass huge amounts of capital. It keeps the financial market ticking by enabling mobilization and allocation of saving from the people, be it, individual investors, companies, and institutional investors whether foreign or domestic.

However, raising equity share capital has its repercussions. The cost of equity share capital is costly. Moreover, companies must meet a lot of regulatory compliances at the time of initial public offerings which takes a lot of time, energy, and money. But, if the company managed to keep its share prices on the higher side, it will easily get more funds in the future whether through equity or debt. If the company opting to raise funds through the debt route, it has certain advantages and disadvantages. The benefits are lower cost of capital in comparison

to equity. The debt route also tends to increase the earnings per share (EPS) of the company which consequently leads to escalation of share prices of the company. However, the demerit is that a debt must be repaid along with interest. So, too much debt may lead an organization to financial/default risks and may land it in financial distress.

(d) Mutual fund Organizations: A mutual fund is a financial institution or intermediary that pools the savings of investors for collective investment in a diversified portfolio of securities. A fund is 'mutual' as all its returns, minus its expenses, are shared by the fund's investors. A mutual fund serves as a link between the investor and the securities market by mobilizing savings from the investor and investing them in the securities market to generate returns.

#### (ii) Service providers in financial market

(a) Merchant Bankers: As per the Securities and Exchange Board of India (Merchant Banker) Regulations, 1992, merchant banker means any person who is engaged in the business of issue management, either by making arrangements regarding selling, buying, or subscribing to securities, or acting as a manager, consultant, or advisor, or rendering corporate-advisory services in relation to such issue management. It is mandatory to appoint a merchant banker in case of a public issue. The functions of merchant banker include – submitting offer documents to SEBI, due diligence i.e., certifying that all the disclosures made in the draft prospectus or letter of offer are true and fair and will enable the investors to make an informed decision etc.

**Globally,** merchant bankers play the same role as discussed above. Some of the top Merchant Bankers in USA are Merrill lynch, Citigroup, Goldman Sachs, J.P. Morgan, and Morgan Stanley. They provide services to top companies in the world. For example, Morgan Stanley has been responsible for hundreds of technology financing and M&A transactions aggregating over \$500 billion in value. Further, Goldman Sachs has served all the big names in tech, including Microsoft, Apple, Facebook, Twitter, Ebay and Alibaba.

(b) Brokers: Stockbrokers participate in the stock market on behalf of their clients. They buy and sell shares on behalf of the clients on their instructions. To actively participate in the capital market, they should be SEBI registered. So, they facilitate trading in the stock market (secondary market) by undertaking buys and sell transactions on behalf of the client.

**In the USA**, most "brokers" must be registered with the Securities Exchange Commission (SEC) and join a "self-regulatory organization," or SRO. Globally, margin financing is popular, in which, many large broking houses provide financing facilities to clients who borrow money

to invest in stocks. Therefore, Stock exchanges monitor the extent to which brokers are lending in line with their net worth.

- (c) Underwriters: Underwriters are those people who assume the risk of others. In the capital market, in case of new issues, they assume risk by guaranteeing that in case the shares are not subscribed fully by the public, the unsubscribed portion will be subscribed by the underwriter itself. They do it by charging a small fee.
  - So, how do the underwriters make profit? They buy the shares of the company before they are listed on a stock exchange. The underwriters make their profit on the difference in price between what they paid before the IPO and when the shares are offered to the public.
- (d) Depositories: Depository is an institution which maintains investors account in electronic form. One of the main functions of the Depository is to transfer the ownership of shares from one investor to another whenever the trading of shares takes place. It helps in reducing the paperwork involved in trade, expedites the transfer, and reduces the risk associated with physical shares such as damage, theft, and subsequent misuse of the certificates or fake securities.

There are two types of depositories in India which are known as NSDL (National Securities Depository Limited) and CSDL [Central Depository Services (India) Limited]. They interface with the investors through their agents called Depository participants (DPs). DPs could be the banks (private, public, and foreign), financial institutions or SEBI registered trading members.

**Globally**, depositories provide the same set of services as has been rendered by CDSL and NSDL.

(e) Custodians: Custodians provide custodial services for safe keeping of securities. Besides safe keeping, they provide other services for a fee (generally 1% of the total volume of transactions) such as physical transfer of share certificates, collecting dividends and interest warrants and conforming to transfer regulations. Besides that, it also updates client status on their investment status. Even though securities are in the custody of depositories, the custodians act as a complementary to them by providing various services as mentioned above. In India, The Stock Holding Corporation of India (SHCIL) and the SBI Share Holding Corporation are the leading custodians.

After liberalization in 1991, **foreign institutional investors (FIIs)** were allowed to invest in the Indian Capital Market. Most of the FII business in India is routed through foreign custodians. According to US laws, no US fund is allowed to use a custodian that does not

have a capital adequacy of USD 200 million. No Indian custodian meets this requirement. Therefore, only foreign banks operate as custodians for US based FIIs, pension funds, and corporates. Hong Kong Bank, Deutsche Bank, Citi Bank, and Standard Chartered Bank are some leading foreign banks which operate as custodians.

#### (iii) Regulators in financial market

- (a) Securities and Exchange Board of India (SEBI): SEBI was born in 1992. The basic objective was to protect the interest of investors in securities and promote the development of the securities market. The important objectives of SEBI are:
  - i) Protect the interest of investors in securities.
  - ii) Promotes the development of securities market.
  - iii) Regulating the securities market.

#### Major Roles of SEBI

- Regulate the Business in Securities Exchanges.
- Register & Regulate intermediaries, collective investment schemes (including Mutual Funds).
- Promote & regulate SRO's. (Self-Regulatory Organizations)
- Prohibit unfair & fraudulent trade practices.
- Promote investor education & Training
- Prohibit Insider trading.
- Regulate substantial acquisition of shares & takeover of companies
- Inspection/Audit of intermediaries & SRO's.
- Any other function as provided under the SCRA 1956, as delegated by the govt.

**Outside India:** Securities Exchange Commission (SEC) in USA performs more or less the same functions as given to SEBI. But the stark difference is the amount of penalty. SEC can impose an unlimited amount of fine which SEBI cannot. That is the reason SEC has more teeth in comparison to SEBI and acts as an effective deterrent against malpractices in the stock market.

(b) Reserve Bank of India: The Reserve Bank of India was established in 1935 with the provision of Reserve Bank of India Act, 1934. Though privately owned initially, in 1949 it was

nationalized and since then fully owned by Government of India (GoI). The preamble of the Reserve Bank of India describes its main functions as to regulate the issue of Bank Notes and keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage, RBI is Apex body for regulation of Banking Sector, Controls money supply in India, Banker to Government and banker to banks, Responsible for monetary and fiscal policy, Regulates the debt securities of Government and forex markets.

**Outside India:** Federal Reserve (Fed) in the USA's policies is primarily driven by growth and employment figures, at the expense of inflation. On the other hand, we have the RBI, whose policies are primarily driven by inflation, at the expense of growth. So which approach is better depending upon the situation of the economy. In the USA and European Union, where the rate of interest is very low encourages industry to borrow at cheaper cost and contributes towards economic development and growth. However, in India, the aim of RBI is to keep the rate of interest high to discourage the industry to borrow large amount of money and consequently to contain inflation.

However, recently, due to the Covid–19 pandemic, RBI has lowered the interest rates to give a firm push to the dwindling economic growth, but not by much. The reason is that too much lowering of interest rates will give not contain the rising inflation rate. So, what is the way out to keep interest rates low and bring them down further?

One solution is - given the prevailing environment, more proactive bond purchases will be required over a longer period of time to provide support to the bond market and the overall economy. Bank credit growth is expected to rise in the coming quarters even though NBFCs are likely to stay in consolidation mode. Banks are unlikely to be able to support both private credit demand and higher borrowings simultaneously. In this backdrop, the RBI needs to step in proactively to buy bonds and keep longer duration yields from inching higher.

(c) Insurance Regulatory and Development Authority of India (IRDAI): IRDA Act was passed in 1999. The main aim of the Insurance Regulatory and Development Authority of India is to protect the interest of holders of Insurance policies to regulate, promote and ensure orderly growth of Insurance industry & for matters connected therewith or incidental thereto. Under this Act, Controller of Insurance under Insurance Act, 1938 was replaced by newly established authority called Insurance Regulatory and Development Authority (IRDA).

**Outside India:** In USA, insurance is almost regulated by the individual state governments. In Canada, Office of the Superintendent of Financial Institutions Canada (OSFI)sets the minimum regulatory requirements and expectations to support policyholder and creditor

protection, giving due regard to the need to allow institutions to compete effectively. As healthy companies are in the best position to protect policyholders and creditors, OSFI is aware of the impact of its requirements and expectations on competition domestically and internationally.

Insurance regulators in other jurisdictions pursue similar goals but with different legislative and policy tools and with different economic experiences and conditions. OSFI considers the pace, scope and impact of reforms while renewing the regulatory framework ensures that we can incorporate best practices, and limit – to the extent practical – unintended consequences and an uneven playing field.

(Source: Office of the Superintendent of Financial institutions, Canada)

(d) Pension Fund Regulatory and Development Authority (PFRDA): The objective of PFRDA is to be a model Regulator for promotion and development of an organized pension system to serve the old age income needs of people on a sustainable basis. Pension systems throughout the world have been under scrutiny over the last couple of decades. Numerous reforms have been carried out to tackle the sustainability and adequacy of pension arrangements in the face of the rising global demographic challenge.

**Outside India:** The main law which governs the establishment, maintenance, and termination of pension plans in the United States is the Employee Retirement Income Security Act (ERISA).

Prudential supervision of Australian pension funds started in 1993. The objective of the regulation regarding superannuation aimed at reducing the riskiness of superannuation investments, dealing with retirement incomes policy, equal treatment of members and various other matters.

#### (iv) Administrative authorities to facilitate the financial market

(a) Association of Mutual funds of India (AMFI): The Association of Mutual Funds of India (AMFI) is dedicated to developing the Indian Mutual Fund Industry on professional, healthy and ethical lines and to enhance and maintain standards in all areas with a view to protecting and promoting the interests of mutual funds and their unit holders.

AMFI, the association of SEBI registered mutual funds in India of all the registered Asset Management Companies, was incorporated on August 22, 1995, as a non-profit organization. As of now, all the 42 Asset Management Companies that are registered with SEBI are its members.

#### Roles of AMFI

- It is an advisory body for mutual funds.
- It represents Mutual Fund (MF) industry before the Government.
- All Asset Management Companies (AMCs) are members of AMFI.
- It gives information about all the Mutual Fund schemes on its website.
- It is also responsible for framing code of conduct and ethics for AMCs.

The Mutual Fund Dealers Association of Canada (MFDA) is the national self-regulatory organization (SRO) that oversees mutual fund dealers in Canada. The MFDA was established in mid-1998 at the initiative of the Canadian Securities Administrators (CSA) in response to the rapid growth of mutual funds in Canada in the late 1980s from \$40 billion to \$400 billion and recognition by the CSA that the mutual fund industry and investors would benefit from more effective regulation and oversight. As an SRO, the MFDA is responsible for regulating the operations, standards of practice and business conduct of its members and their representatives with a view to enhancing investor protection and strengthening public confidence in the Canadian mutual fund industry.

(b) Foreign Exchange Dealers Association of India (FEDAI): Foreign Exchange Dealers Association of India (FEDAI) was set up in 1958 as an Association of banks dealing in foreign exchange in India (typically called Authorised Dealers - ADs) as a self-regulatory body and is incorporated under Section 25 of The Companies Act, 1956. Its major activities include framing of rules governing the conduct of inter-bank foreign exchange business among banks vis-à-vis public and liaison with RBI for reforms and development of forex market.

Internationally, forex dealers provide online trading services to allow individuals to speculate on rapidly changing foreign exchange rates. Forex Dealer Members (FDMs) are regulated in the United States by the Commodity Futures Trading Commission (CFTC) and National Futures Association (NFA), as well as by national and local regulatory bodies where they conduct business.

#### (c) Fixed Income Money Market and Derivative Association of India (FIMMDA)

The Fixed Income Money Market and Derivatives Association of India (FIMMDA), an association of Scheduled Commercial Banks, Public Financial Institutions, Primary Dealers, and Insurance Companies was incorporated as a Company under section 25 of the Companies Act, 1956 on June 3rd, 1998. FIMMDA is a voluntary market body for the bond, money, and derivatives markets.

FIMMDA has members representing all major institutional segments of the market. The membership includes Nationalized Banks such as State Bank of India, its associate banks and other nationalized banks; Private sector banks such as ICICI Bank, HDFC Bank, IDBI Bank; Foreign Banks such as Bank of America, ABN Amro, Citibank, Financial institutions such as IDFC, EXIM Bank, NABARD, Insurance Companies like Life Insurance Corporation of India (LIC), ICICI Prudential Life Insurance Company, Birla Sun Life Insurance Company and all Primary Dealers.

The International Swaps and Derivatives Association (ISDA) is a trade organization of participants in the market for over-the-counter derivatives. It's headquarter is in New York City, and has created a standardized contract (the ISDA Master Agreement) to enter into derivatives transactions.

#### (d) Association of Investment Bankers of India (AIBI)

In the early 1990s, the merchant banking industry in India witnessed a phenomenal growth with over 1500 merchant bankers registered with SEBI. To ensure the wellbeing of the industry and for promoting healthy business practices, it became necessary to set up a Self-Regulatory Organization within the industry. This led to the birth of the Association of Investment Bankers of India (AIBI). AIBI was promoted to exercise overall supervision over its members in the matters of compliance with statutory rules and regulations pertaining to merchant banking and other activities. AIBI was granted recognition by SEBI to set up professional standards, for providing efficient services and to establish standard practices in merchant banking and financial services. AIBI, in consultation with SEBI, is working towards improving the compliance of statutory requirement in a systematic manner.

AIBI's primary objective is to ensure that its members render services to all its constituents within an agreed framework of ethical principles and practices. It also works as a trade body promoting the interests of the industry and of its members. (Source www.aibi.org.in)

Internationally, International Association of Investment Bankers (IAIB) since its inception in 1994 has leveraged its collective expertise, best practice knowledge, industry insights, and global reach to assist clients in executing mergers, acquisitions, divestitures, and strategic partnerships.

Its membership is composed of established boutique investment banks from around the world whose primary focus is advising middle market and emerging growth companies. As a highly collaborative group, they hold monthly conference calls and gather twice each year to review creative transaction structures and current market dynamics, as well as to share perspectives

on important industry issues. Through these efforts, they can offer their clients a truly differentiated advisory service that leverages the significant transaction experience and domain expertise of their member firms.

The International Association of Investment Bankers (IAIB) is an affiliation of investment banking firms from Europe, North America, Australia, and Asia, working together to broaden their reach and leverage their expertise within the global marketplace.

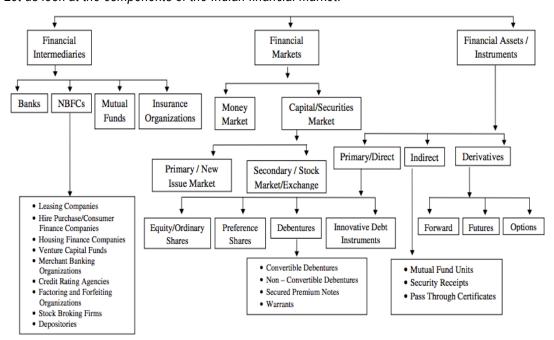
Since 1994, the IAIB member firms have utilized this network to offer their clients worldwide access to providers of capital, advisory services and acquirers and sellers of businesses. With this capability, member firms can provide substantial added value to their clients beyond that typically offered by purely domestic advisors. (Source www.iaib.org)



#### 4. INDIAN FINANCIAL MARKET SCENARIO

The Indian economy is a developing one and so is the Indian financial market ecosystem. The market is well regulated by SEBI, along with other regulators. The pace of development, in terms of systems and enablers, has been quite fast. Though we are yet to catch up with developed markets like the USA on many parameters, it is because we are still a developing economy.

Let us look at the components of the Indian financial market:



Source: Google to http://practicemock.com/blog/lic-aao/insurance-financial-market-awareness-indian-financial-system/

#### 4.1 Money Market Instruments

The money market is the market for financial assets that are close substitutes for money. It is the market for instruments ranging from one day deployment e.g., call money market to a few months, but upto or less than one year.

#### 4.1.1 Treasury Bills

Treasury Bills (T-Bills) are short term instruments issued by the Central Government with maturities in less than one year. Their purpose remains the same as Dated Securities (i.e., regular Government Securities), but they are intended more to be meeting the short-term funding needs of the Central Government. Currently, the Central Government issues T Bills of 91-day, 182-day and 364-day maturity. Since T Bills have a maturity of less than one year, they are a money market instrument.

#### 4.1.2 Cash Management Bills

These are a short-term instrument issued by the Government of India and meant to specifically meet temporary cash flow mismatches of the Government. These instruments have a maturity of less than 91 days. Further, they are issued at a discount to par value (in zero-coupon securities). CMBs have similar characteristics as Treasury Bills.

#### 4.1.3 Call Money, Notice Money, and Term Money

These are the terms used for short-term borrowing and lending operations between Banks and sometimes with and between Primary Dealers. The difference between the three is in their tenure of lending. Call money is for overnight deployment i.e., one day, notice money is two to fourteen days and term money is for a tenure fifteen days and longer.

#### 4.1.4 Certificate of Deposits (CDs)

CDs are issued by banks for short-term funding needs. Usually, banks issue CDs when credit pickup is higher than bank deposit growth. CDs save on operational costs of the Bank as these take place in bulk. Issued for 3, 6 and 12 months maturity. Also, issued at a discount and redeemed at par.

#### 4.1.5 Commercial Papers (CPs) kon krta ha?

CPs are issued by corporates (mostly NBFCs), primary dealers and all-India financial institutions (other than Banks), as a source of short-term finance. In a way CDs and CPs are similar, difference being CDs are issued by Banks and CPs are issued by corporates. Issued at a discount to face value and contains higher risk and yield than T-Bills.

#### 4.1.6 Repurchase Agreements

These are short-term loans in which two parties agree to sell and repurchase the same security. When considering a transaction from the seller's point of view, it is called a repo, and when considering it from the buyer's point of view, it is called a reverse repo.

Only transactions in Central Government dated securities, Treasury bills, state development loans, and GOI special securities like oil bonds that have been approved by the RBI may be conducted through Repo or Reverse Repo between parties that have received RBI approval.

#### 4.2 Capital Market

The capital market provides support to corporates for raising resources. The Securities and Exchange Board of India (SEBI), along with the Reserve Bank of India are the regulatory authorities for Indian securities market, to protect investors and improve the microstructure of capital markets in India.

There are two components of capital market, primary and secondary. In primary markets, companies, governments, or public sector institutions can raise funds through bond issues. In the primary market, the investor directly buys shares / bonds of a company. In secondary markets, the shares / bonds are bought and sold by the customers. On the platforms provided by Exchanges like NSE or BSE, investors buy and sell instruments like stocks and bonds through brokers / sub-brokers.

#### 4.2.1 Indian Capital Market scenario (Equity Market)

The market capitalization to Gross Domestic Product (GDP) ratio shows to what extent the market is assigning a value to the listed corporates against the GDP of the economy. The perspective is the current value against the historical average. The stock market capitalization-to-GDP ratio is also known as the Buffett Indicator, after legendary investor Warren Buffett, who popularized its use. This measures the total value of all listed shares divided by GDP.



The chart above shows that investments in, and discounting of future earnings growth of Indian companies has been moving up during the FY 2011 to 2022 represented by the increase in the ratio of market capitalization to GDP.

However, earnings growth of companies has not kept pace with the increase in valuations given by the market, as indicated in the chart above. If EPS does not grow as much and price goes up, the market valuation, as represented by P/E ratio, moves to the higher side.



Source: PhillipCapital India Research

The P/E ratio, calculated on the basis of forward or expected EPS, has moved to the higher side.

#### 4.2.2 Historical Returns from Equity

Returns from the equity market have been volatile. The following chart shows returns from Sensex since inception on a rolling basis. Annual rolling means returns of every one year calculated every year, three-year rolling return means returns over past three years, calculated every year, and so on.

Year End (1)	Sensex	Rolling 1 YR Growth	Rolling 3 YR Growth	Rolling 5 YR Growth	Rolling 10 YR Growth	Rolling 15 YR Growth	Rolling 20 YR Growth
	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Mar-79	100						
Mar-80	129	29%					
Mar-81	173	35%					
Mar-82	218	26%	30%				
Mar-83	212	-3%	18%				
Mar-84	245	16%	12%	20%			
Mar-85	354	44%	18%	22%			
Mar-86	574	62%	39%	27%			
Mar-87	510	-11%	28%	19%			
Mar-88	398	-22%	4%	13%			
Mar-89	714	79%	8%	24%	22%		
Mar-90	781	9%	15%	17%	20%		
Mar-91	1168	50%	43%	15%	21%		
Mar-92	4285	267%	82%	53%	35%		
Mar-93	2281	-47%	43%	42%	27%		
Mar-94	3779	66%	48%	40%	31%	27%	
Mar-95	3261	-14%	-9%	33%	25%	24%	
Mar-96	3367	3%	14%	24%	19%	22%	
Mar-97	3361	0%	-4%	-5%	21%	20%	
Mar-98	3893	16%	6%	11%	26%	21%	

Mar-99	3740	-4%	4%	0%	18%	20%	20%
Mar-00	5001	34%	14%	9%	20%	19%	20%
Mar-01	3604	-28%	-3%	1%	12%	13%	16%
Mar-02	3469	-4%	-2%	1%	-2%	14%	15%
Mar-03	3049	-12%	15%	-5%	3%	15%	14%
Mar-04	5591	83%	16%	8%	4%	15%	17%
Mar-05	6493	16%	23%	5%	7%	15%	16%
Mar-06	11280	74%	55%	26%	13%	16%	16%
Mar-07	13072	16%	33%	30%	15%	8%	18%
Mar-08	15644	20%	34%	39%	15%	14%	20%
Mar-09	9709	-38%	-5%	12%	10%	6%	14%
Mar-10	17528	81%	10%	22%	13%	12%	17%
Mar-11	19445	11%	8%	12%	18%	12%	15%
Mar-12	17404	-10%	21%	6%	18%	12%	7%
Mar-13	18836	8%	2%	4%	20%	11%	11%
Mar-14	22386	19%	5%	18%	15%	13%	9%
Mar-15	27957	25%	17%	10%	16%	12%	11%
Mar-16	25342	-9%	10%	5%	8%	14%	11%
Mar-17	29621	17%	10%	11%	9%	15%	11%
Mar-18	32969	11%	6%	12%	8%	17%	11%
Mar-19	38673	17%	15%	12%	15%	14%	12%
Mar-20	29468	-24%	0%	1%	5%	11%	9%
Probability	of Gain	27/41	32/39	34/37	31/32	27/27	22/22

Source: HDFC Mutual Fund

#### How to read it?

Return of 29% from March 1979 to March 1980 means over a holding period of one year. Then it goes on like this every year. Return of 30% from March 1979 to March 1982 means over a holding

period of 3 years, annualized. Similarly, the same pattern will be followed for other 3-year holding periods.

#### Conclusion:

On a one-year holding period basis, returns were positive in 27 out of 41 years, hence the probability of positive return is 27/41. Over 10-year holding periods, it is positive in 31 out of 32 years, hence over a long holding period probability of positive return is 31/32. Over 15 and 20 year holding periods, it is always positive.

#### 4.2.3 Bond Market

The Government and corporates issue bonds / debentures for raising resources. The market capitalization concept is not used in the bond market as the market price is not much different from the face value of instruments. To gauge the size of the market, we will look at the outstanding quantum of securities. The primary goal of the bond market is to provide a mechanism for long term funding of public and private expenditures. The most important advantage of investing in bonds is that it helps diversify and grow your money. Debt or Bond can be defined as a loan for which an investor is the lender. The issuer of the bond pays the investor interest (at a predetermined rate and schedule) in return for the funding. The maturity date refers to the date on which the issuer has to repay the principal to the investor. When an investor invests money via equity, he becomes an owner in the corporation. In case of debt, the investor becomes a creditor to the issuing entity. To build a diversified and stable portfolio, investing in debt securities is a must since it assures fixed income.

	Amount outstanding as on 31 Dec. 2015 (₹ Cr)	% of total Dec. 2015	Amount outstanding as on (₹ Cr)
G Secs	45,19,205	51	1,00,33,518.106 (as on Dec. 4, 2023)
SDLs	14,51,236	16	95,77,920 (as on Oct. 2023)
T Bills	4,25,648	5	1,00,65,404.70 (24 Nov. 2023)
Total Sovereign	63,96,089	72	No added the numbers above as the dates are different
Corporate Bonds	19,11,226	22	44,16,320 (Sept. 2023)
CPs	3,08,109	4	3,64,999.65 (April 30, 2022)
CDs	2,06,559	2	201427.56 (April 22, 2022)

Total Corporate	24,26,294	28	No added the numbers above as the dates are different
Total	88,22,383	100	

Source: RBI, SEBI

As we observe from the chart above, the outstanding quantum of Government Securities, both Centre and States, have been going up steadily. This is in line with the GDP growth of the country and increase in size of Government budgets. The Central Government is the major issuer of securities in the bond market.

Corporate bonds and Commercial Papers have also been increasing steadily, in line with the growth of the corporate sector. This is another means of raising resources for them, apart from Bank loans.

Money market instruments like Treasury Bills and Certificates of Deposit have not increased much as these are means of short-term funding. CPs have increased in quantum as the major issuers are NBFCs; NBFCs require money as that is their input and output.

#### 4.2.4 Subscribers to Government Securities

Table 4.4: Ownership Pattern of Government of India Dated Securities

(Per Cent of Outstanding Dated Securities)

Category	2016		•	2017	•		Dated Sec	2018
	Sep.	Dec.	March	Jun	Sep	Dec	March	June
1. Commercial Banks	40	40.9	40.5	39.7	40.4	41.4	42.7	41.8
2. Non-Bank PDs	0.1	0.3	0.2	0.3	0.3	0.3	0.3	0.3
3. Insurance Companies	22.7	22.5	22.9	23.1	23.5	23.6	23.5	24.2
4. Mutual Funds	2.1	2	1.5	1.4	1.9	1.3	1	1.1
5. Co-operative Banks	2.5	2.6	2.7	2.7	2.6	2.7	2.6	2.6
6. Financial Institutions	0.8	0.9	0.8	0.7	0.8	0.8	0.9	0.9
7. Corporates	1.1	1.1	1.1	1.3	1	1.1	0.9	1.1
8. FPIs	3.8	3.1	3.5	4.3	4.6	4.5	4.4	3.8
9. Provident Funds	6.3	6.2	6.3	6.1	6	5.3	5.9	5.8
10. RBI	14.8	14.6	14.7	14.3	12.8	11.9	11.6	11.6
11. Others	5.8	5.8	6	6.1	6.1	6.9	6.3	6.6
Total	100	100	100	100	100	100	100	100

Source: RBI

#### **TEST YOUR KNOWLEDGE**

Muli	tiple (	Choice Questions (MCQs)
1.		derivatives market deals in contracts whose value is based on the market value of the being traded, called the
	(a)	Forwards
	(b)	Futures
	(c)	Options
	(d)	Un <mark>derly</mark> ing
2.	Whic	n among the following is not a function of Financial Markets?
	(a)	puts savings into more productive use
	(b)	determines the price of securities
	(c)	makes financial asse <mark>ts r</mark> isky and liquid
	(d)	lowers the cost of transactions
3.	Whic	h among the following is the primary stakeholder in the financial market?
	(a)	Merchant Bankers
	(b)	Brokers
	(c)	Underwriters
	(d)	Comp <mark>anies</mark>
4.		make their profit on the difference in price between what they paid before the and when the shares are offered to the public.
	(a)	Underw <mark>rite</mark> rs
	(b)	Merchant Bankers
	(c)	Brokers
	(d)	Custodians

- 5. .....is a voluntary market body for the bond, money, and derivatives markets.
  - (a) AMFI
  - (b) FIMMDA
  - (c) AIBI
  - (d) FEDAI

#### **Theoretical Questions**

- 1. What do you understand by financial markets? Discuss the importance of financial markets.
- 2. Explain briefly the various service providers in financial markets.
- 3. Discuss the important objectives of SEBI and make a brief comparison to its compatriot in USA.
- 4. Explain briefly the various administrative authorities to facilitate the financial market.

#### **ANSWERS/SOLUTIONS**

#### **Answers to the MCQ based Questions**

1. (d) 2. (c) 3. (d) 4. (a) 5.	1.	(d)	2.	(c)	3.	(d)	4.	(a)	5.	(b)
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#### **Answers to the Theoretical Questions**

- **1.** Please refer to paragraph 1.2
- 2. Please refer to paragraph 3
- 3. Please refer to paragraph 3.(iii)
- **4.** Please refer to paragraph 3.(iv)

CHAPTER 2

# IMPACT OF VARIOUS POLICIES OF FINANCIAL MARKETS

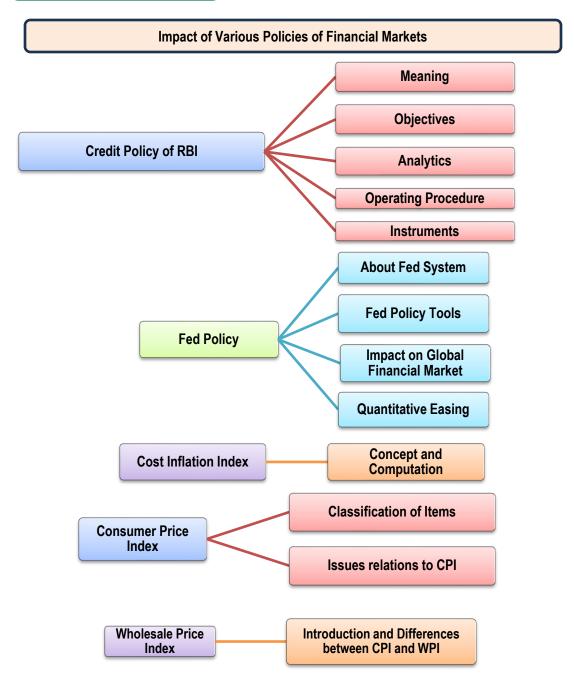


#### **LEARNING OUTCOMES**

After going through the chapter student shall be able to understand:

- Credit Policy of RBI
- □ Fed Policy
- ☐ Inflation Index, CPI, WPI, etc.







## 1. CREDIT POLICY OF THE RESERVE BANK OF INDIA (RBI)

#### 1.1 Meaning of Credit Policy

The credit policy is basically a plan of action executed by the Reserve Bank of India (RBI)on behalf of the Government of India to control and regulate the demand for and supply of money with the public and the flow of credit i.e. money into the economy. It refers to the use of credit policy instruments which are at the disposal of central bank to regulate the availability, cost and use of money and credit to promote economic growth, price stability, optimum levels of output and employment, balance of payments equilibrium, stable currency, or any other goal of government's economic policy.

#### 1.2 Objectives of Credit Policy

The various objectives of Credit Policy are as follows:

- (i) Maintenance of Price Stability—One of the foremost responsibilities of RBI is to control inflation and maintain the stability of prices. For this RBI uses interest rates as a tool to maintain inflation at its desired levels. If the RBI feels that the inflation is high, then it increases the interest rates to curb demand in the overall market & to tune the credit growth in economy which in turn leads the inflation to cool down. Similarly, if RBI feels the inflation is too low and wishes to increase inflation then it either reduces the interest rates or pumps in money in the system by different means to increase the demand in the economy and in turn increases the inflation.
- (ii) Achieving Economic Growth It is also one of the most important objectives of the Credit Policy of RBI. The purpose is to achieve economic growth through various means which will be discussed later. In fact, the primary objective is to maintain a judicious balance between maintenance of price stability and achieving economic growth. So, achieving economic growth is not a direct objective. GDP growth and job creation is primarily the government function. Credit policy is primarily targeted to keep inflation in check and maintain sufficient liquidity in the system which will spur demand and leads to economic growth.
- (iii) Exchange Rate Stability The aim is to maintain exchange rate stability, so the imports are cheaper, and exporters increase their exports and earn precious foreign exchange. If RBI finds that the Dollar is appreciating, and INR is depreciating, and it wants to support INR from further depreciation then it will take measures that will allow more dollar inflow in the system thereby appreciating the rupee, and thus, supporting INR. For example, allowing banks temporarily to raise

fresh Foreign Currency Non-Resident Bank i.e., FCNR(B) and Non-Resident External (NRE) deposits for a limited period.

- (iv) External Balance of payment equilibrium The balance of payment is basically economic transactions of the residents of a country with the rest of the world during a given period of time. When we add up all the demand for foreign currency and all the sources from which it comes, these two amounts are necessarily equal and thus the overall account of the balance of payments necessarily balance or must always be in equilibrium.
- (v) Adequate flow of credit to productive sectors It is the responsibility of the Central Bank to ensure that regular, easy, and smooth availability of money to the needy sectors of the economy is rendered on a continuous basis. This will help the industry to pump in the required money to boost their production. This will automatically increase employment as the companies will hire more people to enhance their capacity. This in turn will lead to a higher standard of living for the people.
- (vi) Maintaining a moderate structure of interest rates to enhance investments The RBI plays an important role in the management of the rate of interest. And the fate of many industries depends upon the interest rate policy pursued by the Central Bank. They expect that interest rates be reduced so that loans can be available at a cheaper rate. On the other hand, in case of inflation, the general perception is to increase the rate of interest. Therefore, the RBI evaluates the pros and cons of its every prospective decision and decides if interest rate policy is to be pursued.

Hence, the role of RBI is to tread on a cautious path. People expect that inflation shall be contained and stay within a reasonable limit so that goods and services are available to them in a cheap manner. At the same time, people expect that unemployment should be reduced and more and more jobs should be available. So, a tradeoff is required between controlling inflation and rising unemployment.

#### 1.3 Analytics of Credit Policy

There are basically four different mechanisms through which monetary policy influences the price level and the national income. These are:

(i) Interest Rate Channel – Interest rates increase the cost of capital and real cost of borrowing for firms with the result that they cut back on their investment expenditure. Similarly, general public facing the heat of high interest rates cut back on their purchase of homes, cars, air-conditioners and other goods. So, a decline in aggregate demand results in the decline in aggregate output and goods.

On the other hand, a decrease in interest rates has the opposite effect of a decrease in cost of capital of firms and cost of borrowing for households.

(ii) Exchange Rate Channel – Appreciation of the domestic currency makes domestically produced goods more expensive as compared to foreign-produced goods. The reason is that import from countries outside India will become cheaper and it will make the goods produced in India dearer in comparison. This will cause the net export to fall (because expensive good produced in India will have to be sold at a higher price and it will find few takers outside India). Consequently, domestic output and employment will also fall.

On the other hand, as the rupee depreciates, exports become more profitable, because the exporter earns more rupees for exchanging dollar. On the other hand, imports become expensive as the importer needs to pay more rupees for the dollars billed. Industries linked to exports like pharma and IT benefit with depreciation, whereas those industries linked to imports (or having vital components of their product imported) must bear higher input cost, which is ultimately passed on to the end users.

(Source: Financial Express)

China used the strategy to devalue their currency "Yuan" and keep the exports profitable for local vendors and thereby infusing jobs and growth in their country.

(iii) Quantum Channel (relating to money supply and credit) – Two things are worth mentioning in this regard – the bank lending (credit) channel and the balance sheet channel. Credit channel operates by altering the access of firms and households to bank credit. Most business organizations depend on bank loans for their borrowing needs. To restrict the flow of credit in times of inflation, the RBI sells government securities to commercial banks and the public and squeeze money from them. This makes the firms which are dependent on bank loans cut back on their spending on investment. This will diminish aggregate output and employment following a reduction in money supply.

Now, we shall look at how the balance sheet channel works. The direct effect of monetary policy on the balance sheet is that it will show the interest cost and increase in payments through loan repayments. An indirect effect is that the same increase in interest rate works to reduce the capitalized value of the firm's fixed assets. This will also raise the company's cost of capital and consequently, precipitate a reduction in production and output.

(iv) Asset Price Channel – The standard asset price channel indicates that changes in credit policy effects output, employment, and inflation. An increase in interest rates in debt securities makes them more attractive to investors than equity. This leads to a fall in the share prices which resulted in the consequent fall in consumption, production, and employment. These also affect the overall financial wealth of the investors.

#### 1.4 Operating Procedure and Instruments

The operating framework of monetary policy refers to how the various aspects of monetary policy are implemented. These aspects are briefly explained as below:

Choosing the operating target –The operating target to the variable (for e.g. inflation) that monetary policy can influence with its actions.

Choosing the intermediate target - (e.g. economic stability) is a variable which central bank can hope to influence to a reasonable degree.

Choosing the policy instruments -The credit policy instruments are the various tools that a central bank can use to influence money market and credit conditions and pursue its monetary policy objectives.

The day-to-day implementation of monetary policy by central banks through various instruments is referred to as 'operating procedures'.

#### 1.5 The instruments of Credit Policy

The various credit policy instruments are explained in the following paragraphs:

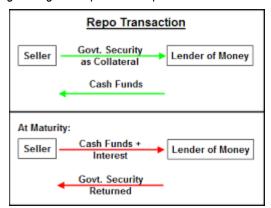
- (i) Cash Reserve Ratio (CRR): Cash reserve ratio is the amount which the commercial banks must maintain as cash deposit with the Reserve Bank of India. An important thing to note here is that commercial banks do not get any interest from RBI on CRR. RBI may increase the CRR if it thinks that there is large amount of money supply in the economy. Conversely, it will decrease the CRR if it is of the opinion that inflation is in control and the industry needs a monetary boost up. The reduction in CRR will provide more money in the hands of commercial banks which will pass it on to industry. More money in the hands of industry will boost production, consumption, and employment.
- (ii) Statutory Liquidity Ratio (SLR): Statutory Liquidity Ratio is the amount which commercial banks must keep it with itself. So, SLR is the amount of money which banks must always keep in its custody. SLR is also a very powerful tool to control liquidity in the economy. To encourage industries to boost up their production, SLR may be decreased to put more money in the hands of commercial banks. An increase in SLR is used as an inflation control measure to control price rise.

Maintenance of CRR and SLR are a part of what is known as the 'Fractional Reserve System' in Central Banking. Fractional Reserves are a part of the wider Quantitative Monetary Policy.

(iii) Liquidity Adjustment Facility (LAF): Under this facility, the commercial banks can borrow from RBI through the discount window against the collateral of securities like commercial bills,

treasury bills or other eligible papers. Currently, the RBI provides financial accommodation to the commercial banks through repos/reverse repos under the LAF.

**Repo transaction** is defined as an instrument through which commercial banks borrow from RBI. So, it is basically borrowing funds by selling securities with an agreement to repurchase the securities on a mutually agreed future date at an agreed price which includes interest for the funds borrowed. In other words, repo is a money market instrument, which enables collateralized short-term borrowing and lending through sale/purchase operations in debt instruments.



Source: https://www.assignmentpoint.com/business/finance/repurchase-agreement-definition.html

**Reverse Repo transaction**, on the other hand, is an instrument through which RBI borrows from commercial banks by giving them securities. So, reverse repo is defined as an instrument for lending funds by purchasing securities with an agreement to resell the securities on a mutually agreed future date at an agreed price which includes interest for the funds lent.

(iv) Margin Standing Facility (MSF): Margin Standing Facility announced by the Reserve Bank of India (RBI) in its Monetary Policy, 2011-12 refers to the facility under which scheduled commercial banks can borrow additional amount of overnight money from the central bank over and above what is available to them through the LAF facility up to a limit at a penal rate of interest.

The minimum amount which can be assessed through MSF is ₹ 1 crore and more will be available in multiples of ₹ 1 crore. The MSF would be the last resort for banks once they exhaust all borrowing options including the liquidity adjustment facility on which the rates are lower compared to the MSF.

(v) Market Stabilization Scheme: Under the market stabilization scheme, the Government of India borrows from the RBI and issues treasury bills/dated securities for absorbing excess liquidity from the market arising from large capital inflows. Now, with the introduction of Liquidity Adjustment Facility (LAF) i.e. Repo and Reverse Repo mechanism, bank rate has become dormant as an instrument of monetary policy.

The bank rate has been aligned to the Marginal Standing Facility (MSF) rate and therefore, as and when the MSF rate changes alongside policy repo rate changes, the bank rate also changes automatically. Now, bank rate is used only for calculating penalty on default in the maintenance of Cash Reserve Ratio (CRR) and the Statutory Liquidity Ratio (SLR).

- (vi) Open Market Operations: Open Market Operation is basically a tactic employed by the RBI to control the liquidity in the economic system. When the RBI feels there is excess liquidity in the market, it resorts to sale of securities thereby reducing excess rupee flowing in the Indian economy. Similarly, when there is a tight liquidity situation in the economy RBI will buy securities from the market, thereby releasing money (rupee) into the system. Maintaining short-term liquidity is very important because if it is not maintained then the short term money market rates (MIBOR) will be impacted, which will have its impact on short term lending and borrowings.
- (vii) Focusing Banks to promote lending to a particular sector: RBI may change the category of the sector in which it wants more lending to be done by commercial banks. For example, in can include the sector in and as priority sector or it can include a particular sector under the definition of infrastructure to promote more funding in that sector.

Furthermore, infrastructure status helps easier access to Institutional credit and reduction in cost of borrowing.



# 2. FED POLICY

# 2.1 About the Federal Reserve System

The Federal Reserve System is the Central Bank of the United States.

It performs five general functions to promote the effective operation of the U.S. economy and, more generally, the public interest. The Federal Reserve:

- **conducts the nation's monetary policy** to promote maximum employment, stable prices, and moderate long-term interest rates in the U.S. economy;
- promotes the stability of the financial system and seeks to minimize and contain systematic risks through active monitoring and engagement in the U.S. and abroad;
- promotes the safety and soundness of individual financial institutions and monitors their impact on the financial system as a whole;
- fosters payment and settlement system safety and efficiency through services to the banking industry and the U.S. government that facilitate U.S. dollar transactions and payments; and

 promotes consumer protection and community development through consumer-focused supervision and examination, research and analysis of emerging consumer issues and trends, community economic development activities, and the administration of consumer laws and regulations.

# 2.2 Fed Policy Tools

The techniques or tools employed by the US Federal Reserve as a part of Fed Policy have been discussed in brief in the following paragraphs. The purpose of the Fed Policy tools is more or less the same as employed by the Reserve Bank of India which has been discussed in detail in the preceding paragraphs.

- (i) Open Market Operations: It is the purchase and sale of securities in the open market by a central bank that are key tools used by the Federal Reserve in the implementation of monetary policy.
- (ii) The Discount Rate: The discount rate is the interest rate charged to commercial banks and other depository institutions on loans they receive from their regional Federal Reserve Bank's lending facility--the discount window. The Federal Reserve Banks offer three discount window programs to depository institutions: primary credit, secondary credit, and seasonal credit, each with its own interest rate. All discount window loans are fully secured.

Under the primary credit program, loans are extended for a very short term (usually overnight) to depository institutions in generally sound financial condition. Depository institutions that are not eligible for primary credit may apply for secondary credit to meet short-term liquidity needs or to resolve severe financial difficulties. Seasonal credit is extended to relatively small depository institutions that have recurring intra-year fluctuations in funding needs, such as banks in agricultural or seasonal resort communities.

- (iii) Reserve Requirements: Reserve requirements are the amount of funds that a depository institution must hold in reserve against specified deposit liabilities. Within limits specified by law, the Board of Governors has sole authority over changes in reserve requirements. Depository institutions must hold reserves in the form of vault cash or deposits with Federal Reserve Banks.
- (iv) Interest on Required Reserve Balances and Excess Balances: The Federal Reserve Banks pay interest on required reserve balances and on excess reserve balances. The interest rate on required reserves (IORR rate) is determined by the Board and is intended to effectively eliminate the implicit tax that reserve requirements used to impose on depository institutions.

- (v) Overnight Reverse Repurchase Agreement Facility: When the Federal Reserve conducts an overnight RRP, it sells a security to an eligible counterparty and simultaneously agrees to buy the security back the next day.
- (vi) Term Deposit Facility: Funds placed in and thereby drain reserve balances from the banking system.

  (Source: www.federalreserve.gov)

#### 2.3 Fed Funds Rate and its impact on Global Financial Market

The Fed Funds Rate is the interest rate at which the top US banks borrow overnight money from common reserves. All American banks are required to park a portion of their deposits with the Federal Reserve in cash, as a statutory requirement.

Fed fund rate gives the direction in which US interest rates should be heading at any given point of time. If the Fed is increasing the interest rates, lending rates for companies and retail borrowers will go up and vice versa. In India, hike in repo rate may not impact the countries outside India. On the other hand, US interest rates matter a lot to global capital flows. Some of the world's richest institutions and investors have their base in the USA. They constantly compare Fed rates with interest rates across the world to make their allocation decisions.

Any changes in the Fed Fund Rates impact the domestic borrowing market to a large extent. For instance, if the Fed rates go up, it will make the RBI hesitant in cutting rates at that time. The reason is that if RBI cut rates it will lead to heavy pullout of foreign investors from the Indian bond market.

Further, US interest rates matter to foreign stock investors in India also. The reason is zero or near zero returns on safe investments in the US. But, if the Fed rates go up, it may lead to mass exodus of foreign investors from the Indian Stock Market because higher returns in the form of interest is available there.

# 2.4 Quantitative easing (QE)

It is a monetary policy strategy used by central banks like the Federal Reserve. With QE, a central bank purchases securities to reduce interest rates, increase the supply of money and drive more lending to consumers and businesses. The goal is to stimulate economic activity during a financial crisis and keep credit flowing.

#### What is Quantitative Easing (QE)?

When a central bank decides to use QE, it makes large-scale purchases of financial assets, like government and corporate bonds and even stocks. This relatively simple decision triggers powerful

outcomes: The amount of money circulating in an economy increases, which helps lower longer-term interest rates. This lowers the cost of borrowing, which spurs economic growth.

By buying longer maturity securities, a central bank is aiming to lower longer-term market interest rates. Contrast this with one of the main tools used by central banks: Interest rate policy, which targets shorter-term market interest rates.

When the Federal Reserve adjusts its target for the federal funds rate, it's seeking to influence the short-term rates that banks charge each other for overnight loans. The Fed has used interest rate policy for decades to keep credit flowing and the U.S. economy on track.

When the fed funds rate was cut to zero during the Great Recession, it became impossible to reduce rates further to encourage lending. Instead, the Fed deployed QE and began purchasing mortgage-backed securities (MBS) and Treasuries to keep the economy from freezing up.

Central banks like the Fed send a strong message to markets when they choose QE. They are telling market participants that they're not afraid to continue buying assets to keep interest rates low.

#### **How Does Quantitative Easing Work?**

Quantitative easing works by making large-scale asset purchases. In response to the coronavirus pandemic, for example, the Fed has begun purchasing longer-maturity Treasuries and commercial bonds.

#### For example:

Here's how the simple act of buying assets in the open market changes the economy (mostly) for the better:

The Fed buys assets. The Fed can make money appear out of thin air—so-called money printing—by creating bank reserves on its balance sheet. With QE, the central bank uses new bank reserves to purchase long-term Treasuries in the open market from major financial institutions (primary dealers).

New money enters the economy. As a result of these transactions, financial institutions have more cash in their accounts, which they can hold, lend out to consumers or companies, or use to buy other assets.

Liquidity in the financial system increases. The infusion of money into the economy aims to prevent problems in the financial system, such as a credit crunch, when available loans decrease or the criteria to borrow money drastically increase. This ensures the financial markets operate as normal.

Interest rates decline further. With the Fed buying billions worth of Treasury bonds and other fixed income assets, the prices of bonds move higher (greater demand from the Fed) and yields go lower (bondholders earn less). Lower interest rates make it cheaper to borrow money, encouraging consumers and businesses to take out loans for big-ticket items that could help spur economic activity.

Investors change their asset allocations. Given the now-lower returns on fixed income assets, investors are more likely to invest in higher-returning assets—like stocks. As a result, the overall stock market could see stronger gains because of quantitative easing.

Confidence in the economy grows. Through QE, the Fed has reassured markets and the broader economy. Businesses and consumers may be more likely to borrow money, invest in the stock market, hire more employees, and spend more money—all of which helps to stimulate the economy.

#### The Downsides of QE

Implementing QE comes with potential downsides, and its impact is not universally beneficial to everyone in the economy. Here are some of the dangers:

#### (i) QE May Cause Inflation

The biggest danger of quantitative easing is the risk of inflation. When a central bank prints money, the supply of dollars increases. This hypothetically can lead to a decrease in the buying power of money already in circulation as greater monetary supply enables people and businesses to raise their demand for the same amount of resources, driving up prices, potentially to an unstable degree.

#### (ii) QE Isn't Helpful for Everyone, May Cause Asset Bubbles

Some critics question the effectiveness of QE, especially with respect to stimulating the economy and its uneven impact for different people. Quantitative easing can cause the stock market to boom, and stock ownership is concentrated among Americans who are already well-off, crisis or not.

By lowering interest rates, the Fed encourages speculative activity in the stock market that can cause bubbles and the euphoria can build upon itself so long as the Fed holds on to its policy. So, this is basically a confidence game; market participants think the Fed has their back and as long as they do, there's limited fear.

#### (iii) QE May Cause Income Inequality

A final danger of QE is that it might exacerbate income inequality because of its impact on both financial assets and real assets, like real estate. It has benefited those who do well when asset prices go up.

This potential for income inequality highlights the Fed's limitations. An expert said in this regard that the central bank doesn't have the infrastructure to lend directly to consumers in an efficient way, so it uses banks as intermediaries to make loans. "It is really challenging for the Fed to target individuals and businesses that are hardest hit by an economic disruption, and that is less about what the Fed wants to do and more about what the Fed is allowed to do. (Source: www. forbes.com)



# 3. COST INFLATION INDEX (CII)

Cost Inflation Index is a measure of inflation that is used for computing long-term capital gains on sale of capital assets. It is prescribed by the central government every year and useful in the calculation of the indexed value of capital assets. It helps a taxpayer in computing the actual long-term gain or loss on selling of capital assets and allows the taxpayer to factor the impact of inflation on the cost of their assets.

To calculate the indexed cost of acquisition we must divide the Cost Inflation Index or CII for year in which asset is sold by the Cost Inflation Index or CII for a year in which asset is bought, then multiplied with the purchase price of the asset to arrive at the indexed cost of acquisition which is the actual or true cost used at the time of tax computation.

Since the government levies a tax on such transactions, the owner would be required to pay a large amount as tax. To avoid paying a large sum towards tax, the purchase price of the asset can be indexed to show the asset's value as per its current value, considering inflation by increasing its value. In this manner, the profit derived from the sale would be lower, thus reducing the tax on capital gains.

Thus, indexation helps the actual value of the asset to reflect at its present market rates, considering the reduction in its value due to inflation.

When selling an asset, the purchase price is referred to as the indexed cost of acquisition. The cost inflation index (CII), therefore, is the indexed price that the asset is purchased at. The CII for a particular year is fixed by the government and released before the accounting year ends, for the purpose of tax computation.

# **Computation of Cost Inflation Index**

Cost Inflation Index (CII) = CII for the year the asset was transferred or sold / CII for the year the asset was acquired or bought.

The above formula for the computation of CII has been explained with the help of an example:

#### **Example**

Suppose you purchased a house for ₹ 25 lakhs in Jan 2005 and sold it for ₹ 70 lakhs in Jan 2015. Your profit or capital gain is ₹ 45 lakhs.

The CII for the year the apartment was bought in is 406. The CII for the year the apartment was sold is 1081.

Now, the cost inflation index = CII for the year the asset was transferred or sold / CII for the year the asset was acquired or bought = 1081/406 = 2.66

While computing tax, CII is multiplied with the purchase price to arrive at the indexed cost of acquisition. This is the actual cost of the assets.

Therefore, the indexed cost of acquisition = 25, 00,000 X 2.66 = ₹ 66,50,000

And the long term capital gain = sale value of the asset- indexed cost of acquisition

$$= 70,00,000 - 66,50,000 =$$
₹ 3,50,000

The tax liability if you use the indexation method is charged at 20 percent. The tax liability will be  $20\% \times 3,50,000 = ₹70000$ .

If you do not use the indexation method, the tax is payable at 10% on the capital gain. The capital gain in this case is sale price of the apartment – cost of acquisition = 70,00,000 - 25,00,000 = 45,00,000. The capital gains tax is  $10\% \times 45,00,000 = 44,50,000$ .

Therefore, when indexation benefit is taken, it helps you in saving taxes. It helps you adjust the purchase price of the house with the current market prices.



# 4. CONSUMER PRICE INDEX (CPI)

A Consumer Price Index (CPI) is designed to measure the changes over time in the general level of retail prices of selected goods and services that households purchase for the purpose of consumption. Such changes affect the real purchasing power of consumers' income and their welfare. The CPI measures price changes by comparing, through time, the cost of a fixed basket of commodities. The basket is based on the expenditures of a target population in a certain reference period. Since the basket contains commodities of unchanging or equivalent quantity and quality, the index reflects only pure price. Traditionally, CPI numbers were originally introduced to provide a measure of changes in the living costs of workers, so that their wages could be compensated to the changing level of prices. However, over the years, CPIs have been widely used as a macroeconomic indicator of inflation, and as a tool by Government and Central Bank for targeting inflation and

monitoring price stability. CPI is also used as deflators in the National Accounts. Therefore, CPI is considered as one of the most important economic indicators.

Given the many uses of CPIs, it is unlikely that one index can perform equally satisfactory in all applications. Therefore, there is a practice of compiling several CPI variants for specific purposes. Each index should be properly defined and named to avoid confusion. The purpose of CPI should influence all aspects of its construction.

#### 4.1 Classification of Items

Classification is the first step in compiling the CPI because its sub-aggregates must be defined in such a way that expenditure weights and prices will relate precisely to the coverage of the sub-aggregates. It establishes a hierarchical framework from whose boundaries the representative items for inclusion in the index (and sometimes the outlets) will be defined and drawn. In a broad sense, classification is a procedure in which items are organized into categories based on information on one or more characteristics inherent to the items. In recent past, countries used their own distinct systems for classifying the range of products covered by their CPI. Most countries have now, however, moved to the international standard classification COICOP (Classification of Individual Consumption according to Purpose).

To ensure better comparability with CPIs of other countries, it is desirable to have the classification of items synchronized with COICOP. At the same time, it is also important to make it relevant to the Indian context by making it comparable to groups and sub-groups being followed in the CPI series compiled in the country. Accordingly, all consumption items have been classified under various Groups, Categories, Sub-groups, and Sections.

(Source: Ministry of Statistics and Programme Implementation)

#### 4.2 Issues relating to Consumer Price Index (CPI)

Some of the issues relating to Consumer Price Index (CPI) which have been in vogue for quite some times have been discussed in the following points in order to have a good glimpse of the actual impact of CPI to the consumers in India.

- (1) 90-95% of the index (CPI) is not affected by interest rates as the amount spent on household is not affected by the rate changes. This includes food products (covering 48% in index), housing or fuel expenses. These are fixed costs and had to be spent irrespective of the rate of inflation.
- (2) Concept of CPI does not make sense to the household. A 2% CPI does not seem convincing to a housewife who believes that prices of most of the commodities are on the higher side than that

reflected by CPI. So, it is frustrating for the consumer who after every fall in rate of inflation finds that actual prices are on the much higher side.

**For example,** prices of onions suddenly increase from ₹ 30 per kg. to ₹ 80 per kg. Similarly, the prices of Tur Dal increase from ₹ 40 per kg. to₹ 200 per kg in a very short span of time. However, prices came down slowly and then settled at ₹ 80-100 per kg. So, prices increase at a very fast rate but came down after taking a lot of time and that too, the reduced price is generally at a much higher level than the previous one, as explained in the previous sentence with the help of an example.

(3) Lastly, a general view is that HRA allowance paid to Central Government employees would tend to raise inflation. However, if the government employee is residing in a government accommodation, HRA is automatically deducted from the pay slip of an employee. On the other hand, if an employee is not staying in government accommodation the amount in the pay slip will go up. Therefore, an increase in HRA may not translate into higher cost of living or higher retail demand.



# 5. WHOLESALE PRICE INDEX (WPI)

The Wholesale Price Index (WPI) measures the average change in the prices of commodities for bulk sale at the level of early stage of transactions. The index basket of the WPI covers commodities falling under the three major groups namely Primary Articles, Fuel and Power and Manufactured products. (The index basket of the present 2011-12 series has a total of 697 items including 117 items for Primary Articles, 16 items for Fuel & Power and 564 items for Manufactured Products.) The prices tracked are ex- factory price for manufactured products, mandi price for agricultural commodities and ex-mines prices for minerals. Weights given to each commodity covered in the WPI basket are based on the value of production adjusted for net imports. WPI basket does not cover services.

In India WPI is also known as the headline inflation rate.

The base year of all India WPI has been revised from 2004-05 to 2011-12 by the Office of the Economic Advisor, Department of Industrial Policy and Promotion, Ministry of Commerce, and Industry.

In India, Office of Economic Advisor (OEA), Department of Industrial Policy and Promotion, Ministry of Commerce and Industry calculates the WPI.

The main uses of WPI are the following:

- (1) To provide estimates of inflation at the wholesale transaction level for the economy. This helps in timely intervention by the Government to check inflation, in essential commodities, before the price increase spill over to retail prices.
- (2) WPI is used as deflator for many sectors of the economy including for estimating GDP by Central Statistical Organisation (CSO).
- (3) WPI is also used for indexation by users in business contracts.
- (4) Global investors also track WPI as one of the key macro indicators for their investment decisions.

#### Difference between Wholesale Price Index (WPI) and Consumer Price Index (CPI)

WPI reflects the change in average prices for bulk sale of commodities at the first stage of transaction while CPI reflects the average change in prices at retail level paid by the consumer.

The prices used for compilation of WPI are collected at ex-factory level for manufactured products, at ex-mine level for mineral products and mandi level for agricultural products. In contrast, retail prices applicable to consumers and collected from various markets are used to compile CPI.

The reasons for the divergence between the two indices can also be partly attributed to the difference in the weight of the food group in the two baskets. CPI Food group has a weight of 39.1 per cent as compared to the combined weight of 24.4 per cent (Food articles and Manufactured Food products) in WPI basket.

The CPI basket consists of services like housing, education, medical care, recreation etc. which are not part of WPI basket. A significant proportion of WPI item basket represents manufacturing inputs and intermediate goods like minerals, basic metals, machinery etc. whose prices are influenced by global factors, but these are not directly consumed by the households and are not part of the CPI item basket.

Thus, even significant price movements in items included in WPI basket need not necessarily translate into movements in CPI in the short run. The rise or fall in prices at wholesale level spilled over to the retail level after a lag.

Similarly, the movement in prices of non-tradable items included in the CPI basket widens the gap between WPI and CPI movements. The relative price trends of tradable vis a vis non-tradable is an important explanatory factor for divergence in the two indices in the short term.

(Source: Arthapedia)

# **TEST YOUR KNOWLEDGE**

## **Multiple Choice Questions**

- 1. The US FED promotes the stability of the financial system and seeks to minimize and contain ...... through active monitoring and engagement in the U.S. and abroad.
  - (a) Credit risks
  - (b) unsystematic risks
  - (c) systemic risks
  - (d) Default risks
- 2. When the Federal Reserve conducts ....., it sells a security to an eligible counterparty and simultaneously agrees to buy the security back the next day.
  - (a) an Overnight Reverse Repurchase Agreement
  - (b) an Open Market Operation
  - (c) a Term Deposit
  - (d) a Moral Suassion
- 3. Which among the following is not true?
  - (a) WPI reflects the change in average prices for bulk sale of commodities at the first stage of transaction while CPI reflects the average change in prices at retail level paid by the consumer.
  - (b) The prices used for compilation of WPI are collected at ex-factory level for manufactured products, at ex-mine level for mineral products and mandi level for agricultural products.
  - (c) The WPI basket consists of services like housing, education, medical care, recreation etc. which are not part of CPI basket.
  - (d) The Federal Reserve System conducts the nation's monetary policy to promote maximum employment, stable prices, and moderate long-term interest rates in the U.S. economy.

- 4. Under the ...... scheme, the Government of India borrows from the RBI and issues treasury bills/dated securities for absorbing excess liquidity from the market arising from large capital inflows.
  - (a) Liquidity Adjustment Facility
  - (b) Margin Standing Facility
  - (c) Market Stabilization Scheme
  - (d) Open Market Operations
- 5. The main purpose of Quantitative easing is ..........
  - (a) controlling inflation
  - (b) controlling deflation
  - (c) controlling recession
  - (d) to stimulate economic activity

#### **Theoretical Questions**

- 1. What do you understand by a credit policy? Discuss the various objectives of credit policy.
- 2. Explain the various instruments of credit policy.
- 3. Write a short note on the Consumer Price Index and the various issues relating to it.
- 4. Discuss Wholesale Price Index and differentiate it from Consumer Price Index.

# **ANSWERS/SOLUTIONS**

# **Answer to Multiple Choice Questions**

1.	(c)	2.	(a)	3.	(c)	4.	(c)	5.	(d)	
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#### **Answers to the Theoretical Questions**

- **1.** Please refer to paragraph 1.2
- 2. Please refer to paragraph 1.5
- 3. Please refer to paragraph 4
- 4. Please refer to paragraph 5

CHAPTER

# CAPITAL MARKET – PRIMARY

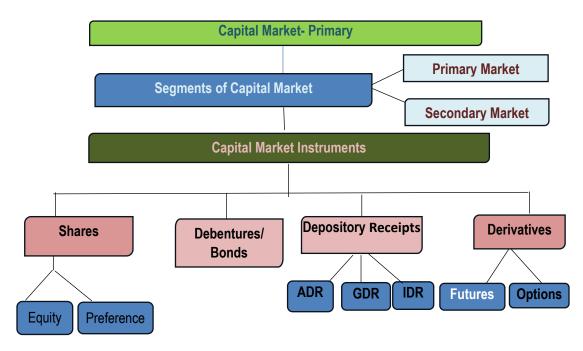


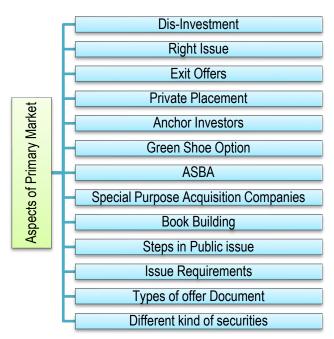
### **LEARNING OUTCOMES**

# After going through the chapter student shall be able to understand:

- Segments of Capital MarketCapital Market InstrumentsAspects of Primary Market
  - (1) Different kinds of issue of securities
  - (2) Types of offer document
  - (3) Issue requirements
  - (4) Steps in Public Issue
  - (5) Book Building
  - (6) Special Purpose Acquisition Companies
  - (7) ASBA
  - (8) Green Shoe Option
  - (9) Anchor Investors
  - (10) Private Placement (includes QIP)
  - (11) Disinvestment
  - (12) Right Issue
  - (13) Exit Offers (Delisting Offers and Strategic Issues)









# 1. BASICS OF CAPITAL MARKETS (NEED, EVOLUTION AND CONSTITUENTS)

Capital Market is basically a part of financial market where buying and selling of long term debt or equity takes place. The main role of the capital market is providing a platform where long-term funds are raised. This fund-raising exercise through the capital market is tapped by the governments, banks and corporate through the capital market. Therefore, the organizations which need money can raise funds with the help of the capital market by issuing shares and debentures. The investors then invest in the capital market by purchasing those shares and debentures.

Therefore, it appears from the above that capital market acts as a link between savers and investors. It plays an important role in mobilizing the savings of the investors and channelizing them for productive purposes. So, the capital markets serve an important purpose as they help in diverting the resources from where surplus funds are available to areas where there is dearth of funding and money is needed on urgent basis.

So, we can say that capital market is the soul of an economy through which savings of people are invested in basically corporate form of organizations. And corporates utilize such invested amounts by putting them to their most effective use by allocating them in profitable opportunities. Therefore, a vibrant capital market benefits both the investor as well as the corporate form of organization and it is an important indicator of the economic health of a country.

To ensure that capital market work in an orderly manner, Securities and Exchange Board of India (SEBI) act as a watchdog to protect investors against market manipulation, unfair trading, and fraud amongst others. The job of SEBI is to protect the interests of investors and guide them to make wise investment decisions. The task of SEBI is also to ensure that the companies follow its rules, regulations, and guidelines diligently and help to make the Indian Capital Market best in the world in terms of transparency and investor friendly measures.

The Indian Capital Market is very old. It started in 18<sup>th</sup> Century when the Indian securities are traded in Mumbai and Kolkata. However, the actual trading of securities in Indian Capital Market started with the setting up of The Stock Exchange of Bombay in July 1875 and Ahmedabad Stock Exchange in 1884. The evolution and development of Indian Capital Market can be discussed under two categories:

- (i) Indian Capital Market Before 1990's
- (ii) Indian Capital Market After 1990's

#### 1.1 Indian Capital Market - Before 1990's

The Indian Capital Market was very inactive till 1990. The requirements of loan term loan of corporate sector were funded by Development Financial Institutions (DFI's) namely IDBI, IFCI, ICICI as well as by other investment institutions like LIC, UTI, GIC etc. Working capital requirements were funded by the Commercial Banks through an elaborate network of bank branches spread all over the country.

The scope of the capital market was limited because of the easy availability of loans from banks and financial institutions. The structure of the interest rate was entirely controlled. But, three important legislations, namely, Capital Issues (Control) Act 1947, Securities Contracts (Regulation) Act, 1956, and Companies Act, 1956 (Now, Companies Act, 2013) were somehow managed to give a proper structure for the development of capital market in India. However, the market was a highly regulated one. The pricing of the securities which were issued to the public for the first time was decided by the Office of the Controller of Capital Issues. There were few stock exchanges and the dominant one was Bombay Stock Exchange (BSE). The BSE provided the trading platform under which the secondary market transactions operate under an open outcry system.

## 1.2 Indian Capital Market – After 1990's

The Indian capital markets have witnessed a major transformation and structural change during the past three decades, since the early 1990's. The Financial Sector Reforms in general and the Capital Market Reforms were initiated in India in a big way from 1991 – 1992 onward. These reforms have enabled the capital market to improve its efficiency, to enhance transparency in market operations, to check unfair trade practices and bring the Indian capital market in accordance with the International Standards. The Capital Issues (Control) Act, 1947 was repealed in May 1992, and the office of the Controller of Capital Issues was abolished in the same year. The incorporation of the National Stock Exchange happened in 1992. After that it was recognized as a Stock Exchange in April 1993. Since then, it has been playing a lead role as a change agent in transforming the Indian Capital Market to its present form.

The Securities and Exchange Board of India (SEBI) was set up in 1988 and acquired the statutory status in 1992. Since 1992, SEBI has emerged as an autonomous and independent statutory body with definite mandate such as:

- (a) to protect the interests of investors in securities,
- (b) to promote the development of securities market, and
- (c) to regulate the securities market.

To achieve these objectives, SEBI has been exercising power under the Securities and Exchange Board of India Act, 1992; Securities Contracts (Regulation) Act, 1956; Depositories Act, 1996 and delegated powers under the Companies Act, 2013. Indian Capital Market has made commendable progress since the inception of SEBI and has been transformed into one of the most dynamic capital markets of the world.

#### 1.3 Functions of the capital market

The major functions of capital market are:

- 1. To mobilize resources for investments.
- 2. To facilitate buying and selling of securities.
- 3. To facilitate the process of efficient price discovery.
- 4. To facilitate settlement of transactions in accordance with the predetermined time schedules.

# 1.4 Major constituents of the capital market

- 1. SEBI (regulator)
- 2. Stock exchanges
- 3. Clearing corporations (cc)/ clearing houses (ch)
- 4. Depositories and depository participants
- Custodians
- 6. Stockbrokers and their sub-brokers
- 7. Mutual funds
- 8. Merchant bankers
- 9. Credit rating agencies
- 10. Financial institutions
- 11. Foreign institutional investors
- 12. Non-banking institutions
- 13. Issuers/ registrar and transfer agents
- 14. Investors



# 2. SEGMENTS OF CAPITAL MARKET

#### 2.1 Primary Market

A primary market is a market where buying and selling of new securities take place for the first time. In other words, the market where the first public offering of equity shares or convertible securities by a company takes place, which is followed by the listing of a company's shares on a stock exchange is called a primary market. It is also known as 'initial public offering' (IPO). The issue of further capital by companies whose shares are already listed on the stock exchange also comes within the ambit of Primary market.

There are different types of intermediaries operating in this segment of the capital market providing a variety of services. For example, merchant bankers, brokers, bankers to issues, debenture trustees, portfolio managers, registrars to issues and share transfer agents, etc. They are also regulated by SEBI. Their contribution is immense in the development of capital markets.

#### 2.2 Secondary Market

A secondary market is a market in which the purchase and sale of securities which are already issued to the public for the first time and listed on the stock exchange takes place. Therefore, secondary markets are called stock exchanges and the over-the-counter market. When the securities are transferred from the first holder to another, the securities are said to be traded in the secondary market.

# 2.3 Primary Market vs. Secondary Market

Both the primary and secondary markets are approached by the corporates for funding their capital requirements. While the functions in the primary market are limited to first issuance, several securities and financial assets can be traded and retraded repeatedly. The main difference between the two is that, in the primary market, the involvement of the company is directly in the transaction, while in the secondary market, the company is not involved because the transactions take place between the investors.

# 2.4 The difference between primary market and secondary market

The Primary market refers to the market in which new securities are issued by the company
to the public for the first time while the secondary market refers to the market where new
securities which are already issued are traded. Stocks, bonds, options, and futures are
usually traded in the secondary market.

- There is direct involvement of the company in the primary market. Whereas, in the secondary
  market, the company has virtually no involvement since the transactions take place between
  the investors.
- 3. The primary market deals with new securities, that is, securities, which were not previously available and are, therefore, offered to the investing public for the first time while the secondary market is a market for already issued securities.
- 4. The primary market provides additional funds to the issuing companies either for starting a new enterprise or for the expansion or diversification of the existing business. On the other hand, the secondary market does not provide additional funds since the company is not involved in the transaction.

#### 2.5 Similarities between Primary and Secondary Market

Some of the similarities between them are as follows:

- (a) Listing: The securities issued in the primary market are invariably listed on a recognized stock exchange for dealings in them. Further trading in the secondary market can also be carried out only through the stock exchange platform. The Listing on stock exchanges provides liquidity as well as marketability for the securities and facilitates discovery of prices for them.
- (b) Control by Stock Exchanges: Through the SEBI (Investor Protection and Disclosure Requirement) Regulations, 2018 [ICDR] and SEBI (Listing Obligations and Disclosure Requirement) Regulations, 2015 [LODR], the stock exchanges exercise considerable control over the new issues as well as on the new securities which are already listed on the stock exchange. Stock Exchanges ensure that there is continuous compliance by the issuer company of the regulations provided in the LODR.

#### 2.6 Interrelationship between Primary Markets and Secondary Markets

The markets for new and old securities are, economically, an integral part of a single market – the capital market. The mutual interdependence between primary market and secondary market from the economic point of view has following two dimensions:

- One, the quantum of trading and the participation of the investors on the stock exchange i.e., the secondary market has a significant bearing on the level of activity in the primary market and, therefore, its responses to capital issues.
- Second, because of the mutual interdependence, the level of activity in primary market has a direct impact on the level of activity in secondary market. As more and more companies

issue their securities in the capital market, investment options for investors increase, which leads to a wider participation by investors in the secondary market.

#### 2.7 Participants in the Capital Market

- Investors: Investors are the lifeline of any capital market. For a vibrant capital market, the capital market should be able to attract the savings of investors. Investors belong to various categories such as Retail Investors, Institutional Investors like mutual funds, insurance companies and Foreign Portfolio Investors.
- **Stock Exchange:** Stock Exchange is a place where securities issued by issuer companies are listed and traded. The term is synonymously used for secondary markets.
- Depository: A depository is an organisation which holds securities (like shares, debentures, bonds, government securities, mutual fund units etc.) of investors in electronic form at the request of the investors through a registered Depository Participant. They also provide safekeeping of securities. They also help in other functions like pledge, hypothecation, stock lending and borrowing etc. In India there are two depositories namely National Securities Depository Limited (NSDL) and Central Depository Services (India) Limited (CDSL).
- Intermediaries: Intermediaries are those entities which offer various services in relation to the capital markets. There are various categories of intermediaries such as stockbrokers, merchant bankers, underwriters etc.



# 3. CAPITAL MARKET INSTRUMENTS

Financial instruments (e.g., bonds and stocks) whose maturity is more than one year are traded in the capital market. They have a very large source of funds with bonds having long maturity and shares having indefinite maturity. It also helps in increasing capital formation in the country. The following instruments are available for investors in the capital market: -

- Shares (Equity and preference)
- Debentures/ Bonds
- Depository Receipts (ADR's, GDR's, and IDR's)
- Derivatives

The above instruments are discussed as below:

(i) Shares: Share is a type of security, which signifies ownership in a corporation and represents a claim on the part of the corporation's assets and earnings. As one acquires more shares, his or her ownership stake in the company becomes larger.

There are two main types of shares, equity shares and preference shares. An equity share usually entitles the owner to vote at shareholders' meetings and to receive dividends. Preference shares generally do not have voting rights but have a prior preference on the assets and earnings of the company than the equity shares. For example, an owner of Preference shares receives dividends before equity shareholders and has priority in the repayment of capital in the event of a company going bankrupt or liquidated.

#### Basic Features of Shares

It is a general belief that on becoming a shareholder of a company, the shareholder has a say in the day-to-day affairs of the business. However, on the contrary, an individual retail investor has very little control over the running of the business. Various features of shares are laid down as below:

- 1) Profits of companies are sometimes paid in the form of dividends. A higher proportion of shares in a company signifies a higher stake in the profits also. In case of bankruptcy and liquidation, shareholders receive what is left after all the creditors have been paid.
- 2) Another extremely important feature of a share is its limited liability, which means that, as an owner of a share, you are not personally liable if the company is not able to pay its debts.
- 3) Companies issue shares to raise capital as it does not require them to pay back the money after a certain period (other than redeemable preference shares) or make interest payments continuously. Equity shares can be held by the company till perpetuity.
- 4) Equity shares are traded on the cash segment of the capital market. The investors in equity shares make money either through dividends or through capital appreciation in the price of the shares. Equity shares are very high-risk instruments with no guaranteed returns. There is always a risk of downside in the value of equity investments.
- Shares are traded at market value on stock exchanges. Market Value per share is the current price at which the share is traded. For actively traded stocks (liquid stocks), market price quotations are readily available due to continuous demand and supply for those shares. However, for inactive stocks (illiquid stocks) that have very thin markets, prices are very difficult to obtain. Even when obtainable, the information may reflect only the sale of a few shares and may not disclose the market value of the firm. Market value per share of an equity share is generally a function of the expectations of the market about the future earnings of the company and the perceived risk on the part of investors.
- (ii) **Debentures/ Bonds**: One of the most popular long term debt securities among corporates is bond. In case of a bond issue, the buyer of bonds lends the required amount to the issuer of bonds. The certificate itself is evidence of a lender-creditor relationship. It is a "security" because unlike a

car loan or home-improvement loan, the debt can be bought and sold in the open market. And a bond is a security which can be bought and sold in the open market. In fact, as already mentioned, a bond is a long-term security whose maturity period is generally more than one year. Bonds with maturities of less than one year are generally called money market instruments.

As the intention of a bond issue is that the securities shall be bought and sold, all the certificates of a bond issue contain a master loan agreement. This agreement between issuer and investor (or creditor and lender), called the 'bond indenture" or "deed of trust," contains all the information one would normally expect to see in any loan agreement, which includes the following:

- Amount of the Loan: The "face amount" "par value" or "principal" is the amount of the loan the amount that the bond issuer has agreed to repay at the bond's maturity.
- Rate of Interest: Bonds are issued with a specified "coupon" or "nominal" rate, which is determined largely by market conditions at the time of the bond's primary offering. So, once the coupon rate is fixed, it is applicable for the entire life of the bond. The amount of the interest to be paid can be arrived at by multiplying the rate of interest (coupon) by the face value of the bond. For example, the interest which a bond issuer pays to the bondholder in case of a bond issue with face value of ₹100,000 and a coupon of 8% is ₹8000 per year.
- Schedule or Form of Interest Payments: Interest is paid on most bonds at six-month intervals, usually on either the first or the fifteenth of the month. The ₹ 8000 of annual interest on the bond in the previous example would probably be paid in two installments of ₹ 4000 each.
- \* Term: A bond's "maturity," or the length of time until the principal is repaid varies. Debt that matures in less than a year is a "money market instrument" such as commercial paper or bankers' acceptances. A "short-term bond," on the other hand, may have an initial maturity of five years. A "long- term bond" typically matures in 20 to 40 years. The maturity of any bond is predetermined and stated in the trust indenture.
- Call Feature (if any): A "call feature," if specified in the trust indenture, allows the bond issuer to "call in" the bonds (also called callable bonds) and repay them at a predetermined price before maturity. Bond issuers use this feature to protect themselves from paying more interest than they must for the money they are borrowing. Companies call in bonds when general interest rates are lower than the coupon rate on the bond, thereby retiring expensive debt and refinancing it at a lower rate.

Suppose IDBI had issued 6 years ₹ 1000 bonds in 1998 @14% p.a. But now the current interest rate is around 9% to 10%. If the issuer wants to take advantage of the call feature in the bond's indenture it will call back the earlier issued bonds and reissue them @9% p.a. The sale proceeds of this new issue will be used to pay the old debt. In this way IDBI now enjoys a lower cost for its borrowed money.

Some bonds offer "call protection"; that is, they are guaranteed not to be called for five to ten years. Call features can affect bond values by serving as a ceiling for prices. Investors are generally unwilling to pay more for a bond than its call price because they are aware that the bond could be called at a lower call price. If the bond issuer exercises the option to call bonds, the bond holder is usually paid a premium over par for the inconvenience.

Refunding: If, at the time of maturity of bonds, the issuer does not have the cash on hand to repay bondholders; it can issue new bonds and use the proceeds either to redeem the older bonds or to exercise a call option. This process is called refunding.

**Bond Yields and its Calculation:** There are several methods for calculating bond yield. But the most common method is the Yield to Maturity (YTM). Yield to maturity (YTM) is the total return anticipated on a bond if the bond is held until it matures. Yield to maturity is considered a long-term bond yield but is expressed as an annual rate. In other words, it is the internal rate of return (IRR) of an investment in a bond if the investor holds the bond until maturity, with all payments made as scheduled and reinvested at the same rate.

(Source: Investopedia)

The formula for computation of YTM is as follows:

YTM = 
$$\frac{\text{Annual Interest +}}{\text{Period of Holding}} \frac{\text{Redemption Value - Purchase Price}}{\text{(Redemption Value + Purchase Value) / 2}}$$

**Determinants of Bond Prices:** While Yield to Maturity (YTM) enables traders and investors to compare debt securities with different coupon rates and terms to maturity, it does not determine price. Bond prices depend on several factors such as the ability of the issuer to make interest and principal payments and how the bond is collateralized. An across-the-board factor that affects bond prices is the level of prevailing interest rates.

#### Illustration 1

Suppose an 8% ₹ 1000 bond has 15 years to maturity. Purchase Price is ₹ 800. The prevailing interest rate (on other investment vehicles) is about 8%. Further assume that current prevailing interest rates are about 9%. Why should investors buy a five-year old bond yielding 8% when they can buy a newly issued 9% bond?

#### Solution

The only way the holder of an 8% bond can find a buyer is to sell the bond at a discount, so that its yield to maturity is the same as the coupon rate on new issues. Let's say interest rates increase from 8% to 10%. With 15 years to maturity, an 8% bond must be priced in such a way that the

discount, when amortized over 15 years has a yield to maturity of 10%. That discount is a little under ₹ 200:

YTM = 
$$\frac{\text{Rs.}80 + (\text{Rs.}200 / 15 \text{ years})}{(\text{Rs.}1000 + \text{Rs.}800) / 2} = \frac{\text{Rs.}93.33}{\text{Rs.}900} = 10.4\%.$$

The 8% bond with 15 years to maturity must sell at a little over ₹ 800 to compete with 10% bonds. The possibility that interest rates will cause outstanding bond issues to lose value is called "Interest rate risk." Further, there is an upside to this risk. If interest rates decline during the five years when the 8% bond is outstanding, the holder could sell it at a premium to make its YTM rate equal to the lower yields of recent issues. For instance, if Interest rates decline to 7%, the price of the 8% bond with 15 years to maturity will increase by about ₹ 100.

- (iv) American Depository Receipt (ADR): An American Depository Receipt (ADR) is a negotiable receipt which represents one or more depository shares held by a US custodian bank, which in turn represent underlying shares of non-US issuer held by a custodian in the home country. Investors of USA who are willing to invest in the securities of non-USA issuers finds ADR as an attractive means of investment for the following reasons:
- ADR provide a means to US investors to trade the non-US company's shares in US dollars. ADR is a negotiable receipt (which represents the non-US share) issued in US capital market and is traded in dollars. The trading in ADR effectively means trading in underlying shares.
- ADR facilitate share transfers. ADR are negotiable and can be easily transferred among the investors like any other negotiable instrument. The transfer of ADR automatically transfers the underlying share.
- The transfer of ADR does not involve any stamp duty and hence the transfer of underlying share does not require any stamp duty.
- The dividends are paid to the holders of ADR in U.S. dollars.

A non-U.S. issuer must work with its US investment bankers, US depository bank, US and non-US legal counsel and independent accountant to prepare the registration documents and offering materials.

The listing of such an issue is done on the NYSE or AMEX to enable trading. Quotations on NASDAQ can also be used for trading purposes. Any requirement with respect to Blue Sky Law, if not exempted, must be fulfilled.

Specified documents and information must be provided to NASDAQ to enable it to review the terms of the offering and determine whether the underwriting arrangements are fair and reasonable. The filing documents with NASDAQ are the responsibility of managing underwriter.

#### Example

India's ABC Ltd. is traded on both the BSE and NSE. To become listed on a US exchange, it offers its shares in large quantities to a bank there. ADR certificates, which are issued by the USA bank to interested investors via the exchange, are accepted in exchange for shares of ABC Ltd.

Through a process of American dollar-based bidding, investors determine the price of the ADR. Investors can only purchase and sell ADR shares once the major U.S. stock exchange lists the bank certificates for trading. The Securities Exchange Commission, which oversees the U.S. stock exchange, keeps an eye on any requirements that must be met by the foreign business, which is in this case, ABC Ltd.

(v) Global Depository Receipts (GDR): Global Depository Receipts are negotiable certificates issued by a depository based outside India to non-resident investors with publicly traded equity shares or foreign currency convertible bonds of the issuer in India as underlying security. An issue of depository receipts would involve the issuer, issuing agent to a foreign depository. The depository, in turn, issues GDR to investors evidencing their rights as shareholders. Depository receipts are denominated in foreign currency and are listed on an international exchange such as London or Luxembourg. GDR enable investors to trade a dollar denominated instrument on an international stock exchange and yet have rights in foreign shares.

The principal purpose of the GDR is to provide international investors with local settlement. The issuer issuing the shares must pay dividends to the depository in the domestic currency. The depository must then convert the domestic currency into dollars for onward payment to receipt holders. GDR bears no risk of capital repayment.

GDR is also issued with warrants attached to them. Warrants give the investors an option to get it converted into equity later. Warrants help the issuer to charge some premium on the GDR sold and it also helps to increase the demand of the GDR issue. The other advantage to the issuer is that it will not have to pay dividends on the warrants till the conversion option is exercised. The disadvantage to the issuer lies in delayed receipt of full proceeds from the issue and in case the conversion option is not exercised the expected proceeds will not be realized.

(vi) Derivatives: A derivative is a financial instrument which derives its value from some other financial price. This 'other financial price' is called the underlying. The most important derivatives are futures and options.

These are derivative instruments traded on the stock exchange. The instrument has no independent value, with the same being 'derived' from the value of the underlying asset. The assets could be

securities, commodities, or currencies. Its value varies with the value of the underlying asset. The contract or the lot size is fixed. For example, a Nifty futures contract has 75 stocks.

#### **Futures**

It means you agree to buy or sell the underlying security at a 'future' date. If you buy the contract, you promise to pay the price at a specified time. If you sell it, you must transfer it to the buyer at a specified price in the future.

The contract will expire on a pre-specified expiry date (for example, it is the last Thursday of the month for equity futures contracts). Upon expiry, the contract must be settled by delivering the underlying asset or cash. You can also roll over the contract to next month. If you do not wish to hold it till expiry, you can close it mid-way.

#### **Options**

This gives the buyer the right to buy/sell the underlying asset at a predetermined price, within, or at end of a specified period. He is, however, not obliged to do so. The seller of an option is obliged to settle it when the buyer exercises his right.

There are two types of options — call and put. Call is the right but not the obligation to purchase the underlying asset at the specified price by paying a premium. The seller of a call option is obliged to sell the underlying asset at the specified strike price. Put is the right but not the obligation to sell the underlying asset at the specified price by paying a premium. However, the seller is obliged to buy the underlying asset at the specified strike price. Thus, in any options contract, the right to exercise the option is vested with the buyer of the contract. The seller only has the obligation.

Investing in F&O needs less capital as you are required to pay only margin money (5-20 per cent of the contract) and take a larger exposure. However, it is meant for high net worth individuals.

In futures contracts, the buyer and the seller have an unlimited loss or profit potential. The buyer of an option can makes unlimited profit and face limited downside risk. The seller, on the other hand, can make limited profit but faces unlimited downside. (Source: Business Standard)



#### 4. ASPECTS OF PRIMARY MARKET (NEW **ISSUE MARKET**)

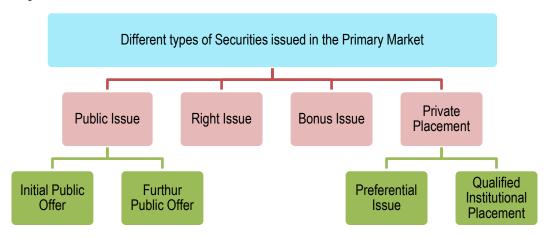
Various aspects of primary market i.e., new issue market have been discussed in detail in the following paragraphs. Discussion mainly takes places in Indian context. However, global aspects are also covered at suitable places.

#### 4.1 Different kinds of issue of securities

Primarily, issues made by an Indian company can be classified as Public, Rights, Bonus and Private Placement. While right issues by a listed company and public issues involve a detailed procedure, bonus issues and private placements are relatively simpler. The classification of issues is illustrated as below:

- a) Public Issue
  - (i) Initial Public Offer (IPO)
  - (ii) Further Public Offer (FPO)
- b) Rights Issue
- c) Composite Issue (Combination of public and right issue)
- d) Bonus Issue
- e) Private Placement
  - (i) Preferential Issue
  - (ii) Qualified Institutional Placement

Different types of Securities issued in the Primary Market can be succinctly shown in the following diagram:



The diagram as depicted above has been briefly discussed as below:

(a) Public Issue: When shares or convertible securities are issued to new investors, it is called a public issue. Public issues can be further sub-divided into Initial Public Offer (IPO) and Further Public Offer (FPO). The significant features of each type of public issue are illustrated below:

- (i) Initial Public Offer (IPO): When the shares and debentures of a company are issued to the public for the first time, it is called an IPO. It then set the stage for listing and trading of the issuer's shares or convertible securities on the Stock Exchanges.
- (ii) Further Public Offer (FPO) or Follow-on Offer: When an already listed company makes either a fresh issue of shares or convertible securities to the public or an offer for sale to the public, it is called an FPO.
- (b) Right Issue (RI): When an issue of shares or convertible securities is made by an issuer to its existing shareholders as on a particular date fixed by the issuer (i.e., record date), it is called a right issue. The rights are offered in a particular ratio to the number of shares or convertible securities held as on the record date.
- (c) Composite Issue: When the issue of shares or convertible securities by a listed issuer on exam public cum-rights basis, wherein the allotment in both public issue and rights issue is proposed to be made simultaneously, it is called composite issue.
  - (d) Bonus Issue: When an issuer makes an issue of shares to its existing shareholders without any consideration based on the number of shares already held by them as on a record date, it is called a bonus issue. In the Bonus Issue, the shares are issued out of the Company's free reserve or share premium account in a particular ratio.
  - (e) Private Placement: When an issuer makes an issue of shares or convertible securities to a select group of people not more than 50 but can extend upto 200, it is called a private placement. It should not either be a right issue or a public issue. Private placement of shares or convertible securities by listed issuer are of following:
  - (i) Preferential Allotment: When a listed issuer issues shares or convertible securities, to a select group of persons in terms of provisions of Chapter V of SEBI (ICDR) Regulations, 2018, it is called a preferential allotment. The issuer is required to comply with various provisions which inter-alia include pricing, disclosures in the notice, lock-in etc., in addition to the requirements specified in the Companies Act.
  - (ii) Qualified Institutional Placement (QIP): When a listed issuer issues equity shares or non-convertible debt instruments along with warrants and convertible securities other than warrants to Qualified Institutional Buyers only, in terms of provisions of Chapter VI of SEBI (ICDR) Regulations, 2018, it is called a QIP.

A listed issuer may make qualified institutional placement if it satisfies the following conditions:

(a) A special resolution must be passed by the shareholders by approving the qualified institutional placement.

- (b) The equity shares of the same class, which are proposed to be allotted through qualified institutional placement or pursuant to conversion or exchange of eligible securities offered through qualified institutional placement, have been listed on a recognized stock exchange for a period of at least one year prior to the date of issuance of notice to its shareholders for convening the meeting to pass the special resolution.
- (c) An issuer shall be eligible to make a qualified institutional placement if any of its promoters or directors is not a fugitive economic offender.
- (d) A qualified institutional placement shall be managed by merchant banker(s) registered with the Board who shall exercise due diligence.
- (e) The qualified institutional placement shall be made at a price not less than the average of the weekly high and low of the closing prices of the equity shares of the same class quoted on the stock exchange during the two weeks preceding the relevant date.
- (f) The minimum number of allottees for each placement of eligible securities made under qualified institutional placement shall not be less than:
  - (i) two, where the issue size is less than or equal to two hundred and fifty crore rupees.
  - (ii) five, where the issue size is greater than two hundred and fifty crore rupees.
  - Provided that no single allottee shall be allotted more than 50% of the issue size.
- (g) The tenure of the convertible or exchangeable eligible securities issued through qualified institutional placement shall not exceed sixty months from the date of allotment.
- (h) The issuer shall not make any subsequent qualified institutional placement until the expiry of two weeks from the date of the prior qualified institutional placement made pursuant to one or more special resolutions.

(Source: SEBI website)

# 4.2 Types of Offer Documents

'Offer document' is a document which contains all the relevant information about the company, promoters, projects, financial details, objects of raising the money, terms of the issue, etc. and is used for inviting subscription to the issue being made by the issuer. 'Offer Document' is called "Prospectus" in case of a public issue and "Letter of Offer" in case of a rights issue.

Terms used for offer documents vary depending upon the stage or type of issue where the document is used.

The terms used for offer documents are defined below:

- (i) Draft offer document is an offer document filed with SEBI for specifying changes, if any, in it, before it is filed with the Registrar of companies (ROCs). Draft offer document is made available in public domain including websites of SEBI, concerned stock exchanges, or concerned Merchant Banker for enabling public to give comments, if any, on the draft offer document.
- (ii) **Red herring prospectus** is an offer document used in case of a book built public issue. It contains all the relevant details except that of price or number of shares being offered. It is filed with ROC before the issue opens.
- (iii) Prospectus is an offer document in case of a public issue, which has all relevant details including price and number of shares or convertible securities being offered. This document is registered with ROC before the issue opens in case of a fixed price issue and after the closure of the issue in case of a book-built issue.
- (iv) Letter of offer is an offer document in case of a Rights issue of shares or convertible securities and is filed with Stock exchanges before the issue opens.
- (v) Abridged prospectus is an abridged version of an offer document in public issue and is issued along with the application form of a public issue. It contains all the salient features of prospectus.
- (vi) **Abridged letter of offer** is an abridged version of the letter of offer. It is sent to all the shareholders along with the application form.
- (vii) **Shelf prospectus** is a prospectus which enables an issuer to make a series of issues within a period of 1 year without the need of filing a fresh prospectus every time. This facility is available to public sector banks, scheduled banks, and Public Financial Institutions.
- (viii) **Placement document** is an offer document for the purpose of Qualified Institutional Placement and contains all the relevant and material disclosures. (Source: SEBI website)

#### Key disclosure requirements of offer document

Key disclosures required to be made in an offer document i.e., in a prospectus are given as below:

- (i) names and addresses of the registered office of the company, company secretary, Chief Financial Officer, auditors, legal advisers, bankers, trustees, if any, underwriters etc.;
- (ii) dates of the opening and closing of the issue, and declaration about the issue of allotment letters and refunds within the prescribed time;

- (iii) a statement by the Board of Directors about the separate bank account where all monies received out of the issue are to be transferred and disclosure of details of all monies including utilized and unutilized monies out of the previous issue;
- (iv) details about underwriting of the issue;
- (v) the authority for the issue and the details of the resolution passed therefor;
- (vi) procedure and time schedule for allotment and issue of securities;
- (vii) capital structure of the company;
- (viii) main objects of public offer and terms of the present issue;
- (ix) Main objects and present business of the company and its location, schedule of implementation of the project;
- (x) Particulars relating to management perception of risk factors specific to the project, gestation period of the project, extent of progress made in the project and deadlines for completion of the project;
- (xi) minimum subscription, amount payable by way of premium, issue of shares otherwise than on cash:
- (xii) details of directors including their appointments and remuneration,
- (xiii) sources of promoter's contribution.

# 4.3 Issue Requirements

SEBI has laid down entry norms for entities making a public issue/ offer. The same are detailed below -

**Entry Norms:** Entry norms are different routes available to an issuer for accessing the capital market by way of a public issue. They are meant for protecting the investors by restricting fund raising by companies if they do not satisfy the entry requirements.

(i) An unlisted issuer making a Public Issue (i.e., IPO) is required to satisfy the following provisions:

#### Entry Norm I (commonly known as "Profitability Route")

The Issuer Company shall meet the following requirements:

(a) Net Tangible Assets of at least ₹. 3 crores in each of the preceding three full years of which not more than 50% are held in monetary assets. However, the limit of fifty percent on

monetary assets shall not be applicable in case the public offer is made entirely through offer for sale.

- (b) Minimum of ₹ 15 crores as average operating profit during the preceding three years, with operating profit in each of these preceding three years.
- (c) Net worth of at least ₹ 1 crore in each of the preceding three full years.
- (d) If the company has changed its name within the last one year, at least 50% revenue for the preceding 1 year should be from the activity suggested by the new name.

If the company has issued Superior Rights (SR) equity shares to its promoters, it can go through an IPO subject to fulfillment of certain conditions which are provided in regulation 6(3) of SEBI (ICDR) Regulations, 2018.

#### Entry Norm II (Commonly known as "QIB Route")

To provide sufficient flexibility and to ensure that genuine companies are not limited from fund raising on account of strict parameters, SEBI has provided the alternative route to the companies not satisfying any of the above conditions, for accessing the primary Market.:

The Issue shall be made through the book-building route, with at least 75% of the net offer to the public to be mandatorily allotted to the Qualified Institutional Buyers (QIBs). The company shall refund the subscription money if the minimum subscription of QIBs is not attained.

- (ii) A listed issuer making a public issue (i.e., FPO) is required to satisfy the following requirements:
- (a) An issuer shall be eligible to make a further public offer, if it has not changed its name in the last one-year period immediately preceding the date of filing the relevant offer document. If the company has changed its name within the last one year, at least 50% revenue for the preceding 1 year should be from the activity suggested by the new name.
  - An issuer not satisfying the condition as stated above 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 seventy-five per cent of the net offer, to qualified institutional buyers and to refund full subscription money if it fails to make the said minimum allotment to qualified institutional buyers.

Certain other general conditions to be satisfied by the issuer about further public offer are given as below:

- (i) It has made an application to one or more stock exchanges to seek an in-principal approval for listing of its specified securities on such stock exchanges and has chosen one of them as the designated stock exchange, in terms of Schedule XIX;
- (ii) It has entered into an agreement with a depository for dematerialization of specified securities already issued and proposed to be issued;
- (b) All its existing partly paid-up equity shares have either been fully paid-up or have been forfeited:
- (c) It has made firm arrangements of finance through verifiable means towards seventy-five per cent of the stated means of finance for the specific project proposed to be funded from the issue proceeds, excluding the amount to be raised through the proposed public issue or through existing identifiable internal accruals.

  (Source: SEBI Website)

#### 4.4 Minimum Promoter's contribution and lock-in

The promoters shall contribute to the public issue as follows:

- a) to the extent of twenty per cent of the proposed issue size or to the extent of twenty per cent of the post-issue capital.
- b) in case of a composite issue (i.e., further public offer cum rights issue), either to the extent of twenty per cent of the proposed issue size or to the extent of twenty per cent. of the post-issue capital excluding the rights issue component.

The specified securities held by the promoters shall not be transferable (hereinafter referred to as "locked-in") for the periods as stipulated hereunder:

- a) minimum promoters' contribution including contribution made by alternative investment funds, or foreign venture capital investors, as applicable, shall be locked in for a period of eighteen months from the date of allotment of the further public offer:
  - Provided that in case most of the issue proceeds excluding the portion of offer for sale is proposed to be utilized for capital expenditure, then the lock-in period shall be three years from the date of allotment in the initial public offer.
- b) promoters' holding more than minimum promoters' contribution shall be locked-in for a period of six months:
  - Provided that in case most of the issue proceeds excluding the portion of offer for sale is proposed to be utilized for capital expenditure, then the lock-in period shall be one year from the date of allotment in the initial public offer:

(c) The SR equity shares shall be under lock-in until their conversion to equity shares having voting rights same as that of ordinary shares, provided they are complying with the other provisions of these regulations.

# 4.5 IPO Grading

The issuer may obtain grading for its initial public offer from one or more credit rating agencies registered with SEBI. Such a credit rating agency shall be registered with SEBI. Such a grading granted to the IPO of a company considers the relative assessment of fundamentals of an IPO. The IPO Grading so obtained must be disclosed by the companies going for an IPO.

The IPO Grading is generally granted on a five-point scale with a higher scale indicates stronger fundamentals and vice versa. This has been shown as below:

IPO grade 1 - Poor fundamentals

IPO grade 2 - Below-Average fundamentals

IPO grade 3 - Average fundamentals

IPO grade 4 - Above-average fundamentals

IPO grade 5 - Strong fundamentals

The purpose of IPO Grading is to make available additional information to the investors. This will help them to assess the fundamentals of a company more judiciously.

The IPO Grading can be done either before filing the offer document with SEBI or later. However, the prospectus/RHP must highlight the grades given to IPOs by the Credit Rating Agencies. Further, the companies coming out with an IPO are required to bear the expenses required for grading an IPO.

However, it is noted that w.e.f. February 4, 2014, IPO Grading has been made optional.

The IPO grading process considers the following points:

- (i) Prospects of the industry in which the company operates.
- (ii) Competitive strengths of the company
- (iii) Company's financial position.

To arrive at an IPO Grade, the following aspects are investigated by the rating agencies. However, the list is not exhaustive and may vary.

a. Business Prospects and Competitive Position (i. Industry Prospects ii. Company Prospects)

- b. Financial Position
- c. Management Quality
- d. Corporate Governance Practices
- e. Compliance and Litigation History
- f. New Projects—Risks and Prospects

It can be reiterated that the above lists may vary on a case-to-case basis. Further, IPO Grading does not consider the price at which the shares are to be issued to the public. So, the investors must make an independent judgement regarding the price at which shares are to be bid during the IPO process.

Therefore, it can be said that though the objective of a credit rating agency is to give an opinion about an IPO, the investors are also required to take safeguards by studying the prospectus including risk factors very carefully by making an independent judgement.

Further, it is to be noted that SEBI does not play any role in the grading process of the CRA. The grading is entirely an independent and unbiased opinion of CRA. Therefore, SEBI's opinion of the IPO document is entirely independent of the opinions expressed or grades given by CRAs.

# 4.6 Pricing of an Issue

Before 1992, pricing of the issue was decided by the Controller of Capital Issues (CCI) under the Capital Issues (Control) Act, 1947. In 1992, the Capital Issues (Control) Act, 1947 was repealed. And then, the public issues came out of the shackles of CCI. Pricing of Issues can be freely arrived at by the companies in consultation with the Merchant Banker.

The offer document discloses the parameters based on which the price is arrived at. These are EPS, PE multiple, return on net worth etc. The parameters as stated above are also compared with the peer group companies.

The public issue can be segregated into either a fixed price issue or a book-built issue. If the price is already mentioned in the offer document, it is called a fixed price issue. Conversely, when the price is discovered based on demand received from the investors at different levels of price, it is called a 'Book Built Issue'.

The price is disclosed in the fixed price issue in the draft prospectus. And the floor price or price band in the case of a book-built issue is disclosed in the Red Herring Prospectus. Where the issuer opts not to make the disclosure of the floor price or price band in the red herring prospectus, the issuer shall announce the floor price or the price band at least two working days before the opening

of the issue in the same newspapers in which the pre-issue advertisement was released or together with the pre-issue advertisement in the format prescribed under Part A of Schedule X to the SEBI (ICDR) Regulations, 2018.

# 4.7 Intermediaries to the Capital Market

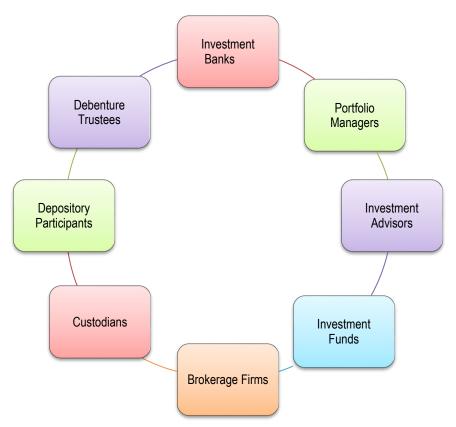
- 1. **Merchant Bankers/Lead Managers –** Merchant Bankers/Lead Managers manage the issue. They make the entire management regarding purchase and sale of securities. They also provide corporate advisory services in relation to issue management. Pre issue and post issue due diligence of the public issue is also handled by the Merchant Banker.
- 2. **Underwriters**—The IPO underwriters generally hire specialists in their staff. The underwriters who are generally investment banks must ensure that all the regulatory requirements are complied with.

Secondly, the investment banker pursues the large institutional investors such as mutual funds, pension funds and insurance companies to invest in the company. The amount of interest generated by these large institutional investors in the company's shares helps the underwriter to set the price of IPO of the company's stock.

- 3. **Bankers to an Issue**—They are scheduled banks who carry any one or more of the following activities:
- (i) acceptance of application and application monies;
- (ii) acceptance of allotment or call monies;
- (iii) refund of application monies;
- (iv) payment of dividend or interest warrants.
- 4. **Brokers to an issue**—the brokers to an issue act as an agent to the investor. He charges commission for the services rendered by him. So, the task of brokers is to execute buy or sell orders.
- 5. **Debenture Trustees**–As per SEBI Regulations, "Debenture Trustee" means a trustee appointed in respect of any issue of debentures of a body corporate. They should either be a schedule commercial bank, a public financial institution, an insurance company, or a body corporate. It is also required to be registered with SEBI.
- 6. **Registrars to Issue**–According to SEBI Regulations, "Registrar to an Issue" means the person appointed by a body corporate or any person or group of persons to carry on the following:
- (i) collecting applications from investors in respect of an issue;

- (ii) keeping a proper record of applications and monies received from investors or paid to the seller of the securities and
- (iii) assisting body corporate or person or group of persons in-
  - (a) determining the basis of allotment of securities in consultation with the stock exchange;
  - (b) finalizing the list of persons entitled to allotment of securities;
  - (c) processing and dispatching allotment letters, refund orders or certificates and other related documents in respect of the issue.
- 7. **Portfolio Managers**—The job of a portfolio manager is to invest in a mutual fund, exchange traded fund or any suitable investments in securities. Further, they help their clients in developing an investment strategy, implementing the strategy developed, and manage day-to-day portfolio trading.

# **Capital Market Intermediaries**



# 4.8 Steps involved in public issue

The various steps involved in public issue of shares are enumerated below:

- 1. Board Meeting and Passing a Board Resolution for Public Issue: Before initiating the process of public issue, a company is required to call a Board meeting and pass a Board Resolution for raising the money through Public Issue.
- **2. Holding of General Meeting**: If it is required by the Articles of Association, then the consent of the shareholders must be obtained. For this purpose, a meeting of the shareholders will be called.
- 3. Appointment of Merchant Banker and other intermediaries and entering MOU with them: To initiate the process, the Company must pass a Board Resolution and proceed to appoint a Merchant Banker, with whom an MOU may be entered. It is also necessary to appoint various intermediaries i.e., underwriters, Bankers to the Issue, Registrars, and brokers to the issue for marketing the same and to enter into an agreement with them.
- **4. Preparation of Draft Prospectus and its approval by Board:** A draft Prospectus must be prepared and approved by the Board. Apart from the notice of offer to issue shares to public, prospectus should also disclose:
- (a) Justification of Premium, if called
- (b) Net Asset value (NAV)
- (c) High and Low price of the shares of the company for the last two years
- (d) Highlights of the issue, as well as the "Risk Factors"
- (e) A clause that company shall refund the entire application money if minimum subscription is not received
- (f) A statement by the lead managers that in their opinion the assets of the underwriters are adequate to meet their obligations
- **5. Filing of prospectus with the SEBI/Registrar of Companies**: The draft prospectus along with the copies of the agreements entered with the Lead Manager, Underwriters, Bankers, Registrars, and Brokers to the issue has to be filed with SEBI and the Registrar of Companies (ROC) of the state where the registered office of the company is located, along with the fees & other prescribed requirements, (with due diligence by merchant banker).
- **6. Intimation to Stock Exchange:** A copy of the Memorandum and Articles of Association of the company must be sent to the Stock Exchanges where the shares are to be listed, for approval.

- 7. **Finalization of collection centers:** The lead manager finalizes the collection centers so that prospective investors can collect the application forms alongwith prospectus.
- **8. Printing and Distribution of Prospectus and Application Forms**: After Receipt of Acknowledgement card from the SEBI and the intimation from Registrar of Companies regarding registration of prospectus, the company should take steps to issue the prospectus within 90 days of its registration with ROC.
- **9. Announcement and Advertisement**: Announcement regarding the proposed issue should be made at least ten days before the subscription list opens. No advertisement should include Brand Names for the issue except the normal commercial name of the company or commercial brand names of the company or commercial brand names of the company or commercial brand names of its products already in use.
- **10. Subscription List**: As stipulated by SEBI Regulations, the subscription list for public issue is to be kept open for at least 3 working days and for a total period not exceeding 10 working days, which is to be disclosed in prospectus as well. In case of a book-built issue, bid is open for a maximum period of 7 working days which can be extended by 3 days in case of revision in price band.
- 11. **Separate Bank Account**: A separate bank account is opened for the purpose of collecting the proceeds of the issue. Further, the date of opening and closing of the subscription list should be intimated to all the collecting and controlling branches of the bank with whom the company has entered into an agreement for the collection of application forms.
- **12. Minimum Subscription**: Section 39 of the Companies Act, 2013 prohibits allotment of securities where the minimum amount as stated in the prospectus has not been subscribed. If the stated minimum amount has not been subscribed, then the application money shall be repaid within a period of not later than four days from the closure of the issue, as per Regulation 45 (2) of SEBI (ICDR) Regulations. If any such money is not repaid within such period, the company shall repay that money with interest at the rate of fifteen percent per annum.
- **13. Promoters' contribution**: A certificate to the effect that the required contribution of the promoters has been raised before opening the issue, must be obtained from a Chartered Accountant, and duly filed with SEBI.
- **14. Allotment of Shares**: A return of allotment in the prescribed form as given under the Companies Act,2013 should be filed with Registrar of companies within 30 days of the date of allotment along with the prescribed fees. In case the issue is oversubscribed, the basis of allotment must be decided in consultation with the stock exchange authorities as per the guidelines laid down by the stock exchanges.

- **15. Compliance Report**: As stipulated by SEBI guidelines, within 45 days of the closure of issue, a report in the prescribed form along with a compliance certificate from statutory auditor/ practicing chartered accountant or by a company secretary in practice must be forwarded to SEBI by the lead managers.
- **16. Issuance of Share Certificates**: As per provisions of the Companies Act, 2013, the company should deliver the share certificates within 2 months from the date of allotment of shares.

# 4.9 Public Issue of Shares- Book Building Route

Book Building is a process undertaken to assess 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.

In the book building process, the price at which securities will be issued to the public is not known while in case of offer of shares through normal public issue, price is known in advance to investor. In the case of Book Building, the demand can be known every day as the book is built. But in case of public issues, the demand is known at the close of the issue. The Book should remain open for a minimum of 3 working days.

# **Book Building Method**

Book building is a method of price discovery. In this method, the offer price of securities is determined based on real demand for the shares at various price levels in the market. "Book building" means a process undertaken to elicit demand and to assess the price for determination of the quantum or value of specified securities or Indian Depository Receipts, as the case may be, in accordance with SEBI (ICDR) regulations.

In book building method, the final issue price is not known in advance. Only a price band is determined and made public before opening of the bidding process. The spread of price between floor price and cap in the price band should not be more than 20%. It means that the cap should not be more than 120% of the floor price. Issuing Company appoints a merchant banker as Book Runner Lead Manager (BRLM), who may be assisted by other co-managers and by a team of syndicate members acting as underwriters to the issue.

The BRLM sends copies of Red Herring Prospectus to the Qualified Institutional Buyers (QIBs), large Investors, SEBI registered Foreign Institutional Investors (FIIs) and to the syndicate members. BRLM also appoints brokers of the stock exchanges, called bidding centres. They accept the bids and application forms from the investors. These bidding centres place the order of bidders with the

company through BRLM. They are liable for any default, if any, made by their clients, who have applied through them. Brokers/ Syndicate members collect money from clients/ investors. Money received by them at the time of accepting bids is called margin money. Bids can be made through an online and transparent system of National Stock Exchange and Bombay Stock Exchange depending upon the agreement of the issuer with the stock exchange(s).

A public issue shall be kept open for three working days but not more than ten working days. An issue through book building system remains open for three to seven working days. In the case of revision of price band, the issue period disclosed in the red herring prospectus can be extended for a minimum period of three working days. However, the total bidding period shall not exceed ten working days. In other words, in case of a book-built issue, bid is open for a minimum period of three working days and maximum period of seven working days, which may be extended to a maximum of ten working days, in case the price band is revised.

# Difference between fixed price method and Book Building methods of the pricing of public issue.

- (a) In Fixed price method, price at which the securities are offered and would be allotted is known in advance to the investors while in book building method, a 20 % price band is offered by the issuer within which investors are allowed to bid and the final price is determined by the issuer only after closure of the bidding.
- (b) In Fixed Price method, demand for the securities offered is known only after the closure of the issue while in book building method demand for the securities offered, and at various prices, is available on a real time basis on the stock exchange's website during the bidding period.
- (c) In fixed price method, 100% advance payment is required to be made by the investors at the time of application, while in book building method, 10 % advance payment is required to be made by the QIBs along with the application, while other categories of investors must pay 100% advance along with the application.

### Price discovery under book building process

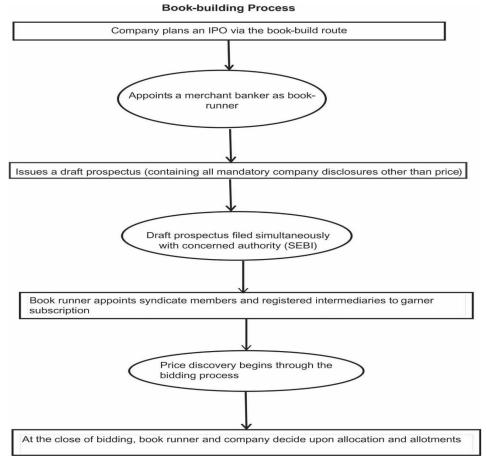
Suppose a company comes with the public offer of 3,000 shares. The company chooses the book building process for price discovery and decides the price band of  $\stackrel{?}{\sim}$ . 20 – 24. The company received the bidding as depicted in the table given below:

Bid Quantity	Bid Price	<b>Cumulative Quantity</b>	Subscription		
500	24	500	16.67%		

1,000	23	1,500	50.00%
1,500	22	3,000	100.00%
2,000	21	5,000	166.67%
2,500	20	7,500	250.00%

Now, based on the above table, the company would obviously want to sell all the shares at the highest price of  $\mathfrak{T}$ . 24, but at this price, it would be able to sell only 500 shares and at  $\mathfrak{T}$ . 23, it would be able to sell only 1500 shares only. To sell all 3000 shares, it has issued to the public, the company would have to further lower the price by  $\mathfrak{T}$ . 1. It means that the company has received 3,000 bids from people interested in buying the stock at  $\mathfrak{T}$ . 22. In this case,  $\mathfrak{T}$ . 22 becomes the cut – off price. Now the company will price the IPO at 22 or lower, but not at a higher price since it didn't receive enough bids to be able to get offering fully subscribed. This is known as the price discovery mechanism of the book building process, and the way most IPOs are priced these days.

The Flowchart given as under explains the book building process



# Some interesting facts about the book building process

- (i) The issuer may mention the floor price or price band in the red herring prospectus.
  - (a) If the issuer chooses not to disclose price band or floor price in the red herring prospectus, the price band or the floor price shall be disclosed at least two working days in the case of initial public offer and at least one working day in the case of further public offer before the opening of the bid.
  - (b) Where the issuer opts for price band instead of floor price, it shall ensure that spread between floor and cap of the price band should not be more than 20 percent. This price band denotes the range of bidding.
- (ii) In case of a composite issue, the price of a public issue may be different from the price offered in right issue. However, justification for such a price difference shall be provided in the offer document.
- (iii) The bidding terminal shall contain on-line graphical display of demand and bid prices updated at periodical intervals, not exceeding thirty minutes.
- (iv) At the end of each day of the bidding period, the demand including allocation made to anchor investors shall be shown graphically in the bidding terminals of syndicate members and websites of recognized stock exchanges offering electronically linked transparent bidding facility, for information of public.
- (v) The issuer in consultation with the book running lead manager determines the issue price on the bid received.
- (vi) On the determination of the price, the number of securities to be offered shall be decided.
- (vii) Once the final price is determined, those bidders whose bids have been successful (bid at or above the final price), shall be entitled to allotment of securities.

# 4.10 Special Purpose Acquisition Companies (SPACs)

In their most basic form, SPACs are listed shell corporations established specifically to buy unlisted or private enterprises and then merge with them. SPACs was founded to raise money through an initial public offering, or IPO, to later purchase private companies. They do not currently operate a business or generate any revenue of their own. Like a typical IPO, this is accomplished by selling shares to the public. Additionally, investors might decide to buy a warrant, which grants them the right to later acquire additional shares at a predetermined price.

These are sometimes known as "blank cheque companies" since SPAC investors are unaware of the destination or purpose of their money. After funds are raised, they are held in trust until a target is identified and purchased. Investors receive their money back from a SPAC if it is unable to locate a suitable acquisition candidate in a period of two years.

Due to their lack of commercial activities and track record, SPACs are primarily supported by well-known CEOs or celebrities who can attract investors for an initial public offering (IPO). To reward themselves, the sponsors purchase up to a fifth of SPAC's capital or shares at a significant discount on the issue price. For instance, sponsors receive the same share at Re 1 or even less if a typical investor pays ₹100 per share. In business jargon, the fee is referred to as "Promote" and lowers regular shareholders' long-term returns by diluting their interest.

# How do SPACs generate revenue or give investors a return?

Following their IPO, SPACs uses the money it raised to buy and combine with a private company. This occurs after the company is listed on the stock exchanges. Following the merger, the SPAC modifies its name and brand to better align with the acquired entity's commercial activities. The acquired company's operations and financial status are now reflected in the SPAC's share price.

Sponsors of SPACs assert that by leveraging their expertise and experience, they may purchase a highly promising private business for less money than it would have cost to list through a conventional IPO. They claim that this significantly increases SPAC investors' post-listing (or merger) returns.

For instance, the space company Virgin Galactic, backed by venture capitalist Chamath Palihapitiya, and Richard Branson merged to list on the stock exchanges in 2019. Since becoming public, the price of Virgin Galactic shares has tripled, while the S&P 500 index has increased by 50% over the same time.

There has been a surge in the number of new SPACs, particularly in the US, as a result of Virgin Galactic's success. Since the year 2020 began, SPACs has raised almost \$100 billion, according to Bloomberg.

### What makes SPACs contentious?

SPAC is perceived by detractors as a means by which the wealthy and well-known evade regulatory oversight and profit unfairly at the expense of common shareholders who are sold shares at par or full value.

Typically, an initial public offering (IPO) is how a private company becomes listed. It takes four to six months and involves a long list of disclosures about the company's finances, operations, prospects, and background of the promoter or promoters. As a result, the market regulator, financial analysts, and the media begin to closely examine the company.

SPACs allow private companies to list directly, evading the entire process. In addition to saving money on hiring merchant bankers to underwrite the IPO, this also saves businesses time. The main attraction of SPACs is its quick route to listing, particularly during the post-pandemic period when IPOs has experienced a significant surge and tech company valuations are at an all-time high.

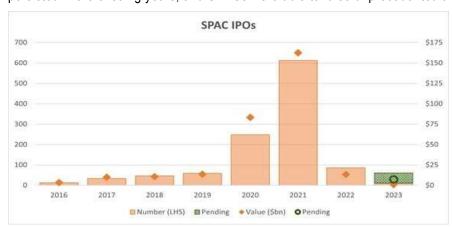
Some view SPAC as a way for well-known and wealthy bankers and CEOs to profit from their fame without having to risk any of their own money. Palihapitiya, for instance, purchased shares in his SPAC for 0.002 cents each, whereas common shareholders paid \$10 for the same shares.

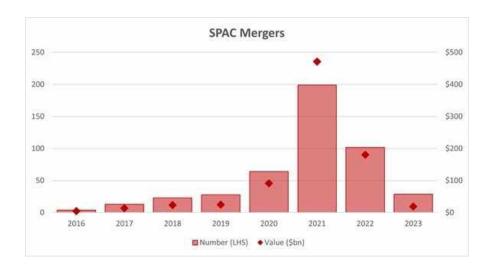
As a result, SPAC is now at the center of the discussion on income and wealth inequality, a topical political issue in the US and many other nations.

# What is the performance of SPACs in exchanges?

### Market expansion

SPACs were a little-known, specialized kind of capital market investment for a long time. This started to change in 2017, as more and more SPAC initial public offerings (IPOs) and mergers were made as sponsors saw them as a desirable substitute for traditional IPOs for taking (mainly tech-focused) companies public. Due to a few high-profile mergers and increased investor interest, the momentum persisted in the ensuing years, and SPACs were able to raise unprecedented amounts of money.





Source: SPAC Research

### **Performance**

Investors saw this as a low-risk opportunity to invest in unlisted companies despite all the hype, particularly in the technology sector where there was theoretically huge growth potential. After a merger, most SPACs have underperformed. After dropping -45% in 2021, the De-SPAC Index—which evaluates the performance of businesses made public through SPAC mergers—fell nearly -75% in 2022.

It is possible to attribute some of the losses to general market weakness. SPACs are frequently used to bring public speculative, fast-growing, and cash-flow negative companies. These growth companies have been disproportionately affected as central bank tightening, rising inflation, and recession concerns have buffeted the broader financial markets.

As a result, a lot of investors have pulled out of the market. SPACs offer their shareholders two choices: either they sell their units in the secondary market while the SPAC is still searching for a merger target, or they reject the proposed merger and redeem their shares to get their investment back plus interest. Companies have suffered disproportionately.

### The final word

Is it the end of the SPACs? Nope. SPACs have been around for decades and do play a crucial role in the capital markets, despite the recent overhype. Put simply, they can be viewed as an alternative to traditional initial public offerings (IPOs) for financing venture capital, offering certain advantages. However, a trifecta of unpredictability in the regulatory environment, sponsors suffering financial blows from liquidations, and generally subpar performance making investors far more cautious have

created obstacles and will alter the sector's future. With SPACs regaining their former position as a riskier but potentially more profitable option for deals, many underwriters will turn back to traditional IPOs. Space will keep changing, and regulations will become clearer.

# Will SPACs be arriving in India?

Currently, India prohibits shell companies, or SPACs, from using initial public offerings (IPOs) to raise money. This could alter, though, since a lot of Indian startups intend to use SPACs to become US listed companies. As a result, a lot of people have petitioned SEBI to permit SPACs or comparable investment vehicles to raise money via an IPO. To facilitate the potential listing of Indian companies in the nation through this channel, the government is currently considering establishing a regulatory framework for Special Purpose Acquisition Companies in the statutes.

# 4.11 Applications Supported by Blocked Amount (ASBA)

It is an alternate payment system for book-built issue launched by SEBI in August 2008. Initially, ASBA was mandatory for public issues going through the book building route. And it was optional for other public issues. But now, Payment through ASBA i.e., Application Supported by Blocked Amount has been made mandatory by SEBI for applying to any public issue of equity shares from January 1<sup>st</sup>, 2016.

ASBA is basically an application by investors for subscribing to an issue containing an authorization to block the application money in a bank account.

An alternative payment mode for applying in primary issues, ASBA has helped investors do away with getting Demand Drafts or Cheques made for payment of application money. Therefore, one's money stays in one's bank account until allotment of the issue takes place. There is no hassle of refunds - in case of less or no allotment of shares. The advantage is that one gets to earn interest even on the blocked amount until it is debited for allotment.

Vadodara-based 20 Microns Ltd was the first company to come out with an initial public offer (IPO) through the new Securities and Exchange Board of India (SEBI) guidelines of Applications Supported by Blocked Amount (ASBA) in September, 2008.

# The process of ASBA has been explained with the help of an example:

- (i) An ASBA investor shall apply to the Self-certified Syndicate Bank (SCSB) with whom the bank account to be blocked is to be maintained.
- (ii) The SCSB will then block the application money in the bank account specified in the ASBA. The application money will remain blocked in the bank account till the allotment of securities or till the withdrawal/failure of the issue or till withdrawal or rejection of the application.

- (iii) The SCSB shall upload the details in the electronic bidding system of the BSE or NSE.
- (iv) After the basis of allotment is finalized, the Registrar to an Issue shall send a request to the SCSB for unblocking the bank account and transferring the allotment money to the issuers escrow account. In case of withdrawal of issue, the bank account shall be unblocked on the information received from pre issue merchant bankers.

# 4.12 What is a Green Shoe Option?

It is an overallotment mechanism. Green Shoe Option is an option to allocate shares more than the shares which have already been issued to the public. It is a price stability mechanism to provide post listing price stability to an initial public offering.

# The process of Green Shoe Option can be explained with the help of following example:

- 1. If a company is issuing 100000 shares, the company will enter into an agreement regarding an overallotment option (green shoe option) with one of the stabilizing agents (mostly underwriters) to the extent of 15000 shares (maximum of 15% of the issue size).
- 2. According to the agreement, the promoters would lend 15000 shares to the stabilizing agents for a limited period of 30 days from the date of listing.
- 3. Allotment would be made to the extent of 1,15,000 shares (100000 shares issued by the company and 15000 shares borrowed from the promoters.
- 4. On listing, if the market price falls below the issue price, the stabilizing agent may buy shares from the market to the extent of 15000 shares. This may help to increase the market price of shares by reducing the selling pressure. The shares purchased by the stabilizing agent are then returned to the promoters. So, only 100000 shares remain listed on the stock exchange after 30 days.
- 5. However, on listing, if the share prices rise, and the stabilizing agent doesn't buy shares from the market, then at the end of 30 days period, the overallotment option is exercised. The company allots 15000 more shares which are then returned to the promoters. Thus, 1,15,000 shares remain listed on the exchange.

Thus, Green Shoe Option acts as a price stabilizing mechanism. Further, over-allotment options are known as Green Shoe options because, in 1919, Green Shoe Manufacturing Company (now part of Wolverine Worldwide Inc.), was the first to issue this type of option. A Green Shoe option can provide additional price stability to a security issue because the underwriter can increase supply and smooth out price fluctuations. It is the only type of price stabilization measure permitted by the Securities and Exchange Commission (SEC) in the USA.

Simply put, it is a price stabilization mechanism whereby a company over-allots shares to investors participating in the issue, with a view to have the merchant banker buy them back from the open market after listing, to arrest any fall in the share prices below the issue price. SEBI introduced the Green Shoe mechanism in Indian capital markets in 2003 vide a circular SEBI/ CFD/DIL/DIP/Circular No. 11 dated 14th August 2003. Since then, several companies have implemented the Green Shoe Option in their initial public offerings.

### Illustration 1

ABC Ltd. issued 15 lakh shares of ₹ 100 each. The green shoe option was exercised by the company prior to the issue. After listing, the share prices of ABC Ltd. plunged to ₹. 90. Stabilizing agents decided to buy shares in the market. How many shares can be purchased by the stabilizing agents to arrest the reduction in share prices?

### Solution

Here, in the above illustration, Green Shoe Option was exercised. Therefore, the stabilizing agents can purchase upto a maximum of 225000 shares i.e., 1500000 x 15/100.

# 4.13 Anchor Investors

### Who is an anchor investor?

Anchor investors are Qualified Institutional Buyers (QIB) who purchase shares one day before the IPO opens. They help in arriving at a fair price and instill confidence in the minds of the investors. As the name suggests, they are supposed to 'anchor' the issue by agreeing to subscribe to shares at a fixed price so that other investors may know that there is demand for the shares offered. SEBI introduced the concept of anchor investors in June 2009 to enhance the issuing company's ability to sell the issue. The Adani Power IPO in July 2009 was the first issue in the country to attract investors under the anchor investor scheme.

### Why anchor investors are important?

Many companies now have a complex structure and are not necessarily profitable at the net level — Sadhbhav Infrastructure Projects, Adlabs Entertainment and Café Coffee Day are examples. In such cases, the anchor investors can guide other investors.

Unlike analysts, brokerages or investment bankers who may put out reports on an IPO, anchor investors have their own skin in game. They have subscribed to the shares at the published price. As the anchor portion of an issue is usually taken up by serious institutions such as mutual funds, insurance companies and foreign funds, their valuation signals can be useful. If the issue has

problems, say, of corporate governance, or asks for a stiff price, the issue will face a tepid response from anchor investors.

**For example -** Prabhat Dairy's offer failed to draw anchor investors as the price was at a sizeable premium to listed peers and there were challenges in growing the business. In the case of Adlabs Entertainment IPO too, anchor investors had bid at the lower end of the price band. In the public issue which opened a day later, poor retail response forced the company to lower its price band to get subscribed. (Source: Business Line)

### **Guidelines for Anchor Investors**

The following guidelines must be complied with to bring in anchor investors in public issue:

- An anchor investor shall make an application of a value of at least ₹10 crores in the public issue.
- 2. An issuer can now allot up to 60% of shares reserved for qualified institutional buyers (QIBs) to anchor investors. So, the QIB portion in an IPO is 50%, anchor investors can buy up to 30% of an IPO.
- exam 3. One-third of the anchor investor portion shall be reserved for domestic mutual fund.
  - 4. The bidding for anchor investors shall open one day before the issue opens.
  - 5. Anchor investors shall pay the entire application money as margin money on application on which the payment has to be made within two days of the date of closure of the issue.
  - 6. Allocation of shares to anchor investors shall be completed on the day of bidding itself.
  - 7. If the price arrived at after the book building issue is higher than the price at which shares were allocated to anchor investors, then in that situation, the anchor investor shall bring in the additional amount. But, if the price arrived at after the book building process is lower than the price at which shares were allocated to anchor investors, the excess amount shall not be refunded to the anchor investors and the anchor investor shall be allotted the securities at the same price at which the allocation was made to it.
  - 8. Anchor investors, however, cannot sell their shares for a period of 30 days from the date of allotment as against IPO investors who are allowed to sell on listing day. Further, even after 30 days, they can sell only 50% of their holdings and the remaining half can be sold only after 90 days.
  - 9. Lastly, the merchant bankers or any person related to the promoter/promoter group/merchant bankers in the concerned public issue cannot apply under the anchor investor category.

# Case Study of InterGlobe Aviation Ltd (Indigo Airlines) regarding Anchor Investors

InterGlobe Aviation Ltd, owner of IndiGo airlines, received demand for around eight times the shares it offered to so-called anchor investors, including domestic and foreign institutions, a day before the start of its initial public offering (IPO).

The company raised ₹ 832 crore via the anchor investor allocation, also known as the anchor book, selling shares at ₹ 765 per share at the upper end of the ₹.700-765 price band.

The company intended to use the proceeds of the fresh issue of shares primarily to retire its aircraft lease obligations. It utilized ₹ 1165.66 crore to retire some of the exiting aircraft lease obligations. The company also tent to utilize ₹ 34.25 crore for the purchase of ground support equipment for its airline operations and the remaining amount for general corporate purposes.

The anchor investors include among others Harvard University Endowment Fund, Goldman Sachs Group Inc., Ruane Cunniff & Goldfarb Inc., Fidelity Investments, BlackRock Inc., Dutch pension fund APG and GIC Pte. Ltd, and Singapore's sovereign wealth fund. Domestic investors include HDFC Mutual Fund and Sundaram Mutual Fund.

The IPO of Inter Globe Aviation Ltd is one of the largest anchor books for an Indian IPO and over 40 investors have subscribed to it. The demand for the main IPO book was very strong before the issue date and given the names of the anchor investors, retail investors have also been attracted to the issue.

InterGlobe is seeking to raise ₹3,000 crore from the IPO, including the anchor book. IndiGo had a total debt of ₹3,912 crore, all of which was aircraft related. The company intended to use the proceeds of the fresh issue of shares primarily to reduce its aircraft lease obligations. It utilized ₹1165.66 crore to pay some of the exiting aircraft lease obligations. The company will utilize ₹34.25 crore for the purchase of ground support equipment for its airline operations and the remaining amount for general corporate purposes.

(Adapted from Business Standard and Livemint)

## 4.14 Private Placement of Shares

Private placement is the process of raising capital directly from institutional investors. A company that does not have access to or does not wish to make use of public capital markets can issue stocks, bonds, or other financial instruments directly to institutional investors. Institutional investors include mutual funds, pension funds, insurance companies, and large banks.

Private placement means any offer of securities or invitation to subscribe securities to a select group of persons by a company (other than by way of public offer) through issue of a private placement offer letter which satisfies the conditions specified in section 42 of the Companies Act, 2013.

The proposed offer of securities or invitation to subscribe to securities needs to be approved by the shareholders of the Company by way of a Special Resolution, for each of the Offers/Invitations.

# **Advantages of Private Placement**

The primary advantage of the private placement is that it bypasses the stringent regulatory requirements of a public offering. Public offerings must be done in accordance with the Companies Act, 2013 and regulations made thereunder. Private placements are negotiated privately between the investors and the issuing company. For Private placements, the companies need to comply with the Companies Act, 2013 provisions but they do not have to register with the SEBI.

Another advantage of private placement is the reduction in the time of issuance and the cost of issuance. Issuing securities publicly can be time-consuming and may require certain expenses. A private placement foregoes the time and costs that come with a public offering.

Also, because private placements are negotiated privately between the investors and the issuing company, they can be tailored to meet the financing needs of the company and the investing needs of the investor. This gives both parties a degree of flexibility.

# **Case Study on Private Placement**

Springer Limited is a US based company and is a famous manufacturer of electric appliances. The Board of Directors of Springer Company decided to expand the company market area and decided to enter new markets such as India and other south Asian countries and Latin American countries. The company decided to incorporate a company in India named Springer India Limited. Springer India Limited decided to raise money from Indian market. The company has two options, i.e., to raise money through private placement of shares or to raise money from public issue.

Evaluate the two options available to the company and give your report containing a comparative of advantages and disadvantages of both options to enable the company to take appropriate decisions.

# Answer to the question raised above on the Case Study on Private Placement

Questions raised in the case study on private placement have been answered in the following points: -

(i) **Meaning of Public Issue:** The sale of equity shares or other financial instruments by an organization to the public to raise funds is called a public issue. Any offer to more than 200 people

in India is termed as public offer. In India, Public offer is governed by Securities and Exchange Board of India (SEBI).

(ii) **Meaning of Private Placement of Shares:** When a company issues financial securities such as shares and convertible securities to a particular group of investors (not more than 200 persons in a financial year), it is known as private placement.

Any offer of securities or invitation to a select group of persons by a company (other than by way of public offer) through issue of a private placement offer letter and which satisfies the conditions specified in section 42 of the Companies Act, 2013.

- (iii) Advantages of Public Offerings: One of the major advantages of a public offering is that it allows a company to raise a large amount of money. This is because anyone who can afford to invest can purchase the company's stock through a broker. Moreover, the shares in the company will be highly liquid. For the same reason, there will always be buyers and sellers in the market. There is prestige in an IPO, and it can bring wide exposure and a great deal of information about a company to the forefront.
- (iv) **Disadvantages:** When it comes to a public offering, such as an IPO, a potential disadvantage is time. The public offer process is very time consuming, and it takes a lot of time. Public offer calls for tough compliances of stock exchange regulations (prescribed by SEBI) on a continuous basis.
- (v) Advantages of Private Placements: A private placement will probably be cheaper and faster. Public companies must fulfill strict reporting and registration requirements, while companies that sell equity through a private placement face fewer reporting requirements. With private placement, it might be easier to decide to whom owners sell equity, and to keep certain information about the company a secret.
- (vi) **Disadvantages of Private Placement:** One disadvantage of a private placement as against public offering is that it significantly narrows the range of investors the company may reach. Since the number of investors is not large, it becomes difficult for the company to arrange large funds as each investor will probably be required to have comparatively more capital to invest in the company.

### 4.15 Disinvestment

It means sale of equity shares of Public Sector Undertakings (PSU's) which leads to dilution of government's shares in such PSU's. The disinvestment programme was initiated by the Govt. of India in 1992-94.

The purpose of the disinvestment programme of the Govt. of India was to garner funds which can be utilized for development purpose. Another purpose was to make the loss-making PSUs came out of the doldrums and contribute to the Indian economy.

The primary objectives of the disinvestment programme of the Govt. of India are enumerated as below:

- (i) To raise funds to finance the fiscal deficit.
- (ii) At the same time, to retain control over management.
- (iii) To improve the management of the PSU.
- (iv) To broad base equity.
- (v) To increase the availability of resources for PSUs.

# 4.16 Right Issue

The rights issue involves selling securities to the existing shareholders in addition to their current holding. As per section 62 of the Companies Act, 2013, where, at any time, a company having a share capital, proposes to increase its Subscribed Capital by the issue of further shares, such shares shall be offered to persons who, on the date of the offer, are holders of equity shares of the company in proportion, as nearly as circumstances admit, to the paid-up share capital on those shares by sending a letter of offer subject to the following conditions, namely:-

- (i) The offer shall be made by a notice specifying the number of shares offered and limiting a time not being less than fifteen days and not exceeding thirty days from the date of the offer within which the offer, if not accepted, shall be deemed to have been declined;
- (ii) Unless the articles of the company otherwise provide, the offer aforesaid shall be deemed to include a right exercisable by the person concerned to renounce the shares offered to him or any of them in favour of any other person; and the notice referred to in clause (above) shall contain a statement of this right;
- (iii) After the expiry of the time specified in the notice aforesaid, or on receipt of earlier intimation from the person to whom such notice is given that he declines to accept the shares offered, the Board of Directors may dispose them off in such manner which is not dis-advantageous to the shareholders and the company.
- (iv) The notice referred to above shall be dispatched by registered post or speed post or through electronic mode to all existing shareholders at least three days before the opening of the issue.

# Procedure for allotment of right issue of shares

 Call a Board meeting by issue notice of meeting and approve right issue including "letter of offer", which shall include right of renunciation also.

- 2. Send an offer letter to all the existing members as on the date of offer through registered post or speed post or through electronic mode at least three days before the opening of the issue.
- 3. Receive acceptance/renunciations/rejection of rights from members to whom the offer has been sent & also from persons in whose favour right has been renounced.
- 4. Call a Board meeting by issue of notice. Approve allotment by passing a Board Resolution.
- 5. Attach list of allottees in form PAS-3, mentioning Name, Address, occupation, if any, and number of securities allotted to each of the allottees, and the list shall be certified by the signatory of the form PAS 3.
- 6. File E-form PAS 3 (Return of Allotment) to ROC for allotment.
- 7. Make Allotment within 60 days of receiving Application Money, otherwise it will be treated as deposits as per deposit rules.

# **Examples of Right Issues and their implications**

Rights offers have come to the forefront of corporate financing after the overwhelming response to Reliance Industries Ltd's ₹ 53,124 crore issue, making it the most preferred fundraising route for Indian companies in the aftermath of the Covid-19 crisis. Over, half a dozen entities including Tata Power, Mahindra & Mahindra Finance, PVR, Aditya Birla Fashion and Shriram Transport have initiated to raise up to ₹ 10,000 crores through such offers. A record amount was raised through rights issuances in FY20.

Most companies are looking to reduce debt and strengthen balance sheets following the impact of Covid-19-related disruptions as the proceeds from the rights issues can be used to pay down existing debt, especially when they are unable to borrow more money and make the balance sheet look more acceptable to investors.

These companies are raising capital, not only to fortify the balance sheet for the current situation but also to take advantage of possible opportunities that can emerge in the crisis as SEBI has provided some relaxations to companies coming out with a right issue considering the difficulties they are facing in view of the pandemic. Such offers allow companies to raise capital by giving shareholders the right to subscribe to newly issued shares at a pre-determined price, normally at a discount, in proportion to their existing holdings.

After the aftermath of Covid – 19, many companies need capital either for working capital or to reduce debt. A right issue gives confidence to the lenders and customers that the promoters have faith in their business and are willing to bring their own money. Given that the stock prices have come down significantly in case of number of companies, right issue tend to reward the existing

shareholders of the company and, at the same time, also help the companies to raise capital and improve their balance sheet position.

# 4.17 Exit Offers (Delisting Offers and Strategic Issues)

With reference to capital market, the term 'exit offers' refers to delisting. So here we would be explaining the term delisting and provision/issues relating to delisting.

Delisting is the reverse of listing. So, what is the meaning of the term listing? Listing is basically a platform provided to the newly issued securities of the company in which the sale and purchase of the securities of a company takes place. On the other hand, delisting means to permanently remove the securities of a listed company from a stock exchange.

Delisting of companies signifies a listed company moving out of the listing status on the stock exchanges. Broadly, delisting falls under two categories. One is voluntary delisting by the promoters of the company under which there is no regulatory compulsion under any statutory provisions to initiate delisting. The second category is mandatory delisting, which gets triggered due to some regulatory compulsion under statutory provisions.

Delisting in Indian capital market is governed by the SEBI (Delisting of Equity Shares) Regulations, 2009. These Regulations provide three different sets of provisions for delisting of equity shares under different circumstances which are as follows:

- 'Voluntary delisting' means delisting of equity shares of a company voluntarily on application
  of the company under these regulations. The main delisting provision pertains to the voluntary
  delisting sought by the promoters of a company from the only recognized stock exchange
  giving exit opportunity to all public shareholders.
- 'Compulsory delisting' means delisting of equity shares of a company by a recognized Stock exchange on any ground prescribed in the rules made under section 21A of the Securities Contracts (Regulation) Act, 1956.
- 3. Special provision for delisting small companies not frequently traded or with a small number of shareholders.

These regulations are applicable to delisting equity shares of a company from all or any of the recognized stock exchanges where such shares are listed. However, these does not apply to any delisting made pursuant to a scheme sanctioned by the Board for Industrial and Financial Reconstruction under the SICA or by the NCLT under the Companies Act, 2013, if such scheme specify procedure to complete the delisting; or provides an exit option to the existing public shareholders at a specified rate.

According to the SEBI Delisting Regulations, a company cannot apply for delisting of its equity shares pursuant to Buy back of its equity shares, or preferential allotment made by the company. A company cannot go for delisting unless a period of three years has elapsed since the listing of that class of equity shares on any recognized stock exchange; or if any instruments issued by the company, which are convertible into the same class of equity shares that are sought to be delisted, are outstanding. No delisting of Convertible securities may be done.

Also, the above regulations further emphasize that after the proposed delisting from a recognized stock exchange, if the equity shares remain listed on any other recognized stock exchange which has nationwide trading terminals, no exit opportunity needs to be given to the public shareholders.

# 4.17.1 Understanding delisting and the terms associated with it

The shareholders generally have queries about how reverse book building works and what happens to the shares after delisting? Here are some FAQs to clarify the concept of delisting:

# What is a reverse book building?

Reverse book building is a process used for efficient price discovery. Once a company announces a delisting plan, public shareholders can tender their shares at or above the floor price. Shareholders can do this through an online bidding system on the stock exchanges, which stays open for five days.

# What is the exit offer price or discovered price?

The exit offer price or discovered price is one at which the shares tendered take the holding of the promoter or acquirer to at least 90% of the paid-up capital. In the case of Vedanta, about 900 million shares were tendered at below ₹ 160 a piece, another 150 million shares were tendered at between ₹ 160 and ₹ 300 each, while about 320 million shares were offered at ₹ 320. These 320 million shares took the total cumulative number of shares to 1.34 billion, the quantity needed to meet the 90% threshold. So, the discovered price was ₹ 320.

### What's next?

The promoter can accept or reject the discovered price within five working days. If the discovered price is accepted, then the shareholders must be paid within 10 working days. Where the bids are not accepted, the shares offered must be returned within 10 working days. The shares returned can be tendered to the promoter within a year of the delisting date at the discovered price.

### What is a counteroffer?

If the discovered price is not acceptable, the promoter can make a counteroffer within two working days. The counteroffer should be above the company's book value and below the discovered price. Shareholders can withdraw the shares they tendered during the reverse book building within 10 working days of the counteroffer. Public shareholders who hadn't tendered their shares during the reverse book building can do so during the counteroffer. The company should publicly announce the counteroffer within four working days of the closure of reverse book building and the process must start within seven working days of the announcement. Counter-offer bidding will remain open for five days and the result should be announced in five working days. (Source: Economic Times)

# 4.17. 2 Explained: Failure of Vedanta Delisting

Vedanta announced on October 2020 that it had failed to garner the number of shares required to complete its delisting process from the stock market. Let us look at the process of delisting and how Vedanta fell short of garnering the threshold amount of 90% of shares of the company, even after public records initially showed that offers by shareholders had crossed that threshold.

# How does the delisting process work?

In the delisting process, the promoters of a company launch a reverse book building process in which shareholders can tender their shares for purchase by promoters at a set price. The discovered price is the price tendered by shareholders at which the company can cross the threshold of 90% stake required to complete the delisting process. Therefore, the lowest price at which the company can complete the acquisition of 90% of shares is the discovery price.

### What were the problems in the Vedanta delisting?

Vedanta announced that it was able to garner offers for only around 125 crore shares instead of the 134 crore shares required for the delisting process to go through. Earlier public records, however, show that Vedanta had received offers of over 137 crore shares. Experts note this discrepancy was a result of certain offers of share sales not being confirmed by foreign shareholders.

The Foreign shareholders hold shares through a custodian, but custodians are not allowed to participate in the secondary market and therefore bids are tendered by brokers. Therefore, any bids placed by the broker were required to be confirmed by the custodians and in this case, there were an unusually large number of unconfirmed bids leading to the company not meeting the 134 crores share threshold.

An expert also viewed that this process could be used to artificially reach the 90% threshold in cases where some bidders do not even own the shares, thereby giving a push to smaller shareholders to participate in a delisting process that they believe is likely to succeed. The expert noted that that the

investigation ordered by SEBI was necessary to ascertain why there had been such many unconfirmed bids.

# Were unconfirmed bids the only reason the delisting failed?

The key issue according to some experts was the discovered price at which Vedanta would be required to acquire a significant portion of shares. While several institutional investors had offered their stakes at around ₹ 170, LIC, which holds a 6.37% stake in Vedanta, and some smaller investors had offered shares at a price of ₹ 320. Therefore, Vedanta would have been required to pay well over the ₹ 160-₹170 per share they had budgeted for a significant proportion of shares and would likely have rejected the offer at the end of the process even if they had been able to meet the 90% threshold of shares offered through the process.

Another expert opined that key issue was that while the promoters wanted to delist at a price of around ₹ 160, they were only able to collect bid at this level for around 96 crore or 70% of the shares as some shareholders may have felt that the value of the stock was much higher as it was trading at around ₹ 320 in 2018. (Source: Indian Express)

# **TEST YOUR KNOWLEDGE**

# **Multiple Choice Questions**

- 1. ...... of the anchor investor portion shall be reserved for domestic mutual fund.
  - (a) one half
  - (b) one third
  - (c) one fourth
  - (d) one fifth
- 2. An anchor investor shall make an application of a value of at least ...... in the public issue.
  - (a) ₹ 10 crores
  - (b) ₹ 15 crores
  - (c) ₹ 20 crores
  - (d) ₹ 25 crores

3.		ase the price band is revised, the bid period for book building can be extended for a imum period of
	(a)	seven working days
	(b)	ten working days
	(c)	twelve working days
	(d)	fifteen working days
exam4.	Reve	erse Book Building is used for
	(a)	Initial Public Offer
	(b)	Further Public Offer
	(c)	Delisting
	(d)	Anchor Investing
5.	Gree	en Shoe Option is a
	(a)	Price stabilizing mechanism
	(b)	Over allotment option
	(c)	both (a) and (b)
	(d)	A mechanism to arrive at a fair value
6.	SPA	Cs are also called blank cheque companies because
	(a)	investors are required to issue blank cheques to companies in which they invest
	(b)	investors are not aware of the acquisition targets
	(c)	investors are fully aware of the acquisition targets
	(d)	investors are partially aware of the acquisition targets
7.	Whic	ch among the following statements is correct?
	(a)	A shell company has a reasonable track record of profitability
	(b)	India's mergers and acquisitions have an edge in comparison to that of developed

nations

- (c) The sponsor should be able to identify an acquisition target within two years and buy it up
- (d) SPAC is only an American phenomenon

# **Theoretical Questions**

- 1. What is an offer document? What are the key disclosure requirements of the offer document?
- 2. Briefly discuss the various steps involved in a public issue.
- 3. Explain the concept of ASBA with the help of an example.
- 4. Who is an anchor investor and why anchor investors are important?
- 5. What are Special Purpose Acquisition Companies? How do SPACs generate revenue or give investors a return?

# **Practical Problems**

- 1. XYZ Ltd. wants to make a public issue of 10,00,000 equity shares of ₹ 100 each at par. The applications are received for 15,00,000 shares. The company wants to explore the Green Shoe Option (GSO). IPO price i.e., listing price is ₹ 120.
  - (i) What is the maximum number of shares that can be issued through green shoe option?
  - (ii) If the market price post listing comes down to ₹ 90, what the stabilizing agent can do in this situation?
  - (iii) If the market price post listing goes up to ₹ 110, what is the option before the stabilizing agent?

# **ANSWERS/SOLUTIONS**

# **Answer to Multiple Choice Questions**

1.	(b)	2.	(a)	3.	(b)	4.	(c)	5.	(c)
6.	(b)	7.	(c)						

# **Answers to the Theoretical Questions**

- **1.** Please refer paragraph 4.2
- **2.** Please refer paragraph 4.8

- 3. Please refer paragraph 4.11
- 4. Please refer paragraph 4.13
- **5.** Please refer paragraph 4.10

# **Answers to the Practical Questions**

- 1. (i) Maximum number of shares that can be issued through the green shoe option = 10,00,000 x 15% = 1,50,000
  - (ii) If the market price post listing comes down to ₹ 90, the stabilizing agent will purchase shares on the market to boost the demand for the shares. This will induce the investors to start purchasing the shares of XYZ Ltd. and consequently, the market price of shares will go up. So, basically, green shoe option is a price stabilizing mechanism. The shares borrowed from the promoters will then be returned to them.
  - (iii) If the market price post listing goes up to ₹ 110, the stabilizing agent will do the same thing as discussed in point (ii) above. However, if the post listing market price goes above ₹ 120, the best course of action for the stabilizing agent is to wait for 30 days after the date of listing and then take steps to allot further shares. The shares borrowed from the promoters will then be returned to them.

# CAPITAL MARKET - SECONDARY

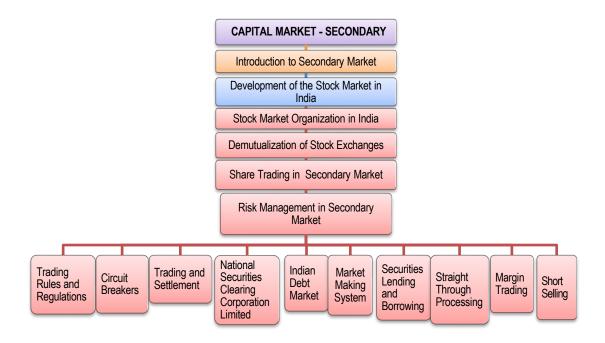


# **LEARNING OUTCOMES**

After going through the chapter student shall be able to understand:

- Introduction to Secondary Market
- Development of the stock market in India
- Stock market Organization in India
- Demutualization of Stock Exchanges
- Share Trading in Secondary Market
- Stock Market and Its Operations
- Risk Management in Secondary Market
  - (1) Trading Rules and Regulations
  - (2) Circuit Breakers
  - (3) Trading and Settlement
  - (4) National Securities Clearing Corporation Limited
  - (5) Market Making System
  - (6) Securities Lending and Borrowing
  - (7) Straight Through Processing
  - (8) Margin Trading
  - (9) Short Selling
- Indian Debt Market







# 1. INTRODUCTION TO SECONDARY MARKET

A secondary market is a market where shares initially issued are traded. Trading of securities takes place when securities are purchased or sold. This market is also known as the stock market. In India, secondary market consists of recognized stock exchanges operating under rules, regulations and guidelines approved by the government. The stock exchanges are organized markets where securities issued by the Companies, Central and State Government, and public bodies are traded. As per section 2(j) of the Securities Contract Regulation Act, 1956, "stock exchange" means anybody of individuals, whether incorporated or not, constituted for the purpose of assisting, regulating, or controlling the business of buying, selling, or dealing in securities.

Therefore, in nutshell, securities issued by a company for the first time are offered to the public in the primary market. Once the IPO is done and the stock is listed, they are traded in the secondary market. The main difference between the two is that in the primary market, an investor gets securities directly from the company through IPOs, while in the secondary market, one purchase securities from other investors willing to sell the same.

Equity shares, bonds, preference shares, debentures, etc. are some of the key products available in a secondary market.

# **Functions of Secondary Market**

- (i) Economic Indicator Every major change in the economy, either due to government policy or any major international event has a bearing on the secondary/stock market. So, if the stock market is doing well, it is an indicator that the economy is in a stable position.
- (ii) Valuation of Securities Secondary market helps in the valuation of securities through its demand and supply. The securities of those companies which are growth oriented and doing well will surely have higher demand in comparison to securities of companies which are not doing well. Consequently, the share prices of growth-oriented companies will be high.
- (iii) Transaction in securities is safe in the secondary market Transactions executed in the secondary market are safe because all the trading taking place in an electronic system which is highly secure.
- (iv) Contributes to economic growth It contributes to economic growth through allocation of funds to the most efficient sector through the process of disinvestment to reinvestment. This leads to capital formation and economic growth.
- (v) Motivating people to invest in equity shares Efficient secondary market motivates people to invest in the securities market. The reason is that the people would be less apprehensive about the riskiness of the stock market.
- (vi) It ensures safety and measures of fair dealing to protect investor' interest.
- (vii) It induces companies to improve their performance since market price of shares showing at the stock exchanges is the indicator that reflects a company's performance and is easily available to the investors.



# 2. DEVELOPMENT OF THE STOCK MARKET IN INDIA

The stock market originated in India at the end of the eighteenth century when lots of new negotiable instruments were introduced. However, the real beginning was made in the middle of nineteenth century when Companies Act, 1860 was enacted where the concept of limited liability was introduced.

The Bombay Stock Exchange was formed in 1875. This was followed by the formation of exchanges in Ahmedabad in 1894, Calcutta (Kolkata) in 1908, and Madras (now Chennai) in 1937. Calcutta

Stock Exchange (CSE) was the largest stock exchange in India till 1960's. In 1961, there were 1203 listed companies. Of these, 576 were listed on the CSE and 297 on the BSE. However, the latter part of the 1960's saw a significant decline in the share of CSE. But the share of BSE gained during that period.

Patt	Pattern of Growth of Stock Exchanges									
	1946	1961	1971	1975	1980					
No of Stock exchanges	7	7	8	8	9					
No of listed Companies	1175	1203	1599	1852	2265					
Market Capitalization (₹ in crores)	971	1292	2675	3273	6750					
	1990-91	1999-2000	2004-05	2007-08	2012-13					
No of Stock Exchange	22	23	23	21	26					
No of listed Companies	2471	5815	4731	4887	5133					
Market Capitalisation	90,836	1,12,842	1,698,428	5,138,014	6,214,941					
Turnover (₹ in crores)	36,011	20,670,310	1,620,498	5,129,895	3,478,391					
Source: SEBI Annual Report, V	arious issue	es .								

Till 1990's, the Indian Stock Market was suffering from many drawbacks which are enumerated as below:

- Uncertainty of execution prices.
- Uncertain delivery and settlement periods.
- Lack of transparency.
- High transaction costs.
- Absence of risk management.
- Systematic failure of market due to market failure.
- Partiality of brokers to certain clients only.

Market Reforms after 1991

After the initiation of reforms in 1991, the secondary market has adopted the following system:

- Regional stock exchanges
- The National Stock Exchanges (BSE and NSE)

- The Over-the-Counter Exchange of India (OTCEI)
- The Interconnected Stock Exchange of India (ISE)

The NSE was set up in 1994. It was the first stock exchange in India to bring new technology, new trading practices, new institutions, and new products. The OTCEI was established in 1992 providing small and medium sized enterprises with the means to generate capital. Metropolitan Stock Exchange of India Ltd. (MSEI), formerly known as MCX Stock Exchange Ltd. (MCX-SX), is recognized by country's securities market regulator - Securities and Exchange Board of India (SEBI). It offers an electronic platform for trading in Capital Market, Futures & Options, Currency Derivatives, Interest Rate Futures (IRF) and Debt Market segments. MSEI's current shareholders include Indian public sector banks, private sector banks, investors, and domestic financial institutions.

## **Select Ratios Relating to the Stock Market (Per cent)**

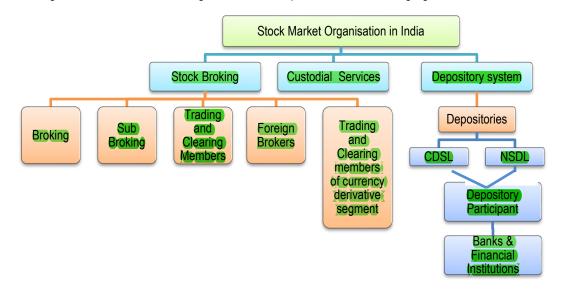
Year	Market Capitalis	ation to GDP Ratio	Total Turnover to GDP Ratio			
	BSE	NSE	Cash Segment (All-India)	Equity Derivatives Segment (BSE + NSE)		
2021-22	112.51	111.55	76.28	7,504		
2022-23	94.78	94.10	52.62	14,158		

**Notes:** First revised estimate of GDP at current prices for 2021-22 and provisional estimate for 2022-23 released on May 31, 2023, by MoSPI, have been considered for computation; Source: BSE, NSE and Central Statistical Office.



# 3. STOCK MARKET ORGANIZATION IN INDIA

The organization of stock exchanges has been depicted in the following figure:



The stock market organization (highlighting the capital market intermediaries) in India as shown in the above diagram is discussed as below:

- (i) Stock Broking –Brokers are members of the stock exchange. They enter share trading transactions either on their own account or on behalf of their clients. They must get registration from SEBI before starting their operations and must comply with the prescribed code of conduct. Till recently, most of the brokers have worked as proprietary or partnership concerns. However, now many top broking firms are company form of organizations. Recent examples are:
- Sharekhan Limited
- India Bulls
- Angel Broking Limited
- India Infoline Limited
- Reliance Money
- Kotak Securities Limited
- ICICI Direct
- Motilal Oswal Securities
- HDFC Securities
- Bajaj Capital

Brokers are important intermediaries in the stock market as they bring buyers and sellers together. However, the brokerage on transactions varies from broker to broker. The maximum allowable brokerage is 2.5% of the contract price.

Further, every stockbroker should appoint a compliance officer to monitor the compliance of the SEBI Act and its various rules, regulations, and guidelines and for redressal of investor grievances. The compliance officer should immediately report any non-compliance observed by him to the SEBI.

SEBI is also empowered to appoint one or more persons as inspectors to inspect the books of accounts, other records, and documents of the stockbroker. Also, a stockbroker shall only deal with any person as a sub-broker if he has obtained a certificate of registration from the SEBI. Further, a stockbroker or a sub-broker who has contravened any provisions of the SEBI Act, rules and regulations are liable for penal action.

(ii) Custodial Services –The custodians play a critical role in the secondary market. SEBI Custodian of Securities Regulation, 1996 was framed for the proper conduct of their business.

According to SEBI regulations, custodial services in relation to securities of a client or gold/gold related instrument held by a mutual fund or title deeds of real estate assets held by a real estate mutual fund mean safekeeping of such securities or gold/gold related instruments or title deeds of real estate assets and providing related services.

The related services provided by them are as follows:

- Maintaining accounts of the securities of a client.
- Collecting the benefits/rights accruing to the client in respect of securities.
- Keeping the client informed of the actions taken by the issuer of securities.
- Maintaining and reconciling records of the services as referred above.

SEBI can also ask for information from the custodian regarding his activities. Such information must be given within a reasonable period as laid down by SEBI. Further, SEBI is also empowered to conduct inspection/investigation including audit of books of account, records etc. of custodians to ensure that they are being properly maintained. SEBI's task is also to ascertain that compliance of provisions of SEBI Act and its regulations have been duly complied with. Moreover, its job is also to investigate complaints received from investors or clients.

(iii) **Depository System**–A major reform of the Indian stock markets has been the introduction of the depository system and scripless trading mechanism. The Depository Act was passed in 1996 to provide further fillip to the process.

The issuers should enter into an agreement with the depository to enable the investors to dematerialize the securities.

Before the depository system came into being, the market suffered from various drawbacks including thefts and forgeries of share certificates. Moreover, dealing in the physical mode had its own limitations which inhibited the growth of the capital market in India. These shortcomings were acutely felt more so after the liberalization of the economy. To address all such issues the Central Government enacted the Depositories Act, 1996, with retrospective effect from September 20, 1995.

Is it compulsory for every investor to hold securities in the demat form or can he also hold shares in the physical form? The Depositories Act provides that every person subscribing to securities offered by an issuer has the option to receive the security certificates or hold securities with a depository. However, investors need to note that while securities can be held by way of certificates, dealing in the market is permitted only if the securities are in demat mode.

When an investor holds securities in the physical form, the certificates bear serial numbers, distinctive numbers, etc. However, when the securities are held in demat mode, they are akin to money lying in the bank account. Therefore, there is no question of certificate numbers or distinctive numbers, though the quantity will remain the same.

As in the case of certificates, holders of securities in demat mode (called beneficial owners) can create a pledge or hypothecation in respect of the securities held by them. In such cases, it is necessary for the beneficial owner to inform the depository of the pledge or hypothecation created by him. The depository concerned must make a note in its records to that effect.

Another query which emerges is that can an investor, who has opted for holding the securities in demat form, ask for certificates on opting out of the depository. The answer is - a beneficial owner has a right to opt out of the depository at any time he or she may desire. In fact, the depository must note the request in its records and convey the same to the company. The company is obliged to issue the certificates in respect of the securities within 30 days of the receipt of the intimation from the depository.

What can an investor do if a depository or any participant or an issuer fails to redress his grievances? A complaint should be lodged with SEBI giving the necessary particulars in the prescribed form. SEBI would write to the concerned party asking it to redress the grievances of the investors within a specified time. In exceptional circumstances SEBI may grant further time for redressing the grievances. However, if the depository or the participant indulges in dilatory tactics or neglects to redress the grievances, SEBI has power to proceed against such defaulting party and impose penalty. In fact, SEBI has come down heavily on various market intermediaries as also the defaulting companies which ignore the investors and fail to redress their grievances. The heavy penalties that SEBI can impose, and, in many cases, it has done so have come as an eye opener for various market players. (Source: Financial Express)

# **Secondary Market Structure**

### SEBI Registered Market Intermediaries/ Market Infrastructure Institutions

Market Intermediaries	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
1	8	9	10	11	12	13	14
Stock Exchanges (Cash Market)	6	5	5	5	3	3	3
Stock Exchanges (Derivatives Market)	3	3	3	3	3	3	3
Stock Exchanges (Currency Derivatives)	3	3	3	3	3	3	3
Stock Exchanges (Commodity Derivatives Market)	10	6	5	5	5	5	4

Brokers (Cash Segment)	4,326	4,252	3,860	2,978	4,639	2,840	2,848
Corporate Brokers (Cash Segment)	3,149	3,073	2,835	2,618	3,587	2,487	2,477
Brokers (Equity Derivatives)	2,651	2,549	2,435	2,405	3,582	2,348	2,357
Brokers (Currency Derivatives)	1,985	2,245	2,110	1,933	2,772	1,830	1,813
Brokers (Debt Segment)	6	162	173	378	445	528	537
Brokers (Commodity Derivatives)	1,162	1,200	1,708	1,745	2,206	1,632	1,600
Sub-brokers (Cash Segment)	30,610	21,098	Na	Na	Na	Na	Na
Foreign Institutional Investors	Na	Na	Na	Na	Na	Na	Na
Sub-accounts	Na	Na	Na	Na	Na	Na	Na
Foreign Portfolio Investors (FPIs)	7,807	9,227	9,390	9,679	9,975	10,608	10,975
Deemed FPIs	974		-	Na	Na	Na	Na
Custodians	19	19	20	19	18	17	18
Depositories	2	2	2	2	2	2	2
Depository Participants - NSDL	276	276	277	279	272	277	282
Depository Participants - CDSL	588	594	597	599	615	584	585
Merchant Bankers	189	195	205	215	215	219	219
Bankers to an Issue	64	66	65	65	65	65	54
Underwriters	2	1	2	2	1	1	0
Debenture Trustees	32	32	30	32	30	26	26
Credit Rating Agencies	7	7	7	7	7	7	7
KYC Registration Agency (KRA)	5	5	5	5	5	5	6
Venture Capital Funds	198	195	190	189	189	157	183
Foreign Venture Capital Investors	218	232	248	251	260	279	271
Alternative Investment Funds	303	395	532	649	726	885	1,023
Registrars to an Issue & Share Transfer Agents	73	73	74	79	78	78	75
Portfolio Managers	218	270	315	351	362	367	385
Mutual Funds	45	45	47	47	49	47	44
Investment Advisors	577	887	1,131	1,291	1,341	1,330	1,322
Research Analysts	351	481	620	680	733	825	964
Infrastructure Investment Trusts (InVIT)	6	6	11	10	15	17	19
Real Estate Investment trusts (REITs)	Na	1	2	3	4	4	5
Collective Investment Management Company	1	1	1	1	1	1	0

Approved Intermediaries (Stock Lending Schemes)	2	2	2	2	1	2	2
STP (Centralised Hub)	1	1	1	1	1	1	1
STP Service Providers	1^	1^	1^	1^	1	3	3

Source: SEBI handbook of statistics



# 4. DEMUTUALIZATION OF STOCK EXCHANGES

Demutualization is the process by which any member owned organization can become a shareholder owned company. Such a company can either be listed on a stock exchange or be established as a closely held company. In simple words, a demutualized stock exchange is basically a company form of organization in which the company goes public, and owners will be given equity shares.

Earlier (i.e., prior to 1991), all stock exchanges in India are broker owned and broker controlled. In other words, it is the brokers who collectively owned, controlled, and managed these exchanges. However, the ownership and managership of these stock exchanges led to a conflict of interest where the interest of these brokers was given more prominence than the investors.

These led to price rigging, frequent payment crises on stock exchanges and misuse of official position by office bearers. Therefore, demutualization of stock exchange was resorted to instill confidence in the minds of the investors.

So, through the demutualization process, a stock exchange becomes a profit-making company and a tax paying entity. Demutualization separates the ownership and control of stock exchange from the trading rights of members. This reduces the conflict of interest and the chances of brokers using the trading mechanism for personal gains.

In November 2002, SEBI approved the uniform model of corporatization and demutualization of stock exchanges, recommended by the Kania Committee. Further, the Securities Contract Regulation Act was amended on October 12, 2004, through an ordinance, making it compulsory for the exchanges to convert into corporate entities and delink their broker members from the management. The ordinance restricts brokers' representation in the governing body of stock exchanges to 25%. It also reduces their shareholding from 100% to 49%. Moreover, 51% of the stake in the stock exchange should be held by the public. This segregation was initiated to safeguard the interest of shareholders, bring greater transparency and efficiency of stock exchanges.

Advantages of Demutualization

(i) Enable stock exchanges to have more access to funds for investment in technology.

- (ii) Facilitate merger and acquisition of other exchanges.
- (iii) Facilitate alliances with other stock exchanges.
- (iv) Benefit to members of the stock exchange as their assets become liquid.
- (v) Members get a share of the profits made by exchanges through dividends.
- (vi) Makes operations of the stock exchanges transparent.
- (vii) Transparency brings better governance.



# 5. SHARE TRADING IN SECONDARY MARKET

Secondary Market or Stock Exchange Market refers to a market where securities are traded after being initially offered to the public in the primary market and/or listed on the Stock Exchange. Most of the trading is done in the secondary market. The secondary market comprises of equity markets and the debt markets. For the general investor, the secondary market provides an efficient platform for trading his securities. For the management of the company, secondary equity markets serve as a monitoring and control conduit—by facilitating value-enhancing control activities, enabling implementation of incentive-based management contracts, and aggregating information (via price discovery) that guides management decisions. [Source: moneycontrol.com]

# 5.1 Share Trading by a Retail Investor

One can either choose to trade online or via a stockbroker or investment firm or an agent. One needs to take following steps to conduct trade in secondary market in India:

- (i) Open a Bank Account: The first step towards investing in Indian stock market is to open a bank account. A bank account is required to hold the funds which would be invested in the secondary market.
- (ii) Open a Demat Account: Just as a bank account is required to hold the funds, a Demat Account is required to hold and trade the securities i.e., Shares, debentures, and mutual funds electronically.
- (iii) Open a trading account: After opening a Demat account, a trading account is required to trade in the securities market. A trading/brokerage account allows you to purchase stocks, bonds, mutual funds, and other units by paying the broker to do the trading on your behalf. A retail investor would not be able to do trading without a trading account. Now, many banks have started providing all these services in a single unified account. The trading platform of a stock exchange is accessible only to trading members. The brokers would give buy/sell orders either for their own account or for their clients.

(iv) Trading Mechanism: With the advent of technology, trading at stock exchanges is now taking place through an open electronic limit order book, in which order matching is done by the trading computer. The buy or sell orders placed by the investors are matched automatically with the order which is best for them. Because of these, the buyers and sellers do not come to the picture. In other words, they remain anonymous. The market driven by order as stated above eliminates opaqueness. It brings transparency by highlighting all buy and sell orders in the trading system. But the presence of market makers is very important. In their absence, there might be a possibility of non-execution of any order. The concept of market making has been discussed in detail in the later part of the chapter.

Investors buy/sell securities on stock exchange platform by placing buy/sell orders through their stockbrokers with whom they are registered as client. On successful execution of order (buy/sell), securities will be bought/sold on behalf of the client. This activity is known as buying/selling of securities on the stock exchange platform on specific days which is known as trading day. This activity is referred to as trading and is carried out by stock exchanges for a specific period called trading hours. After the trading activity is completed, the process of delivering securities by the seller and payment of funds by the buyer is called securities pay-in/funds pay-in respectively. This activity also must be conducted within the stipulated time. After the pay-in process is completed successfully, the buyer will get shares and the seller will get money. The above-mentioned activities of pay-in and payout are collectively referred to as settlement process. Each settlement is identified by a unique number called settlement id/Settlement number.

- (v) Payment to Broker for purchase of shares/securities: The payment for the shares purchased is required to be made prior to the pay-in date for the relevant settlement or as otherwise provided in the Rules and Regulations of the Exchange.
- (vi) Delivery of shares to the broker for sale: The delivery of shares must be done prior to the pay- in date for the relevant settlement or as otherwise provided in the Rules and Regulations of the Exchange and agreed with the broker/sub broker in writing.
- (vii) Receipt of money for a sale transaction and receipt of shares for a buy transaction: Brokers were required to make payment or give delivery within two working days of the pay out day. However, as settlement cycle has been reduced from T+3 rolling settlement to T+2, the pay out of funds and securities to the clients by the broker will be made within 24 hours of the payout.

# 5.2 Algorithmic Trading

The practice of algorithmic trading involves using a computer programme to purchase and sell stocks, options, futures, FX currency pairings, and cryptocurrencies. Algorithmic trading is also

referred to as high-frequency trading, automated trading, or black-box trading on Wall Street. These terms are often used interchangeably.

The algorithm is essentially a piece of code that performs a series of automatic operations step-bystep. The inputs you have programmed into it serve as the foundation for the step-by-step procedures. Price, volume, time, economic data, and indicator readings are examples of input variables. Any variation of the input variables is acceptable. A buy or sell order will be carried out if these requirements have been met.

To execute deals at precise times, algorithmic trading mixes computer programming and financial markets. Additionally, algorithmic trading aims to remove emotions from transactions, guarantees the best possible execution of a deal, instantly places orders, and may result in decreased transaction costs.

#### **Algorithmic Trading in Practice**

Suppose a trader follows these simple trading techniques:

- ♦ Buy 50 shares of a stock when its 50-day moving average goes above the 200-day moving average. (A moving average is an average of past data points that smooths out day-to-day price fluctuations and thereby identifies trends.)
- Sell shares of the stock when its 50-day moving average goes below the 200-day moving average.

Computer software will automatically monitor the stock price (as well as the moving average indicators) and place the buy and sell orders when the predetermined criteria are satisfied using these two straightforward instructions. The trader is no longer needed to manually enter orders or keep an eye on live pricing and graphs. This is automatically accomplished by the algorithmic trading system, which accurately recognises the trade opportunity.

#### **Benefits of Algorithmic Trading**

Algo-trading provides the following benefits:

- Trades are executed at the best possible prices.
- Trade order placement is instant and accurate (there is a high chance of execution at the desired levels).
- Trades are timed correctly and instantly to avoid significant price changes.
- Reduced transaction costs.

- Simultaneous automated checks on multiple market conditions.
- Reduced risk of manual errors when placing trades.
- Algo-trading can be backtested using available historical and real-time data to see if it is a viable trading strategy.
- Reduced the possibility of mistakes by human traders based on emotional and psychological factors.

High-frequency trading (HFT), which tries to profit from placing a lot of orders quickly across a variety of markets and different decision parameters based on preprogramed instructions, makes up the majority of algo trading today.

#### **Technical Requirements for Algorithmic Trading**

The final element in algorithmic trading is to put the algorithm into practise using a computer programme, after backtesting (trying out the algorithm on historical periods of past stock-market performance to see if using it would have been profitable). The difficult part is integrating the determined strategy into a computerised system that can access a trading account and accept orders. The prerequisites for algorithmic trading are as follows:

- ♦ Computer-programming knowledge to program the required trading strategy, hired programmers, or pre-made trading software.
- Network connectivity and access to trading platforms to place orders.
- Access to market data feeds that will be monitored by the algorithm for opportunities to place orders.
- The ability and infrastructure to backtest the system once it is built before it goes live on real markets.
- Available historical data for backtesting depending on the complexity of rules implemented in the algorithm.

#### An Example of Algorithmic Trading

Royal Dutch Shell (RDS) is listed on the Amsterdam Stock Exchange (AEX) and London Stock Exchange (LSE). We start by building an algorithm to identify arbitrage opportunities. Here are a few interesting observations:

AEX trades in euros while LSE trades in British pound sterling.

 Due to the one-hour time difference, AEX opens an hour earlier than LSE followed by both exchanges trading simultaneously for the next few hours and then trading only in LSE during the last hour as AEX closes.

Can we explore the possibility of arbitrage trading on the Royal Dutch Shell stock listed on these two markets in two different currencies?

#### Requirements:

- A computer program that can read current market prices.
- Price feeds from both LSE and AEX.
- ◆ A forex (foreign exchange) rate feed for GBP-EUR.
- Order-placing capability that can route the order to the correct exchange.
- Back testing capability on historical price feeds.

The computer program should perform the following:

- Read the incoming price feed of RDS stock from both exchanges.
- Using the available foreign exchange rates, convert the price of one currency to the other.
- If there is a large enough price discrepancy (discounting the brokerage costs) leading to a profitable opportunity, then the program should place the buy order on the lower-priced exchange and sell the order on the higher-priced exchange.
- If the orders are executed as desired, the arbitrage profit will follow.

The above process seems to be simple and effortless. Algorithmic trading is not, however, an easy process to manage and carry out. Keep in mind that multiple market participants can execute an algo-generated deal if one investor can. As a result, price changes occur in milli and even microseconds. What happens in the case above, if the purchase trade is carried out, but the sell trade is not, as the sell prices have changed by the time the order reaches the market? The arbitrage approach will be useless because the trader will still have an open position.

Additional dangers and difficulties include the potential for system failure, network connectivity issues, execution delays for trade orders, and—most significantly—imperfect algorithms. Prior to implementation, more rigorous backtesting is required for algorithms with more complexity.

Source: Investopedia

# 5.3 Basket Trading

Investment companies and large institutional traders often utilize basket trades as a form of order to purchase or sell several securities all at once.

Institutional investors and investment funds who want to own a variety of assets in specific ratios must use basket trading. Large baskets of assets must be purchased or sold at once as cash flows in and out of the fund to prevent price changes for individual securities from changing the allocation of the portfolio.

To understand how a basket trade is advantageous to an investment fund, suppose an index fund seeks to match its target index by owning the majority or all the index's securities to understand how a basket trade benefits an investment fund. The manager must simultaneously purchase a significant number of securities in the same proportion that they are represented in the index as new money that could boost the value of the fund comes in. The frequent price changes of the assets would prevent the index fund from holding the securities in the right ratios if it were not possible to execute a basket trade on all of them.

A basket trade normally involves the selling or acquisition of 15 or more securities but is generally used to buy stocks. To calculate their returns, such baskets are frequently compared to a benchmark or tracked against an object, such as an index.

Let's say a fund of investments wants to profit from an index's volatility. To follow the index, the fund manager builds a long/short basket. The basket does not include any securities. It consists of several call and put options instead.

The trading of commodities and currencies is also possible with baskets. For instance, a trader might put together a basket of soft commodities like wheat, soybeans, and corn. Most brokerage firms or investment companies that offer basket trading have a minimum investment requirement.

#### **Basket Trade Benefits**

- Personalized Option: Investors have the option to design a basket transaction that meets their financial goals. An investor looking for income, for instance, might put together a basket trade that solely contains high-yielding dividend equities. Stocks from a specified industry or with a certain market valuation may be included in baskets.
- Simple Allocation: Basket transactions make it simple for investors to distribute their money among various securities. Common distribution methods for investments include share size, dollar amount, and percentage weighting. Each holding in the basket is given an equal number of shares according to share quantity. Securities are distributed using dollars or

percentage amounts in dollar and percentage allocations. For instance, if an investor wants to invest \$50,000 across a basket of 15 assets, they will need to buy \$3,333.33 of each security.

Control: A basket transaction aids investors in maintaining investment control. Individual or multiple securities may be added to or removed from the basket depending on the decision made. Monitoring the performance of a basket deal also streamlines the administrative procedure and saves time compared to monitoring individual securities.



# 6. STOCK MARKET AND ITS OPERATIONS

Stock exchanges are meant to facilitate mobilization of resources by companies. Their effective regulation is required for protecting the interests of investors and safeguarding their developmental role.

The Securities Contracts (Regulation) Act 1956 along with the Securities Contracts (Regulation) Rules 1957 has been the main laws to regulate the securities market in India. As per the Securities Contracts Regulations Act, 1956, a stock exchange is defined as "an association, organization or body of individuals whether incorporated or not, established for the purpose of assisting, regulating and controlling business in buying, selling and dealing in securities". A look at the powers given to stock exchanges in India to make and enforce by laws under the Act and the rules reveals that Indian Stock Exchanges have been envisaged as self-regulatory organizations.

# 6.1 Growth of Stock Exchanges

The stock exchange in India came into existence in the eighteenth century. At that time, securities of East India Co. were transacted. And there were at the most 50-60 brokers led by Premchand Roychand. They provided the much-needed impetus to the shares issued by East India Company and a few commercial banks. The issuance of shares of a company made its beginning in the 1830s and gained importance with the passage of the Companies Act in 1850s. The stock exchange in India, the Bombay Stock Exchange was established in 1875. Its name at that time was "Share and Stockbrokers Association."

The stock exchanges are tightly regulated as self-regulatory organizations (SROs) under the Act. In addition to ordinary regulatory powers over the stock exchanges, the Central Government and/or SEBI may nominate up to three members to the board of each stock exchange [Section 4(2) (iii) of the SC(R) Act, 1956 and Section 10 of SC(R) Rules, 1957]. The government and/or the agency have the authority to make, approve and amend the byelaws of the stock exchanges [Section 4(1)(a)

&8 of the SC(R) Act, 1956]. In return, the stock exchanges have been granted strong disciplinary authority (as well as obligations) over their member stockbrokers.

# 6.2 Characteristics of Stock Exchanges in India

A stock exchange is an association of brokers, who are its members, established with the objective of regulating and helping the buying and selling of securities by the organizations. Recognition to a stock exchange in India is provided by the Central Government after making such inquiry as may be necessary after satisfying the provisions of the Securities Contract (Regulation) Act, 1956.

The governance of a stock exchange is done by the Board of Directors. Some board members are nominated by the Government. And Govt. nominees include people representing the Ministry of Finance. There are some public representatives also whose job is to protect the interest of investors.

Further, the Board is presided by a President, who is nominated by the government from among the elected members. The Executive Director (ED) is the operational chief of the stock exchange. He is appointed by the Stock Exchange with government's approval. The duty of the ED is to make sure that day-to-day operations of the stock exchange are carried out in accordance with the rules and regulations.

The office of SEBI has been set up in Mumbai to observe the proper functioning of stock exchanges in the country. Every company wishing to issue shares to the public must get its securities listed on at least one stock exchange. Stock exchanges also facilitate trading of shares listed in them.

# 6.3 Functions of Stock Exchanges

Various functions of stock exchanges are discussed as below:

- (a) Liquidity and Marketability of Securities: The basic functions of the stock market are to provide liquidity to the securities of a company. This can be achieved when investors can sell their securities at the prevalent market price at that time and get the required amount. The stock exchanges also provide marketability to the securities of a company i.e., the securities can be bought and sold at any time at the convenience of investors.
- **(b)** Fair Price Determination: Fair price is determined through the demand and supply forces. As the market is almost perfectly competitive, there are many buyers and sellers that ensure an honest and just determination of prices of securities.
- (c) Source for Long term Funds: Stock exchanges provide a reliable long-term source of funds to the corporates, government, and the public bodies. The advantages of the securities placed in the stock exchanges are that they are negotiable and transferable. They are freely traded and

change hands from one investor to another without affecting the funds requirement of the issuing company.

- (d) Helps in Capital Formation: It means the savings of the people are mobilized and channelized into those sectors which need money. So, stock exchanges facilitate capital formation i.e., it helps in transfer of funds from those people who have surplus money to sectors which need money.
- (e) Services provided by Stock Exchanges: Stock exchanges ensure that the shares issued to the public are transparent and in accordance with prescribed rules and regulations.

Shares are issued to the public by the companies by disclosing all the information through the prospectus. It ensures various norms regarding listing, opening of subscription for a minimum number of days, availability of share applications at the prescribed centres etc.

Members of the stock exchanges provide useful services as brokers and underwriters. As brokers, they try to gain access to potential investors and encourage them to invest in the stock market. And, as underwriters, they provide the much-needed services by subscribers to those securities of a company which remains unsubscribed.

Stock exchanges also provide a platform where the right shares of a company are issued to the already existing shareholders of the company. New shareholders can also take part in the rights shares provided existing shareholders renounce a part of their shareholding.

(f) Reflects the General State of Economy: The stock market reflects the economy. When the economy is doing badly, the stock market also reflects the same negativity in the form of declining share prices. On the other hand, when the economy is doing well, the stock market also shows a boosting effect in the form of higher share prices.

#### 6.4 Basics of Stock Market Indices

#### 6.4.1 Stock Market Index

It represents the entire stock market. It shows the changes taking place in the stock market. Movement of the index is also an indication of average returns received by the investors. With the help of an index, it is easy for an investor to compare performance as it can be used as a benchmark, for e.g., a simple comparison of the stock and the index can be undertaken to find out the feasibility of holding a particular stock.

Each stock exchange has an index. For instance, in India, it is **Sensex of BSE** and **Nifty of NSE**. On the other hand, in outside India, popular indexes are **Dow Jones**, **NASDAQ**, FTSE etc.

#### 6.4.2 Concept behind Fluctuations of Index

Valuation of stocks is arrived at by discounting future earnings (i.e., dividend and capital gains) to arrive at the present value. So, the stock market is basically reflective of how a company will perform in the future. So, when the index goes up, the perception is that the future returns will go up and vice-versa.

Furthermore, the stock exchange computes the closing price of stocks based on weighted average price of all trades executed during the last 30 minutes of a continuous trading session.

If there is no trade recorded during the last 30 minutes, the last traded price of the stock in the continuous trading session is taken as the official closing price.

#### 6.4.3 Computation of Index

Following steps are involved in calculation of index on a particular date:

- Calculate the market capitalization of each individual company comprising the index.
- Calculate the total market capitalization by adding the individual market capitalization of all companies in the index.
- Computing index of next day requires the index value and the total market capitalization of the previous day and is computed as follows:

It should also be noted that Indices may also be calculated using the price weighted method. Here, the share price of the constituent companies forms the weight. However, almost all equity indices worldwide are calculated using the market capitalization weighted method.

# 6.4.4 Free Float Market Capitalization

The company's outstanding shares multiplied by the share price equals its market capitalization. For instance, a corporation with 50,000 shares in circulation at a price of ₹ 50 will have a market capitalization of ₹ 25 lakhs. Depending on a company's market capitalization, it can be divided into small-cap, mid-cap, and large-cap categories. Free-float market capitalization, on the other hand, is an entirely distinct idea.

#### What is Free-Float Market Capitalization?

The calculation for conventional market capitalization entails counting all outstanding shares, including publicly traded and privately held. However, the free-float market cap method only uses publicly held, outstanding shares to value a corporation.

The price of each share is then multiplied by the number of shares. Privately held shares are not included in this computation at all. Shares owned by trusts, governmental entities, and promoters are therefore disregarded. Additionally, it shows that a free-float market capitalization would always be less expensive than the company's real market capitalization.

Float-adjusted capitalization is another name for free-float market capitalization.

#### **Examples of Free-Float Market Capitalisation**

Sadbhavna Garments has 100000 outstanding shares, each priced at ₹ 30. From these, 53000 shares are held publicly, while the remaining 47000 shares are owned privately. From this information, both the market cap and the free float market capitalisation can be calculated.

#### Market capitalisation for Sadbhavna Garments

Total outstanding shares x Price of each share

1,00,000 x 30= ₹ 30,00,000

#### Free-float market capitalisation for Sadbhavna Garments

Outstanding shares held by public x Price of each share

53,000 x 30 = ₹ 15,90,000

This difference is more prominent in the case of companies that contain a large government holding. For instance, Coal India's free float market cap is much lower than its regular market capitalization, because most of its shares are held privately by the Indian government.

#### Now, consider a second example to have a proper understanding-

The National Thermal Power Corporation has 160000 outstanding shares of ₹ 100 out of which 40000 are publicly owned. The remaining 120000 shares are held by different government entities.

Again, the market cap and the free-float market cap of the company is as follows:

Market capitalisation =  $1,60,000 \times 100 = Rs1,60,00,000$ 

Free-float market capitalisation = 40,000 x 100 = ₹ 40,00,000

#### Advantages of Using Free-Float Market Capitalisation

The free-float market cap technique of analyzing an index is preferred because of the following reasons:

- (i) Presents a realistic picture The total market capitalization technique considers both the shares that are now on the market and those that are currently locked in. However, the free-float system merely considers how many shares are presently traded on the market. To assess an enterprise's genuine state, this procedure is a more helpful statistic.
- (ii) No valuation distortion When shares of large-cap businesses are not easily available for trade, their market capitalization can deceive investors into believing that they are. Although some companies grow to be large cap, most of their shares are still privately held and remain restricted. Broad-based indexing is conceivable with the free-float market cap. By doing this, the concentration of businesses with big market caps is reduced.
- (iii) A market-driven approach Companies that only have a small number of shares available for trading in the market are disqualified and eliminated using this calculation process. As a result, investors may readily use this valuation method to identify companies where they can store their surplus funds by purchasing public shares.

#### Relationship between Free-Float and Market Understanding Free-Float Factor

Finding the float factor is a crucial component of the free-float approach. This factor is assigned to each share of the company to provide investors with a sense of which shares are held closed, and which are available for trading.

For instance, a company has 60000 outstanding shares out of which 48000 are open for trading, and 12000 are closed. Each share is priced at ₹ 80. Therefore, the proportion of shares available for trading is -

48000/60000 = 0.80

So, 0.80 is the float factor, which is allocated to each share price. Now, the free float market capitalization for this company is  $48000 \times 80 = 38,40,000$  (using the same method as explained previously).

Or it can also be calculated as follows:

Market capitalization x Float Factor

Or  $(60000 \text{ shares } x \neq 80) \times 0.80 = \text{Rs } 38,40,000$ 

# Volatility

Market volatility is inversely correlated with free-float market cap. A higher free float shows that shares are being bought and sold by investors more quickly. Like this, a low free float signals greater volatility. Trade can have a substantial impact on market values at this point.

As a result, traders tend to favour trading shares from companies with a bigger free float. By doing this, they can freely purchase and sell shares without impacting the index's total stock values.

# 6.4.5 Index Management

#### Rebalancing

Rebalancing is the process of changing the weights of the securities that make up the index. The index provider rebalances the index by adjusting the weights of the constituent securities on a regularly scheduled basis (rebalancing dates), usually on a quarterly basis, to maintain each security's weight in accordance with the index's weighting method. Because the weights of the component securities fluctuate in tandem with their market prices, rebalancing is required. Consider the following, for instance:

Security A	19.93%
Security B	15.94
Security C	11.60
Security D	25.36
Security E	27.17

The index would be rebalanced by increasing the weights of Securities A, B, and C (which had the lowest returns) and decreasing the weights of Securities D and E (which had the highest returns). Rebalancing therefore causes turnover within an index.

#### Reconstitution

The process of altering an index's constituent securities is known as reconstitution. It's comparable to a portfolio manager choosing to alter the stocks in their holdings. One phase of the rebalancing cycle is reconstitution. The reconstitution date is the day that index providers examine the securities that make up the index, apply the original inclusion criteria once more, and decide which securities to keep, exclude, or add. Securities that satisfy the requirements are substituted for constituent securities that no longer do. The weighting technique is reapplied after the revised list of constituent

securities is established. Reconstituted indexes reflect the selection committee's decision as well as shifts in the target market, such as bankruptcies, delistings, mergers, and acquisitions.

#### **Uses of Market Indexes**

The original purpose of index creation was to provide a sense of the performance of a specific security market on a given day. The applications of modern financial theory in investment management have grown substantially with it. The following are some of the main applications of indices:

- benchmarks for actively managed portfolios;
- measures of market sentiment;
- proxies for asset classes in asset allocation models;
- measures and models of returns, systematic risk, and risk-adjusted performance; and
- model portfolios for investment products like index funds and exchange-traded funds (ETFs).

When choosing the index or indexes that best suit their needs, investors utilizing security market indexes need to understand how different indexes are put together.



# 7. RISK MANAGEMENT IN SECONDARY MARKET

The stock exchanges have developed a comprehensive risk management mechanism to promote a safe and efficient capital market. These include:

- Laying down trading rules and regulations for broker members.
- Setting up market surveillance systems to curb excess volatility.
- Creating trade/settlement guarantee fund to ensure timely settlements even if a member defaults on delivering securities or pay cash.
- Setting up a clearing corporation to guarantee financial settlement of all trades and thereby reduce credit risk in the settlement system.

The Risk Management structure of Secondary Market (or stock exchanges) has been discussed in detail in the following paragraphs to enable students to have a good grasp over the nuances of secondary market.

# I. Trading Rules and Regulations

Strict rules and regulations have been framed to prevent unfair trading practices and insider trading. Stock exchanges impose different types of margins on brokers for individual stocks, depending upon the exposures taken by these brokers in these stocks, both on ownership basis and on behalf of clients. These margins are collected to prevent brokers from taking market positions more than their buying capacity. They are also used to settle any amount due to the stock exchange, clearing corporation and traders, in case the broker faces any shortage of amount.

Further, there is real time monitoring of the intra-day trading limits and gross exposure limits by the stock exchanges. There is an automatic deactivation of trading terminals in case of breach of exposure limits. Also, SEBI stipulated that stockbrokers and sub-brokers of one exchange cannot deal with the brokers and sub-brokers of the same exchange either for proprietary trading or for trading on behalf of their clients. However, they can deal with the brokers and sub-brokers of another exchange for proprietary trading only.

Moreover, to ensure fair trading practices, the SEBI has devised insider trading regulations by prohibiting insider trading and making it a criminal offence. To ensure transparency in the takeover process, SEBI takeover regulations have been made.

# II. Circuit Breakers to curb excess volatility

Circuit Breaker is a temporary halt or suspension of trading in any stock or index for a certain period. The move is basically resorted to curb excess volatility in the stock market.

There are two methods by which circuit breakers are practiced:

- 1. Suspension of trade in a security or index for a certain period.
- 2. Suspension of trade in a security or index for the entire trading day.

In the case of the first option, trading activities are suspended for few hours to enable the market to settle down. This also allows market participants to make an informed decision by having a relook at the market. If the market is very volatile and it seems that it is going out of control, then the trading may be halted for the entire day.

Advantages of Circuit Breakers

- (i) During the suspension period, circuit breakers allow participants to reassess the situation by gathering new information.
- (ii) It helps in controlling panic among the investors.
- (iii) It also helps exchange clearing houses to monitor their members.

(iv) It also helps investors to take a rational approach towards security during the time the trading is suspended.

#### Disadvantages of Circuit Breakers

- (i) Firstly, circuit breakers prevent true discovery of price for the period during which it is imposed.
- (ii) Secondly, sometimes circuit breakers prove to be unfair to retail investors because well informed investors such as foreign institutional investors usually make a move before the circuit breaker can be invoked leading to chaos and confusion among retail investors.

The market index circuit limits in India are set by SEBI. Exchanges use the closing price of the index for the previous day to calculate circuit limits for 10%, 15%, and 20% stages daily. To the nearest tick size, the closing price is rounded. The table below lists the market index circuit breaker rules.

#### **Trigger limit Trigger Time** Market halt duration 45 minutes Before 1 p.m. 10% At or after 1 p.m. upto 2.30 pm 15 minutes At or after 2.30 p.m. No halt Before 1p.m 1 hr. 45 min. 15% At or after 1 p.m. upto 2p.m. 45 minutes On or after 2 p.m. Remainder of the day 20% Any time during market hours Remainder of the day

#### **Circuit Breaker**

Exchange will calculate the 10%, 15%, and 20% index circuit breaker limits each day using the closing index level from the prior day, rounded to the closest tick size. One can also use the same methodology to calculate individual stock circuits. Circuit limits do not apply to stocks that have listed derivative contracts or to portions of indices that contain derivative products.

#### III. Trading and Settlement

Rolling settlement is basically settlement of transaction in stock market in a certain number of days after the trade is agreed.

Rolling settlement can be explained with the help of following table:

#### **Rolling Settlement**

Activity	Description of Activities	Day	Timings
Trading	Trading by investors	T day	
Clearing	National Securities Clearing Corporation Ltd. (NSCCL) confirms the trade from stock exchange. Then, NSCCL process and download obligation files to brokers.	T + 1	By 1.30 P.M.
Settlement	Pay-in of securities and funds to NSCCL.  NSCCL gives pay out of securities and funds.	T + 2	By 10.30 A.M. By 1.30 P.M.

The above chart has been explained as follows:

#### Trading Day (T Day)

T stands for trading. Trading can be done during the entire day, i.e., from 9.00 A.M. to 3.30 P.M. Trading can be done on any working day (except Saturday and Sunday and other holidays as intimated by the stock exchange from time to time). During the trading process, one investor buys the shares, and the other investor sells the shares. After the execution of trading, the buyer receives the shares, and the seller receives money for the shares he parted.

#### Clearing Activities (T+1 day)

Clearing is a process of determination of obligations, after which obligations are discharged by settlement. On the T+1 day i.e., one day after the trading day, first, the National Securities Clearing Corporation Ltd. (NSCCL) confirms the trade executed during the day from the Stock Exchange which helps it to determine the obligation of each member (broker) in terms of funds and securities. After that, the netting of obligations is done. This entire process of determining the obligation is done by the custodians/clearing corporation which works under the NSCCL. Once the netting of obligation is done, all the files are processed and downloaded so that each broker knows what he must pay in and receive.

#### **Netting explained**

Suppose an investor buys 100 shares @ ₹ 2000 each on Monday and sells those shares @ 2500 each on the same day. His net obligation in terms of funds and securities will be calculated on Tuesday. In terms of securities, his net obligation is nil as he has sold all the shares he bought. So,

he will neither receive nor give any security. On the other hand, his net monetary obligations will be calculated considering his buying and selling amount. In this case, the net amount he is receiving is ₹ 50000 (100 shares x ₹ 2500 - 100 shares x ₹ 2000). This pay-in and pay-out of funds are calculated on T+2 day i.e., on Wednesday.

#### **Settlement Activities (T+2 Day)**

On the second working day i.e., T+2 day, all the brokers must pay in the required funds and securities to the NSCCL by 10.30 A.M. giving the required instructions to the respective clearing banks and members on the same day. Moreover, by 1.30 on the same day, brokers get the required funds through the NSCCL. This is called pay-out of funds.

#### Pay-in and pay-out of funds explained

Pay-in of funds takes place when NSCCL gives the required funds to the clearing corporation by giving instructions to the clearing bank which credits the account of clearing corporation and debit the accounts of clearing bank. This is called pay-in of funds. After that, the NSCCL gives electronic instructions to the clearing banks to credit accounts of clearing members and debit accounts of the clearing corporation. This is called pay-out of funds, and it completes the settlement cycle.

#### Pay-in and pay-out of securities explained

Pay-in of securities means that shares that the shareholder wants to sell are picked up from their Demat account and transferred to the broker's account. All these shares are then delivered to the clearing corporation. In pay-out of securities, the shares that the investor wants to buy are received from the clearing corporation and then transferred to the broker's account. After that, the shares are transferred from the broker's account to the buyer's demat account.

# **Building Safe and Efficient Markets for Investors**

#### Implementation of T+1 Settlement

India, one of the earliest adopters of T+1 settlement system in the global securities market, well ahead of major developed and emerging markets, completed its transition to T+1 settlement cycle in equity market in 2022-23. In this regard, a roadmap for phased implementation of T+1 settlement was issued by MIIs vide joint press release dated November 08, 2021, to mitigate the concerns around uniformity of implementation across stock exchanges.

Accordingly, stocks in equity segment across stock exchanges were ranked based on market capitalization for the month of October 2021 and based on the ranking arrived, the bottom 100 stocks were made available for introduction on T+1 settlement, from trade date February 25, 2022. Thereafter, from March 2022 onwards, on the last Friday (trade day) of every month, the next bottom

500 stocks from the list of stocks ranked were made available for on T+1 settlement. With effect from January 27, 2023, all stocks in equity segment across stock exchanges have moved to T+1 settlement.

To address concerns around post trade activities like allocation of trades by FPIs (client wise or scheme-wise), booking of forex by FPIs and confirmation of such trades by custodians, the timeline for trade allocation and confirmation was extended by CCs, respectively by one hour on T-day and 12 hours on T+1 day. The revised settlement timelines are as below:

Process	Under T+2 settlement	Under T+1 settlement
Trade Confirmation by custodians	By 01:00 P.M. on T+1 day	By 07:30 A.M. on T+1 day
Pay-in of funds/ securities to CCs	By 11:00 A.M. on T+2 day	By 11:00 A.M. on T+1 day
Pay-out of funds/ securities by CCs	By 01:30 P.M. on T+2 day	By 01:30 P.M. on T+1 day

The switch to T+1 settlement cycle shall benefit investors by increasing market liquidity as the securities/funds of trades carried out on T Day will be available on the next working day itself. An early settlement of funds/securities under a T+1 settlement cycle may also enable mutual funds to facilitate faster availability of redemption proceeds to investors. Other benefits associated with a T+1 cycle include increased trading turnover and reduced settlement risk thereby leading to overall development of the securities market.

# Introduction of a new concept of 'Earmarking' for settlement by SEBI

To settle a sell trade, the broker used to have to debit shares from a selling client, hold the securities in the broker's pool account, and transfer the securities to the clearing corporation (CC) on T+2. The client would have received a credit of funds against the sale at the time of transfer, which would have marked the transaction as settled. Since T+2 was the settlement day, brokers would normally debit shares on T Day or T+1 day and transfer them to CC on T+2.

Since the client shares are kept in the broker's pool account until they are settled, there is a chance that a broker will misuse these assets. SEBI identified this as a potential risk and instituted "earmarking" for settlement. Under this new earmarking system, shares are only designated for settlement; the client's account is no longer debited for them. So, earmarking is a temporary hold on the securities pending a future settlement for the client-initiated sale transaction.

On settlement day, the shares are debited from the investor's account and credited to the clearing corporation. This new process eliminates related risk by eliminating the need for brokers to hold client shares in their pool account. The new earmarking process is mandatorily implemented from November 2022.

(Source: SEBI Annual Report 2022-23)

# IV. National Securities Clearing Corporation Limited

In April 1995, the NSE set up the National Securities Clearing Corporation Limited (NSCCL), its wholly owned subsidiary, to undertake clearing and settlement at the exchange. It started operations in April 1996. The NSCCL undertakes the counter party risk of each member and guarantees settlement. A settlement guarantee is a guarantee provided by the clearing corporation for the settlement of all trading of products on the stock exchange. The organizations linked with Clearing Corporation in the clearing and settlement process are discussed as below:

- (a) Custodians/Clearing Members: NSCCL takes trading information from the exchange and passes the trade details to custodians/clearing members. Custodians confirm the obligations of the parties by netting.
- (b) Clearing Banks: They act as a link between the clearing corporation and clearing member. Every clearing member is required to maintain a clearing account with one of the clearing banks. A clearing bank must enter into an agreement with the NSCCL and clearing members and open a clearing account with the depository.
- (c) Depositories: They hold securities in dematerialized form for the investors in their beneficiary account. Every clearing member is required to maintain a clearing pool account with the depositories.

The clearing banks, on receiving electronic instructions from the NSCCL, debit accounts of clearing banks and credit accounts of the clearing corporation. This is termed as pay-in of funds and securities. The NSCCL, after providing for shortages of funds and securities, sends electronic instructions to the depositories and clearing banks to credit accounts of clearing members and debit accounts of the clearing corporation. Thus, the settlement cycle is completed once the payment out of funds and securities is made.

# V. Market Making System

The job of the market maker is to provide liquidity to the stock market by providing a two-way quote i.e., a buy and a sell quote. How do the market makers do this? And what is the purpose. Consider a situation when you want to purchase shares and there is no one there to sell his share. What will happen? Such a person must wait until he finds a person who can sell his shares at a price quoted by him. The market maker resolves this problem. He sells shares at the quoted price. This way, the person gets the shares he wants to sell. Conversely, if a person wants to sell his shares, the market maker may come to his rescue and purchase shares at the price quoted by him. So, he gets the shares he was so willing to purchase. Hence, market maker has devised a system in which anyone can buy and sell shares anytime.

Market makers are basically large brokerage houses. But how do they make money? And there is a chance that they may suffer loss. For e.g., if they buy shares at a particular price and are not able to sell them later at a higher price because of the fall in the market price of shares, they will incur a loss. To offset this loss, they purchase shares at a particular price (ask price), say ₹ 100 and sell them at a slightly higher price say ₹ 100.10 (bid price). This profit margin of 0.10 seems to be very nominal. But, when trading of millions of shares takes place in a day, the market maker at the end of the day managed to pocket a significant amount.

The obligations and responsibilities of Market Makers (as per BSE website)

The Market Maker shall fulfill the following conditions to provide depth and continuity on this exchange:

- (a) The Market Maker shall be required to provide a 2-way quote for 75% of the time in a day. The same shall be monitored by the stock exchange. Further, the Market Maker shall inform the exchange in advance for each blackout period when the quotes are not being offered by the Market Maker.
- (b) The minimum depth of the quote shall be ₹1,00,000/-. However, the investors with holdings of value less than ₹ 1,00,000 shall be allowed to offer their holding to the Market Maker in that scrip if he sells his entire holding in that scrip in one lot along with a declaration to the effect to the selling broker.
- (c) Execution of the order at the quoted price and quantity must be guaranteed by the Market Maker, for the quotes given by him.
- (d) There would not be more than five Market Makers for a stock. These would be selected based on objective criteria to be evolved by the Exchange which would include capital adequacy, net worth, infrastructure, minimum volume of business etc.
- (e) The Market Maker may compete with other Market Makers for better quotes to the investors.
- (f) Once registered as a Market Maker, he must start providing quotes from the day of the listing / the day when designated as the Market Maker for the respective stocks and shall be subject to the guidelines laid down for market making by the exchange. Once registered as a Market Maker, he must act in that capacity for a period as mutually decided between the Merchant Banker and the market maker.
- (g) Further, the Market Maker shall be allowed to deregister by giving one month's notice to the exchange

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# VI. Securities Lending and Borrowing (SLB)

Securities lending means lending stocks, derivatives and other securities to an investor or firm. Securities lending requires the borrower to pledge, whether cash, security or a letter of credit to the lender. When a security is lent, the title and the ownership are also transferred to the borrower.

Why securities lending and borrowing is important? Securities lending and borrowing has its importance in short selling. Basically, short selling is a facility in which a person (short seller) can sell shares which he does not own or possess. What is the advantage of doing that? The short seller borrows security to immediately sell them. He generally does that when he has a firm belief that security prices will come down soon. So, he borrows the security hoping to profit by selling the security and buying it back at a lower price. The borrower of securities pays the lender interest on the value of the securities borrowed.

The concept of short selling has been discussed in detail later in this chapter.

The borrower of securities are usually brokers, speculators, market makers, custodian banks, clearing banks, clearing corporations, and finance companies. The lenders are mutual funds, insurance companies, custodian banks, finance companies, brokers, and high net worth individuals.

Further, the lender remains the owner of stock after SLB and gets all beneficial rights such as dividend, rights, or bonus shares in respect of the stock lent. The borrower, however, has the legal title of the borrowed securities and is eligible to trade and sell securities in any manner he thinks fit. Moreover, there is roll over facility also i.e., the lender and borrower can extend the period of their borrowing and lending respectively.

Merits of Stock Lending and Borrowing

- (i) Provides a facility to the borrowers who are anticipating a fall in the market price of securities to sell securities which they don't own.
- (ii) Provides an incentive to institutional investors such as banks, mutual funds, financial institutions, and insurance companies to earn income by lending their idle stock in the market and earn interest income from borrowers.
- (iii) Increase liquidity of the stock as more and more people can sell or purchase stock inspite of shortage of money.
- (iv) Providing stability to stock market movements.

- Helps to avoid delivery failures as it is routed through the clearing house and facilitates timely delivery.
- (vi) And, lastly, manipulation of stock prices is difficult.

#### Example:

A borrower needs 5,000 shares of company A. The lending price of a security is ₹ 100. The borrower is willing to pay 50 paise for each share in lending fees. The transaction price is ₹ 100.25. The borrowing period is 7 days. Calculate the amount of lending fee and the annualized yield. How can the borrower ensure that he makes a profit on his trade?

#### Solution

Number of shares = 5000

Amount of lending fee = 50 paise per share = 5000 shares/0.50 paise = ₹ 2500

Annualized yield = Transaction Price – Securities Lending Price/Securities Lending Price x 365/borrowing period x 100.

 $= 100.25 - 100/100 \times 365/7 \times 100 = 13.036\%$ 

And the borrower would need to gain over and above the lending fees of ₹2,500 to make a net positive return on his or her trade.

# VII. Straight Through Processing (STP)

The concept of Straight Through Processing is designed to complete the transaction without human intervention. Straight through processing (STP) is an initiative that financial companies use to optimize the speed at which they process transactions. This is performed by allowing information that has been electronically entered to be transferred from one party to another in the settlement process without manually re-entering the same pieces of information repeatedly over the entire sequence of events.

The primary purpose of STP is to streamline the processing of transactions across multiple points. By allowing information to pass along electronically, this eliminates the need for a hands-on reentry of data that has already been completed at the source. Additionally, information could be sent to more than one party simultaneously if it is appropriate for the transaction type.

So, the purpose of STP is to eliminate costly delays during transaction processing period. Since manual assistance is not needed, there is no delay between one party receiving information and the other being able to proceed further.

In normal processing, information must be handled by the multiple people involved. This requires taking the time to accept and review the information, receipt of data as required, and then sending it forward to the next part of the transaction process. STP eliminates the human factor, allowing an automated process to complete any steps needed for a transaction to proceed. By eliminating these delays, the transactions can be more cost-effective as they require less time to manage. This is particularly attractive to investors looking for lower fee options.

The benefit of STP can be explained with the help of an example. In a manual trade, the broker issues a contract note which is then passed on to the custodian or a depository participant. There are multiple data entries during the different stages of a manual trade which makes the process prone to errors, delays, and manipulation. However, in STP, contract note is issued in electronic form and the trade is settled in computer leaving almost no scope for manipulation. Further, in comparison to manual trade, STP is quicker, risk free and eliminates any failure in trade.

(Source: Investopedia)

#### VIII. Margin Trading

Margin Trading is a facility given to the investors in which they can invest in shares by part financing from the bank. In other words, investors can provide some amount of money from their pocket to invest in shares, and the rest of the amount will be financed by the banks. Margin trading permits investors to buy shares by providing 40% of the total value as margin, while borrowing 60% from the banks.

**For example**, an investor wants to buy 20000 shares worth ₹ 2,00,000 (price of one share is ₹ 10). But he can invest only ₹ 80000 from his own pocket. However, under margin trading, he can buy as many as 20000 shares worth ₹ 200000 from his broker by paying ₹ 80000 as margin and by borrowing the balance ₹ 120000 from a bank through his broker. The broker pledges 20000 shares with the bank. The bank has collateral of ₹ 200000 backing the loan of ₹ 120000.

Now, suppose the market price of shares moves upwards from ₹ 10 to ₹ 15. So, with the help of the facility of margin trading, the shareholder can sell his entire shareholding of 20000 shares and pocket a gain of ₹ 100000 (20000 shares x ₹ 15 - 20000 shares x ₹ 10). Conversely, if he hadn't availed the facility of margin trading, he would have been able to sell only 8000 shares and pocketed a gain of ₹ 40000 only. The reason is that he would have purchased only 8000 shares because of paucity of funds.

On the other hand, if the market price of shares falls below ₹ 10, the bank will give a margin call under which the investors will have to furnish additional funds/securities for the broker to pass on to the bank.

Margin trading gives a unique opportunity to the bank to lend short term funds at a high rate of interest. However, banks must evolve a suitable risk management mechanism to safeguard the loans given by them against collateral of securities. In the same way, it provides a facility for the investors to borrow money from the bank and invest it in the stock market.

#### IX Short Selling

#### Concept

Short Selling means selling shares without owning it. In other words, the task of short sellers is to borrow the shares (generally through the clearing corporation of an exchange) and sell them. The borrowed shares which have been sold are bought back when prices are lower. The shares are then returned to the lender and the excess profit is pocketed by the short seller.

In India, short selling can only take place on an intra-day basis. As per the SEBI's revised guidelines, both retail and institutional investors can participate in short selling. These transactions are facilitated by the exchanges. So, if one wants to short sell, one must undertake the transaction through a broker. If the profit is made, then the short seller must shell out 15% short term Capital Gain tax.

#### Risk inherent in short selling

In short selling, there is a scope of making huge return. On the flip side, the risk is also high. If you are trading in shares, the losses can be limited to the amount which you have invested. For e.g., if you have purchased 1000 shares at ₹ 10 each, the maximum loss that can be borne is ₹ 10,000.

However, in the case of short selling, the amount of loss which an investor can bear is unlimited. The reason is that the price of shares of a given company can rise to any amount. For instance, you short 100 shares at ₹ 50 each, but the shares increase to ₹ 70 each. So, you end up losing ₹ 2000 because you cannot buy back the shares until it reaches below ₹ 50. And short seller must return the borrowed shares to the lender. Hence, in short selling, there is an inherent risk of losing a heavy amount if the shares prices do not fall as per the expectations.

However, on the positive side, short selling gives much needed liquidity to the market by keeping the valuation of stocks in check. Another advantage of short selling is that the short seller is not required to pay too much at the time of entering the transaction. So, initially only a small fee to the broker is required to be paid. And, lastly, it is one of the easiest ways to make money in a bear market.



# 8. OTHER ASPECTS OF SECONDARY MARKET

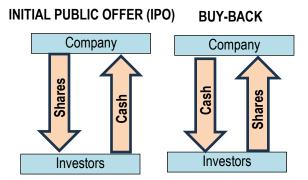
# **Buy Back of Shares**

#### What is a buyback?

A buyback is a process in which a company uses its surplus cash to buy shares from the public. It is also called Share Repurchase. It is almost the opposite of an initial public offer in which shares are issued to the public for the first time. In buyback, shares which have already been issued are bought back from the public. And, once the shares are bought back, they get absorbed and cease to exist.

For example, a company has one crore outstanding shares and has a huge cash pile of ₹ 5 crores. Since the company has very limited investment options it decides to buy back some of its outstanding shares from the shareholders, by utilizing some portion of its surplus cash. Accordingly, it purchases 10 lakh shares from the existing shareholders by paying₹ 20 per share, i.e., total cash of say, ₹2 crore.

The concept of buyback can be cleared with the help of the following diagram:



#### **Effects of Buyback**

There are several effects or consequences of buyback, some of which are as follows:

- (i) It increases the proportion of shares owned by controlling shareholders as the number of outstanding shares decreases after the buyback.
- (ii) Earning Per Share (EPS) escalates as the number of shares reduces, leading the market price of shares to step up.

- (iii) A share repurchase also effects a company's financial statements as follows:
  - (a) In balance sheet, a share buyback will reduce the company's total assets position as cash holdings will be reduced and consequently as shareholders' equity get reduced it results in reduction on the liabilities side by the same amount.
  - (b) Amount spent on share buybacks shall be shown in Statement of Cash Flows in the "Financing Activities" section, as well as from the Statement of Changes in Equity or Statement of Retained Earnings.
- (iv) Ratios based on performance indicators such as Return on Assets (ROA) and Return on Equity (ROE) typically improve after a share buyback. This **can be understood with the help of the following Statement** showing the Buyback Effect of a hypothetical company using ₹ 1.50 crore of cash out of total cash of ₹ 2.00 crore for buyback.

	Before Buyback	After Buyback (₹)
Cash (₹)	2,00,00,000	50,00,000
Assets (₹)	5,00,00,000	3,50,00,000
Earnings (₹)	20,00,000	20,00,000
No. of Shares outstanding (Nos.)	10,00,000	9,00,000
Return on Assets (%)	4.00%	5.71%
Earnings Per Share (EPS) (₹)	2	2.22

As visible from the above figure, the company's cash pile has been reduced from  $\stackrel{?}{_{\sim}} 2$  crore to  $\stackrel{?}{_{\sim}} 50$  lakh after the buyback. Because cash is an asset, this will lower the total assets of the company from  $\stackrel{?}{_{\sim}} 5$  crore to  $\stackrel{?}{_{\sim}} 3.5$  crore. Now, this leads to an increase in the company's ROA, even though earnings have not changed. Prior to the buyback, its ROA was 4% but after the repurchase, ROA increases to 5.71%. A similar effect can be seen in the EPS number, which increases from  $\stackrel{?}{_{\sim}} 2$  to  $\stackrel{?}{_{\sim}} 2.22$ .

#### Why buybacks are being favoured by companies?

There are several reasons why a company chooses buyback, some of which are as follows:

(i) A business organization needs cash to either expand its operations through acquisition of other businesses or grow its capacity by purchasing machinery, plants, furniture, or other kinds of assets. Therefore, too much cash is not considered good as it shows that cash is lying idle without being utilized in any manner.

- (ii) A company may reduce some of its dividend liability by buying back shares thereby providing cash in the hands of shareholders and reducing costs.
- (iii) Also, the company will save on the dividend distribution tax @15% if they opt for buy back instead of declaring dividend to shareholders. Now, as per the Finance Act, 2020, all dividends received on or after 1 April 2020 are taxable in the hands of the investor/shareholder.
- (iv) Further, a company's earnings per share (EPS) increases as the numbers of shares reduce because EPS is PAT (Profit after Tax) divided by total outstanding shares. This leads to a spurt in the market price of shares.
- (v) Moreover, by going for buyback, the company may give a signal to the investors that there are not any worthwhile investment opportunities for the company to increase capacity or through acquisitions.
- (vi) Another reason to opt for buyback is when a company feels that the current market value of its shares is underpriced and is confident of its business and potential future value to investors.

#### Legal requirements to be satisfied in case of a Buyback

A company going for a buyback must comply with the some of the legal requirements as given in Companies Act, 2013 which are as follows:

- (i) a company may purchase its own shares or other specified securities out of—
  - (a) its free reserves.
  - (b) the securities premium account; or
  - (c) the proceeds of the issue of any shares or other specified securities
- (ii) the buyback is authorised by its articles.
- (iii) a special resolution has been passed at a general meeting of the company authorising the buy-back. However, where a buyback is 10% or less of the total paid-up equity capital and free reserves of the company, only a board resolution is required.
- (iv) the buyback is 25% or less of the aggregate of paid-up capital and free reserves of the company.
- (v) the ratio of the aggregate of secured and unsecured debts owed by the company after buyback is not more than twice the paid-up capital and its free reserves.

- (vi) all the shares or other specified securities for buy-back are fully paid-up.
- (vii) the buy-back of the shares or other specified securities listed on any recognized stock exchange is in accordance with the regulations made by the Securities and Exchange Board of India (SEBI) in this behalf.
- (viii) A declaration of solvency is required to be filed with the SEBI and the Registrar of Companies (ROC). An unlisted company is required to file such declaration only with the ROC.

#### When should investors opt for buyback?

The investors may opt for a buyback of shares if the price offered to them is at a premium on the market price. In such a scenario, the buyback may be an attractive proposition. For example, in case of an earlier Tata Consultancy Services (TCS) buyback, the offer price was ₹ 2850 per share while the current market price at that time was around ₹ 2505. So, in the case of TCS, the offer price was at about 14% premium.

Therefore, if a shareholder goes by the famous quote, "a bird in the hand is worth two in the bush", he may be inclined to accept the buyback offer, if buyback premium is more than the market price. However, if the investors can make out that management is continuously putting its effort to improve shareholder value, then the long-term investor may not go for the buyback offer. The reason is that maybe, in the next few years, the market price of shares may upstage the premium price of buyback offer.

On the other hand, opting for a buyback makes sense if the share price in the market is overvalued (i.e., there is very little chance that share price may increase any further in near future), or if there is firm belief that there are not enough opportunities for a firm to grow earnings.

#### Factors to be considered in buy back option by the investor

Acceptance ratio is also a very important factor in buyback. Acceptance ratio is the proportion of shares accepted by the company from the shareholders for buyback out of the shares tendered by the shareholders. In the case of the buyback offer of TCS, only 3% of the total shares tendered by each of the shareholders were accepted by the company. So, if we go with the TCS example, if a shareholder is holding e.g., 1000 shares, it doesn't mean that TCS will buy back all the 1000 shares. In this case, it will buy back only 30 shares.

Another factor which is to be considered by investors while buying back the shares of a particular company is whether promoters are participating in buyback or not. If there is promoter participation, the buyback is likely to be positive for the shares in the long run.

#### **Delisting versus Buyback**

Generally delisting is confused with buyback, which is wrong since it is the process by which a listed security is removed from the exchange on which it trades. The major differences between buyback and delisting of shares are as follows:

- (1) In case of delisting, buyback of shares compulsorily happens while buyback offer does not lead to delisting of shares.
- (2) Delisting can happen in the case of two circumstances. One, a company may delist its shares voluntarily. Two, a company's stock may be compulsorily removed from an exchange if the company does not comply with the listing requirements of the exchange. However, there is no compulsion upon a company to execute buyback.
- (3) In case of delisting, the entire share capital of the company is extinguished. But, in the event of buyback, only a portion of the total capital is offered to the shareholders for buyback.
- (4) Delisting can happen in the case of a listed company only. While buyback can take place in the case of both listed and unlisted company.

#### 8.2 Block and Bulk Deals

Bulk and block deals done on exchanges are keenly watched by market participants daily as they indicate the interest of big investors in a stock. Though these two terms sound similar, there is a difference between them. Here's what they mean and how investors should interpret them.

# 8.2.1 Meaning of block deal

Block deal is execution of large trades through a single transaction without putting either the buyer or seller in a disadvantageous position. For this purpose, stock exchanges are permitted to provide a separate trading window.

Block deal will be subject to the following conditions:

- (i) Morning Block Deal Window: This window shall operate between 08:45 AM to 09:00 AM. The reference price for execution of block deals in this window shall be the previous day closing price of the stock. The stock exchanges shall set their trading hours between 08:45AM to 9:00 PM with a stipulation that between 08:45AM and 09:00AM, the stock exchanges shall operate only for executing trades in the block deal window.
- (ii) Afternoon Block Deal Window: This window shall operate between 02:05 PM to 2:20 PM. The reference price for block deals in this window shall be the volume weighted average market price (VWAP) of the trades executed in the stock in the cash segment between 01:45 PM to 02:00

PM. Between the period 02:00 pm to 02:05 pm, the stock exchanges shall calculate and disseminate necessary information regarding the VWAP applicable for the execution of block deals in the Afternoon block deal window.

- (iii) The orders placed shall be within  $\pm 1\%$  of the applicable reference price in the respective windows as stated above.
- (iv) The minimum order size for execution of trades in the Block deal window shall be ₹ 10 Crore. Every trade executed in this block deal windows must result in delivery and shall not be squared off or reversed.
- (v) The stock exchanges shall disseminate the information on block deals such as the name of the scrip, name of the client, quantity of shares bought/sold, traded price, etc. to the public on the same day, after the market hours.

# 8.2.2 Meaning of bulk deal

A bulk deal is a trade where the total quantity of shares bought or sold is more than 0.5% of the number of shares of a listed company. Bulk deals happen during a normal trading window provided by the broker. The broker who manages the bulk deal trade must provide the details of the transaction to the stock exchanges whenever they happen. Unlike block deals, bulk deal orders are visible to everyone.

#### Participants in such deals

It is usually deep-pocketed investors like fund houses, foreign institutional investors, banks, insurance firms and HNIs given the high amount required to enter such transactions and the percentage of shares involved.

#### **Disclosures**

- (i) The disclosure shall be made with respect to all transactions in a scrip where total quantity of shares bought/sold is more than 0.5% of the number of equity shares of the company listed on the stock exchange.
- (ii) The brokers shall disclose to the stock exchange the name of the scrip, name of the client, quantity of shares bought/sold and the traded price.
- (iii) The disclosure shall be made by the brokers immediately upon execution of the trade.
- (iv) The Stock exchanges shall disseminate the aforesaid information on the same day after market hours to the public.

#### How do bulk and block deals influence a stock?

Investors often look at bulk and block deals to judge the interest of big investors in a stock. If several deals happen in a stock continuously over a period, it can be viewed as a sign of confidence and stock price may rise soon. But a big institution or investor buying shares through such deals does not necessarily mean that the stock will rise. Many a time, the large block of share purchase, which is disclosed to the exchange, could be the last leg of buying by the large investor, who wants to signal his interest in the stock. In short, some large HNIs may use this as a bait to attract more buyers.

(Source: SEBI Website)

#### 8.3 Block Mechanism in Demat Accounts

Under Block Mechanism in Demat Accounts, investors must block securities on their respective demat accounts for sale transactions, according to market regulator SEBI. Earlier, investors have this as an option, but it is not required because an early pay-in method was previously offered. Now, SEBI has made it clear that security blocking is required even for early pay-in transactions.

According to the block method, shares of a client planning a selling transaction will be blocked in the client's demat account in favour of the clearing company, such as ASBA in an initial public offering (IPO), where money is blocked in the client account until the IPO allotment.

#### After extensive consultation

Considering the advantages of the block mechanism and following thorough consultation with depositories, clearing companies, and stock exchanges, SEBI has determined that "the facility of block mechanism shall be essential for all early pay-in transactions."

Shares will continue to be held in the client's Demat account and will be unblocked at the end of the T(Trade) day if the sale transaction is not carried out. Further, the regulator stated that the shares will be blocked on a time basis.

#### Procedures to block shares

- Under this mechanism, the client may block the securities in their DEMAT account using the Depository's online system or an eDIS mandate, or the depository participant may block the securities based on a physical DIS.
- The securities that the depository participant blocks will only be transferred after verifying the client's level net delivery obligation received from the clearing corporation.
- The depository participants will then maintain a block on the client's DEMAT account regarding the intra- or inter-depository transfer until the pay-in day.

- The depositories will also give clearing corporations the specifics of the transfer instructions.
- Following a match between the block details and the client-level net obligations, the clearing corporations will offer the client Early Pay-In (EPI) benefits if they are satisfied.



# 9. INDIAN DEBT MARKET

Debt market is one of the most important components of a financial system. In fact, the debt market in most of the developed countries is bigger than the equity market. The Indian Debt market has been a Wholesale market. The major participants are basically restricted to some financial institutions only. The primary participants are banks.

So, basically a debt market is a financial market where buying and selling of securities takes place. The debt market also facilitates efficient allocation of mobilized resources. It also helps in financing the various developmental projects of the government. Further, the fiscal deficit is often financed by the government borrowing from the market by tapping the debt market.

So, in India, most of the times, the debt market is used as a mechanism to finance the development activities of the government.

# 9.1 Indian debt market can mainly be classified into two categories

- (i) Government Securities Market (G-Sec Market): It consists of central and state government securities. It means that loans are being taken by the central and state government. It is also the most dominant category in the India debt market.
- (ii) Bond Market: It consists of Financial Institution bonds, corporate bonds and debentures and Public Sector Unit bonds. These bonds are issued to meet financial requirements at a fixed cost and hence remove uncertainty in financial costs.

Structurally, the debt market remains firmly skewed towards government securities (G-secs). And the corporate bond market remains largely about top-rated financial and public sector issuances. The good part is, the domestic corporate bond market has done well, fueled by higher demand as a larger share of financial savings get channeled into the capital market, and favourable supply conditions have emerged because of mounting pressure of non-performing assets (NPAs) at banks.

If India is to see rapid economic growth over the long term – which is an absolute social necessity – the corporate bond market will have to play a pivotal role as a funding source.

Over the five fiscals through 2023, CRISIL expects corporate bond outstanding to more than double to ₹ 55-60 lakh crore, compared with ₹ 27 lakh crore at the end of fiscal 2018, driven by large

infrastructure investment requirements, growth of non-banking financial institutions, regulatory push, and the inability of banks to crank up corporate lending because of capital constraints.

However, demand is expected to be only for ₹ 52-56 lakh crore, driven by higher penetration of mutual funds (MFs) and insurance products, increasing retirement subscriptions, growth in corporate investments, and increasing wealth of high-net-worth individuals (HNIs). As a result, there would be a substantial gap of ₹ 3-4 lakh crore between demand and supply of corporate bonds in the next five fiscals. [Source: Crisil Yearbook on the Indian Debt Market 2018]

Further, a comparative figure of outstanding number of various types of fixed income securities as on March 31, 2018, has been given as follows:

#### Outstanding amount of various fixed - income securities

Type of Security	Amount outstanding as on March 31, 2018 (₹ Crore)
Corporate Bonds	2,742,259
Government Securities	5,323,090
SDLs	2,430,333
T – Bills	385,283
CDs	185,732
CPs	372,577
Total	11,439,276

Source: RBI, SEBI, CCIL

The secondary debt market in India can be broadly categorized into –

- (a) Wholesale Debt Market comprising of investors like Banks, financial institutions, RBI, insurance companies, Mutual funds, corporates and FIIs.
- (b) Retail Debt Market comprising of investors like individuals, pension funds, private trusts, NBFCs and other legal entities.

# 9.2 Benefits of an efficient Debt Market to the financial system and the economy

- The debt market allows government to raise money to finance the development activities of the government.
- It plays an important role in efficient mobilization and allocation of resources in the economy.

- The Government securities are issued to meet the short term and long-term financial needs
  of the government, they are not only used as instruments for raising debt but have emerged
  as key instruments for internal debt management, monetary management, and short-term
  liquidity management.
- The debt market also provides greater funding avenues to public-sector and private sector projects and reduces the pressure on institutional financing.
- It also enhances mobilization of resources by unlocking illiquid retail investments like gold.
- Reduction in the borrowing cost of the Government and enable mobilization of resources at a reasonable cost.
- Development of heterogeneity of market participants.
- Assist in development of a reliable yield curve and the term structure of interest rates.

[Source: BSE - FAQs on Debt Market]

#### Participant-wise share in Corporate Bond Trades at NSE

Category	2021-22	2022-23
Mutual Funds	31.6	49.5
Indian Banks	19.1	11.3
Insurance Companies	8.3	7.2
Trading Members	7.5	7.1
Corporates	8.7	6.4
Primary Dealers	6.9	4.5
Others	10.5	9.1
FPIs	4.7	2.8
Domestic Financial Institutions (other than MFs, Insurance, Banks)	0.2	0.8
Foreign Banks	2.6	1.6
Total	100	100

# 9.3 Different types of risks regarding debt securities

 Default Risk- can be defined as the risk that an issuer of a bond may be unable to make timely payment of interest or principal on a debt security or to otherwise comply with the provisions of a bond indenture and is also referred to as credit risk.

- Interest Rate Risk- can be defined as the risk emerging from an adverse change in the interest rate prevalent in the market to affect the yield on the existing instruments. A good case would be an upswing in the prevailing interest rate scenario leading to a situation where the investor's money is locked at lower rates whereas if he had waited and invested in the changed interest rate scenario, he would have earned more.
- Reinvestment Rate Risk- can be defined as the probability of a fall in the interest rate resulting in a lack of options to invest the interest received at regular intervals at higher rates at comparable rates in the market.

#### The following are the risks associated with trading in debt securities:

- Counter Party Risk is the normal risk associated with any transaction and refers to the failure or inability of the opposite party to the contract to deliver either the promised security or the sale value at the time of settlement.
- Price Risk refers to the possibility of not being able to receive the expected price on any order due to an adverse movement in the prices. [Source: BSE - FAQs on Debt Market]



# 10. EMERGING MARKETS

# 10.1 Gift City

India is among the economies in the world which has the one of the quickest growth rates in the world. GIFT City, a developing global financial centre and India's first operational smart city, has a crucial role to play in realizing this aim of expanding the nation's economic and strategic operations abroad.

Over 886 acres in Gandhinagar, GIFT City is made up of an exclusive Domestic Tariff Area, a multiservice Special Economic Zone (SEZ), and the country's first International Financial Services Centre (IFSC) (DTA). While 625 acres have been designated as the DTA, around 261 acres have been designated as the SEZ area. The goal is to create 62 million square feet of built-up area, of which 67% will be commercial space, 22% will be residential space, and 11% will be social space.

The city's social infrastructure includes a school, medical facilities, a planned hospital, and the GIFT City business club, which has both indoor and outdoor sports facilities. GIFT City is a "Walk to Work" City because of the integrated, well-planned residential housing buildings that are part of it. With numerous first-in-the-nation projects in urban infrastructure, GIFT is a smart city in every respect.

In GIFT City, the country's first International Financial Services Center (IFSC) is now open. By providing a business and regulatory environment that is comparable to other top international financial centres like London and Singapore, an IFSC enables Indian corporate entities and overseas branches/subsidiaries of financial institutions (FIs) to bring back the financial services and transactions that are currently carried out in offshore financial centres and bring them back to India. It would make it simpler for Indian firms to access international financial markets. Additionally, IFSC would support and encourage the expansion of India's financial markets.

Aircraft and ship leasing, offshore insurance, offshore banking, asset management, and ancillary services are among the services offered by GIFT IFSC. It is home to two international stock exchanges with daily trading volumes that average more than \$11 billion. Additionally, GIFT City recently welcomed a foreign bullion exchange.

The IFSCA has been established as a unified regulator with a holistic vision to promote ease of doing business in IFSCs and provide a top-notch regulatory environment because the dynamic nature of business in the IFSCs necessitates a high degree of inter-regulatory coordination within the financial sector. The primary goals of the IFSCA are to create a solid worldwide network, concentrate on the requirements of the Indian economy, and act as a global financial platform.

## 10.2 Power Exchange

Power Exchange India Limited (PXIL), India's first institutionally promoted power exchange, has been providing innovative and credible solutions since 2008, and has revolutionized the way Indian power markets operate. PXIL's unique combination of local insights and global perspectives has helped its members make better informed business and investment decisions and has improved the overall efficiency of power markets in India by accurately and seamlessly connecting buyers and sellers.

#### **Key Features of the Exchange**

- Nation-wide, electronic Exchange for trading of power.
- Exchange handles power trading and transmission clearance simultaneously.
- Trading happens for Day Ahead, Day Ahead Contingency, Any Day, Intra Day and Weekly Contracts.
- Trading platform available for Renewable Energy Certificates.
- More contracts to be introduced in due course.
- Exchange is a central counterparty to all trades done on the Exchange.

## 10.3 Energy Exchange

Indian Energy Exchange is India's premier energy marketplace, providing a nationwide automated trading platform for the physical delivery of electricity, renewables, and certificates. More recently, IEX has pioneered cross border electricity trade expanding its power market beyond India in an endeavour to create an integrated South Asian Power Market. IEX is powered by state-of-the-art, intuitive and customer centric technology, enabling efficient price discovery and facilitating the ease of power procurement.

IEX has a robust ecosystem of 7,500+ participants located across 29 States and 5 Union Territories comprising of 60+ distribution utilities, 600+ conventional generators and 1,800+ RE generators and obligated entities. It also has a strong base of 4600+ commercial and industrial consumers representing industries such as metal, food processing, textile, cement, ceramic, chemicals, automobiles, information technology industries, institutional, housing, and real estate, and commercial entities.

IEX is approved and regulated by the Central Electricity Regulatory Commission and has been operating since 27 June 2008 and is a publicly listed company with NSE and BSE since October 2017.

The Exchange has ISO Certifications for quality management, information security management and environmental management since August 2016.

# 10.4 Social Stock Exchanges

#### Introduction

Social Stock Exchange (SSE) is a separate segment of the existing Stock Exchange, that can help Social Enterprise(s) to raise funds from the public through the stock exchange mechanism. SSE will act as a medium between Social Enterprises and fund providers and that can help them to select those entities that are creating measurable social impact and reporting such impact. Certain types of Social Enterprises i.e. Not-for-profit organizations (NPOs) that meet the registration criteria can register on SSE and undertake to make continuous disclosures on their social impact. NPOs may or may not choose to raise funds through SSE, however, would continue to make disclosures including on social impact to stock exchanges.

#### Types of entities which can identify themselves as a social enterprise.

Social Stock Exchange identifies the following two forms of social enterprises that are engaging in the activity of creating positive social impact and that meets primacy of their social intent.

- i. Not-for-profit organization
- ii. For profit social enterprise

Any entity, whether a for-profit social enterprise (FPE) or a not-for-profit organization (NPO), must satisfy all three requirements listed in Regulation 292E (2) of the ICDR Regulations to demonstrate the primacy of social intent. In a nutshell, these requirements state that the entity must target underprivileged or underserved population segments or regions that have performed worse in the central or state governments' development priorities, as well as engage in the activities outlined in Regulation 292E(2)(a).

Additionally, to be recognized as a social enterprise, it must show that 67% of its operations meet the requirements for being eligible to serve the target population. This can be done by demonstrating any one of the following:

- i. Offering eligible activities to members of the target population accounts for at least 67% of the company's revenue in the three years prior to the current average. Or
- ii. at least 67% of the 3-year average of expenses that came right before has been spent on offering target population members eligible activities. Or
- iii. Members of the target group to whom the eligible activities have been offered make up at least 67% of the total customer base and/or number of beneficiaries as of the three-year average that came right before.

Corporate foundations, professional or trade associations, political or religious organizations or activities, infrastructure, and housing companies—aside from affordable housing—will not, however, be qualified to be classified as social enterprises.

Organizations recognized as not-for-profit within the Social Stock Exchange framework.

A not-for-profit organization is any of the following entities that satisfies the requirements to be classified as a social enterprise:

- i. a charitable trust established in accordance with the state's public trust statute;
- ii. a nonprofit organization that is approved by the Societies Registration Act, 1860 (21 of 1860);
- iii. a business established in accordance with Companies Act, 2013 (18 of 2013);
- iv. any additional organization that SEBI may designate.

# Organizations classified as for-profit social enterprises within the Social Stock Exchange framework.

A for-profit social enterprise is any of the following organizations that satisfies the requirements to be classified as a social enterprise:

- A business formed in accordance with section 8 of the Companies Act, 2013 (18 of 2013), which excludes companies operating for profit;
- ii. A business entity that pursues financial gain.

#### How a Non-Profit Organization Can Use Social Stock Exchange to Raise Funds

After registering with Social Stock Exchange, a not-for-profit organization may raise money on the platform by:

- i. Issuing Zero Coupon Zero Principal Instruments [through public issuance or private placement].
- ii. Donations made via SEBI-designated mutual fund schemes.
- iii. Any additional methods that SEBI may later specify.

Additionally, before a non-profit organization raises money on Social Stock Exchange, it must register with Social Stock Exchange. Whether or not a non-profit organization is registered with the Social Stock Exchange, it is still legally permitted to raise money through any other means.

# **TEST YOUR KNOWLEDGE**

# Multiple Choice Questions (MCQs)

- 1. Which among the following is not a risk management practice in secondary market?
  - (a) Laying down trading rules and regulations for broker members
  - (b) Setting up market surveillance systems to curb excess volatility
  - (c) Creating trade/settlement guarantee fund to ensure timely settlement even if a member defaults to deliver securities or pay cash.
  - (d) Setting up a clearing corporation which can settle transactions and depository which can only guarantee financial settlement of all trades.

2.		separates the ownership and control of stock exchange from the trading rights of				
	memb					
	(a)	Indexation				
	(b)	Demutualization				
	(c)	Trading Mechanism				
	(d)	Governing Board				
3.	Which	among the following is not a risk management mechanism in the secondary market?				
	(a)	Circuit Breaker				
	(b)	Rolling Settlement				
	(c)	Market Making System				
	(d)	Reverse Book Building				
4.	The lending price of a security is $\stackrel{?}{\underset{?}{?}}$ 100. The transaction prices of the securities are (i) $\stackrel{?}{\underset{?}{?}}$ 100.50; (ii) $\stackrel{?}{\underset{?}{?}}$ 99.75. Calculate lender's earnings as fee and borrower's earning as rebate.					
	(a)	0.50; 0.25				
	(b)	0.25; 0.50				
	(c)	0.50; 0.50				
	(d)	0.25; 0.25				
5.	securi	ecurities Lending price (SLP) of a security is ₹ 100. The transaction price (TP) of a ty is ₹ 100.35. You are required to calculate annualized yield where the borrowing is 10 days.				
	(a)	15%				
	(b)	12.78%				
	(c)	18.25%				
	(d)	16%				
6.	Stocks	s that have margin requirements.				
	(a)	are more liquid; higher				
	(b)	lack liquidity; higher				

- (c) are more liquid; nil
- (d) lack liquidity; lower
- 7. Which among the following risks will be reduced for the clearing corporation and the foreign portfolio investors, if T + 1 settlement is adopted?
  - (a) Credit Risk
  - (b) Liquidity Risk
  - (c) Counter Party Risk
  - (d) Market Risk

#### **Theoretical Questions**

- 1. Briefly explain the organization of stock market in India.
- 2. What is a buyback? What are the effects of buybacks? Why buybacks are being favoured by companies?
- 3. Briefly explain the concept of free float market capitalization with the help of an example.
- 4. Discuss how the implementation of T +1 settlement will build a safe and efficient markets for investors.
- 5. What are the main classifications of Indian Debt Market? What benefits does an efficient debt market bring to the financial system and the economy?

## **Practical Problems**

1. The following information has been collected regarding two shares, Share P and Share Q in which Mr. Avinash wants to invest, was trading at BSE on 10<sup>th</sup> March 2023.

Share-P								
Date	Time	Price (₹)	No. of shares traded					
10th March 2023	14:45:10	385.80	650					
10th March 2023	14:55:35	383.60	1585					
10th March 2023	15:00:20	380.89	1524					
10th March 2023	15:01:30	381.79	1635					
10th March 2023	15:10:20	380.48	1035					
10th March 2023	15:20:25	381.84	1470					

10th March 2023	15:22:20	381.42	900
10th March 2023	15:01:30	384.08	700
10th March 2023	15:25:55	383.64	1300

Share-Q								
Date	Time	Price (₹)	No. of shares traded					
10th March 2023	14:48:20	50.80	350					
10th March 2023	14:13:30	53.20	565					
10th March 2023	14:17:20	50.60	800					
10th March 2023	14:36:25	51.85	435					
10th March 2023	14:45:20	50.65	460					
10th March 2023	14:56:35	49.85	510					

Mr. Avinash was a little circumspect about the volatility of the above-mentioned shares, since they are mid-cap. He wanted to know the closing and last traded price of both the shares for 10 March 2023.

2. A borrower needs 5,000 shares of company A. The lending price of a security is ₹ 100. The borrower is willing to pay 50 paise for each share in lending fees. The transaction price is ₹ 100.25. The borrowing period is 7 days. Calculate the amount of lending fee and the annualized yield. How can the borrower ensure that he makes a profit on his trade?

# **ANSWERS/SOLUTIONS**

# **Answer to Multiple Choice Questions**

1.	(d)	2.	(b)	3.	(d)	4.	(a)	5.	(b)
6.	(b)	7.	(c)						

# **Answers to the Theoretical Questions**

- 1. Please refer paragraph 3
- 2. Please refer paragraph 8.1
- 3. Please refer paragraph 6.4.4
- 4. Please refer paragraph 7, part III
- **5.** Please refer paragraph 9

#### **Answers to the Practical Questions**

1. The BSE computes the closing price of stocks based on weighted average price of all trades executed during the last 30 minutes of a continuous trading session.

If there is no trade recorded during the last 30 minutes, the last traded price of the stocks in the continuous trading session is taken as the official closing price.

Hence, last traded price for share P = ₹ 383.64 and for share Q = ₹ 49.85

The closing price of share P (Average price in last 30 minutes) is calculated as follows:

Time	Price (₹) (1)	No. of shares traded (2)	Total Value (₹)	Closing Price of Share P
			[1 x 2]	
15:00:20	380.89	1524	580476.36	Closing Price = ₹
15:01:30	381.79	1635	624226.65	3270671/8564 = 381.9093
15:10:20	380.48	1035	393796.80	
15:20:25	381.84	1470	561304.80	
15:22:20	381.42	900	343278	
15:01:30	384.08	700	268856	
15:25:55	383.64	1300	498732	
	Total	8564	3270671	

Closing Price of Q is calculated as follows:

Since there is no trade recorded during the last 30 minutes for Share Q, the last traded price of stock in the continuous trading session can be taken as the official closing price. Hence, closing price of Share Q = Last traded price for share Q i.e., ₹ 49.85. Therefore, the closing price of Share Q = ₹ 49.85.

2. Number of shares = 5000

Amount of lending fee = 50 paise per share

= 5000 shares/0.50 paise = ₹ 2500

Annualized yield = Transaction Price – Securities Lending Price/Securities Lending Price x 365/borrowing period x 100.

 $= 100.25 - 100/100 \times 365/7 \times 100 = 13.036\%$ 

And the borrower would need to gain over and above the lending fees of ₹2,500 to make a net positive return on his or her trade.

CHAPTER

# **MONEY MARKET**



# **LEARNING OUTCOMES**

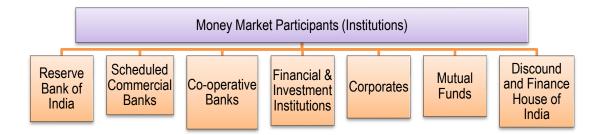
After going through the chapter student shall be able to understand:

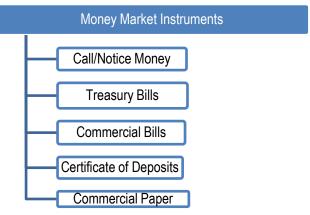
- Basics of Money Market
- Money Market Participants (Institutions)
  - (i) Reserve Bank of India (RBI)
  - (ii) Schedule Commercial Banks (SCBs)
  - (iii) Co-operative Banks
  - (iv) Financial and Investment Institutions
  - (v) Corporates
  - (vi) Mutual Funds
  - (vii) Discount and Finance House of India
- Money Market Instruments
  - (a) Call/Notice money
  - (b) Treasury Bills (TBs)
  - (c) Commercial Bills
  - (d) Certificate of Deposits (CDs)
  - (e) Commercial Paper

- CRR, SLR
- Determination of Interest Rates
  - (I) MIBOR
  - (II) LIBOR
- Government Securities Market
- Recent Development in Money Market
  - (i) Debt Securitization
  - (ii) Money Market Mutual Funds (MMMFs)
- Repurchase Options (Repo.), Reverse Repurchase Agreement (Reverse Repo) and Ready Forward (RF) Contracts
- Day Count Convention

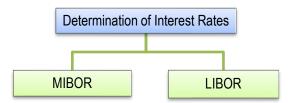


## **Money Market**

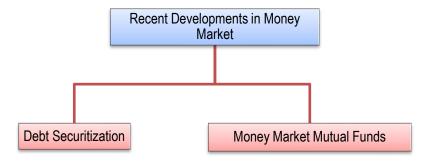




> CRR and SLR



> Government Securities Market



- Repo, Reverse Repo and Ready Forward Contracts
- > Day Count Convention



## BASICS OF MONEY MARKET

The financial system of any country is a conglomeration of sub-markets, viz. money, capital, and forex markets. The flow of funds in these markets is multidirectional depending upon demand and supply, liquidity, risk profile, yield pattern, interest rate differential or arbitrage opportunities, regulatory restrictions, etc. The role of money market in the overall financial system is prime in as much as the market acts as a mechanism for ironing out short-term surpluses and deficits and provides a focal point for Central Bank's intervention to bring out variations in liquidity profile in the economy.

Money Market is the market for short-term funds, generally ranging from overnight to a year. It helps in meeting the short-term and very short-term requirements of banks, financial institutions, firms, companies, and the Government. On the other hand, the surplus funds for short periods, with the individuals and other savers, are mobilized through the market and made available to the aforesaid entities for utilization by them. Thus, the money market provides a mechanism for ironing out short-term liquidity imbalances within an economy. Hence, the presence of an active and vibrant money market is an essential pre-requisite for growth and development of an economy.

As the Indian economy gets integrated with the global economy, the demand for borrowing and lending options for the corporates and the financial institutions increases every day. The major players in the money market are the Reserve Bank of India and financial institutions like the UTI, GIC, and LIC.

While the call money rates have been deregulated and left to the demand and supply forces of the market, the RBI intervenes in the repos through its subsidiaries. The RBI also acts in the foreign exchange market, where it sells US dollars to stabilize the rupee-dollar exchange rate.

# 1.1 Conceptual Framework

The money market is a market for short-term financial assets which can be turned over quickly at low cost. It provides an avenue for equilibrating the short-term surplus funds of lenders and the requirements of borrowers. It, thus, provides reasonable access to the users of short-term money to meet their requirements at realistic prices. Short term financial asset in this context may be construed as any financial asset which can be quickly converted into money with minimum transaction cost within a period of one year and is termed as a close substitute for money or near money.

The money market thus may be defined as a market in which financial institutions congregate for the purpose of dealing impersonally in monetary assets. In a wider spectrum, a money market can be defined as a market for short-term money and financial assets that are near substitutes for money. The term short-term generally means a period up to one year and near substitutes to money is used to denote any financial asset which can be quickly converted into money with minimum transaction cost.

This is a market for borrowing and lending *short-term* funds. Banks, financial institutions, investment institutions, and corporates attempt to manage the mismatch between inflow and outflow of funds by lending in or borrowing from the money market.

Basic understanding about the money market is that all the institutions and stakeholders do not always have optimum money supply available to them. The money supply to them is not as per the requirement but it is as per the normal process of business. Sometimes it is less and sometimes its is more. Thus, Banks, Govt, Corporates and Financial Institutions and other entities at times may have excess money and sometimes shortage of money for a short period, because the future cash flows will bring it to normal level. But till the time it happens, they must fulfill the requirement. The place where entities with surplus money and shortage of money meet is known as money market. Money market instruments are issued at discount and repaid at par, thus effectively those who require funds pays for their use and those who have surplus funds earn on it.

# 1.2 The Distinct Features of Money Market

- (i) The money market is a collection of various sub-markets, such as, call money, notice money, repo's, term money, treasury bills, commercial bills, certificate of deposits, commercial papers, etc. and is concerned to deal type of assets, the chief characteristic is its relative liquidity. All the sub-markets have close inter-relationship and free movement of funds from one sub-market to another. There must be a network of large numbers of participants which will add greater depth to the market.
- (ii) The activities in the money market tend to concentrate in some center which serves as a region or an area; the width of such area may vary considerably in some markets like London and New York which have become world financial centres. Where more than one market exists in a country, with screen-based trading and revolutions in information technology, such markets have rapidly become integrated into a national market. In India, Mumbai is emerging as a national market for money market instruments.
- (iii) The relationship that characterizes a money market should be impersonal in character so that competition will be relatively pure.
- (iv) In a true money market, price differentials for assets of similar type (counterparty, maturity, and liquidity) will tend to be eliminated by the interplay of demand and supply. Even for similar types of assets, some differential will no doubt continue to exist at any given point of time which gives scope for arbitrage.

- (v) Due to greater flexibility in the regulatory framework, there are constant endeavours for introducing new instruments/innovative dealing techniques; and
- (vi) It is a wholesale market and the volume of funds or financial assets traded in the market are very large.
- (vii) The Indian money market has a dichotomic structure. It has a simultaneous existence of both the organized money market as well as unorganized money markets. The organized money market consists of RBI, all scheduled commercial banks, and other recognized financial institutions. However, the unorganized part of the money market comprises domestic money lenders, indigenous bankers, traders, etc. The organized money market is in full control of the RBI. However, the unorganized money market remains outside RBI control.
- (viii) The demand for money in Indian money market is of a seasonal nature. India being an agriculture predominant economy, the demand for money is generated from the agricultural operations. During the busy season i.e., between October and April more agricultural activities take place leading to a higher demand for money.
- (ix) In our money market the supply of various instruments such as the Treasury Bills, Commercial Bills, Certificate of Deposits, Commercial Papers, etc. is very limited. To meet the varied requirements of borrowers and lenders, it is necessary to develop numerous instruments.

# 1.3 Preconditions for an Efficient Money Market

A well-developed money market has following characteristics-

- (a) uses a broad range of financial instruments (treasury bills, bills of exchange etc).
- (b) channelizes savings into productive investments (like working capital),
- (c) promote financial mobility in the form of inter sectoral flows of funds and
- (d) facilitate the implementation of monetary policy by way of open market operations.

However, the development of a money market into a sophisticated market depends upon certain critical conditions. They are:

- (i) Institutional development, relative political stability and a reasonably well-developed banking and financial system.
- (ii) Unlike capital market or commodity markets, trading in money market are concluded over telephone followed by written confirmation from the contracting parties. Hence, integrity is sine qua non. Thus, banks and other players in the market may have to be licensed and effectively supervised by regulators.

- (iii) The market should be able to provide an investment outlet for any temporary surplus funds that may be available. Thus, there must be supply of temporarily idle cash that is seeking short-term investment in an earning asset. There must also exist a demand for temporarily available cash either from banks or financial institutions for the purpose of adjusting their liquidity position and financing the carrying of the relevant assets in their balance sheets.
- (iv) Efficient payment systems for clearing and settlement of transactions. The introduction of Electronic Funds Transfer (EFT), Depository System, Delivery versus Payment (DVP), High Value Inter-bank Payment System, etc. are essential pre-requisites for ensuring a risk free and transparent payment and settlement system.
- (v) Government/Central Bank intervention to moderate liquidity profile.
- (vi) Strong Central Bank to ensure credibility in the system and to supervise the players in the market.
- (vii) The market should have varied instruments with distinctive maturity and risk profiles to meet the varied appetite of the players in the market. Multiple instruments add strength and depth to the market; and
- (viii) Market should be integrated with the rest of the markets in the financial system to ensure perfect equilibrium. The funds should move from one segment of the market to another to exploit the advantages of arbitrage opportunities.
- (ix) In India, as many banks keep large funds for liquidity purpose, the use of the commercial bills is very limited. RBI should encourage banks to make use of commercial papers instead of making transactions in cash.

The money market in India has been undergoing rapid transformation in the recent years in the wake of deregulation process initiated by Government of India/Reserve Bank of India. The institutions of Primary Dealers (PDs) and Satellite Dealers have been set up as specialised institutions to facilitate an active secondary market for money market instruments. New money market instruments have been introduced and more institutions have been permitted as players in the market. Interest rates in respect of all money market instruments have been completely freed and are allowed to be fixed in terms of market forces of demand and supply.

## 1.4 Rigidities in the Indian Money Market

Notwithstanding the deregulation process initiated by the Reserve Bank of India and several innovations, the money market is not free from certain rigidities which are hampering the growth of the market. The most important rigidities in the Indian money market are:

- (i) Markets are not integrated: Money market in India is not well integrated. There is a well-developed secondary capital market in India, which does not exist in money market.
- (ii) Restricted Players: Only Government, banks, FII and big companies are involved in the money market. Retail investors are rarely interested in the money market, making it restricted to only corporates, the Government, and the foreign Institutional Investors (FII's).
- (iii) Supply based-sources influence uses: Banks are generally the main sources of funds in the money market. Commercial Banks are main supplier of funds in Money Market Instruments especially RBI which issues Treasury Bills on behalf of the Government of India.
- (iv) Fewer instruments: Unlike European Market, only few money market instruments are available in India i.e., Treasury bill, commercial papers, commercial bill, certificate of deposit and call/notice money in India.
- (v) Reserve requirements: There are fixed reserve requirements in the case of Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR) which banks must always maintain. CRR is the reserve which banks must keep with RBI. Whereas SLR is the reserve which banks must keep with themselves, thus restricting the flow of money market instruments.
- (vi) Lack of transparency: There is a lack of transparency in the money market because the secondary market is not very well developed. Since the transactions are done "Over the Counter (OTC)", there is lack of transparency and public information.
- (vii) Commercial transactions are mainly in cash: Since most of the transactions are made through cash, the circulation of funds in money market instruments is restricted.
- (viii) Heavy Stamp duty limiting use of exchange bills: In case of issuance of commercial bills, stamp duty is paid in case of bill of exchange, thus limiting their use. Further, in the case of Commercial Paper (CP), the stamp duty rates applicable to non-bank entities are five times higher than those applicable to banks. Moreover, a CP attracts stamp duty for 90 days irrespective of tenure. Hence, CP issued for a shorter period attracts higher stamp duty, making it an expensive financial instrument.

## 1.5 Distinction between Capital and Money Market

There is, however, basically a difference between the money market and capital market. The operations in the money market are for a duration up to one year and deal in short term financial assets whereas in capital market operations are for a longer period beyond one year and therefore, deal in medium and long term financial assets. Secondly, the money market is not a well-defined place like the capital market where business is done in a defined place viz. stock exchange. The transactions in the money market are done through electronic media and other written documents.

The major points of distinction are enumerated as follows:

- (1) In the Capital Market, there is classification between Primary Market and Secondary Market. However, there is no such sub-division in the money market, as such. However, slowly a secondary market in greater form is coming up in Money Market also.
- (2) Capital Market deals with funding of long-term financial requirements. In contrast, the Money Market generally supplies funds for short-term financial requirements.
- (3) If the volume of business of Capital Market is considered (both Primary and Secondary Markets), it will lag the total value of transactions in Money Market.
- (4) While the number of instruments dealt with in the Money Market are many like
  - (a) Interbank Call Money,
  - (b) Notice Money upto 14 days
  - (c) Short-term deposits upto 3 months
  - (d) 91-days Treasury Bill
  - (e) 182-days Treasury Bill
  - (f) Commercial Paper etc.

The number of instruments in the Capital Market are limited i.e., Shares and Debentures.

- (5) The players in Capital Market are general investors, brokers, Merchant Bankers, Registrar to the issue, Custodians, Depositories, Clearing House, Exchanges, underwriters, Corporate Investors, Foreign Financial Institutions (FII) and Bankers. While in the money market, the participants are Bankers, RBI and Government.
- (6) Rate of interest in money market is controlled by RBI or central bank of any country. But capital market's interest and dividend rate depend on demand and supply of securities and conditions of stock market. The regulation of the stock market is in the hands of SEBI.
- (7) The degree of risk is small in the money market. The risk is much greater in the capital market. The maturity of one year or less gives more visibility and little time for a default to occur, so the risk is minimized. Risk varies both in degree and nature throughout the capital market.
- (8) The money market is closely and directly linked with the central bank of the country. The capital market feels the central bank's influence, but mainly indirectly and through the money market.

	Basis	Money Market	Capital Maket		
1.	Maturity of Instruments	1 year or less	More than 1 year		
2.	Risks	Less	More and varied		
3.	Instruments	Treasury bills, CDs, etc	Shares, bonds, etc		
4.	Finance	Short term	Long term		
5.	Relation with Central Bank	Direct	Indirect		

#### **Distinction between Money Market and Capital Market**

# 1.6 The Participants

The money market in India, as many other less developed countries, is characterized by two segments -

- 1. Organized Segment
- 2. Unorganized Segment

#### The principal intermediaries in the organized segment are:

- (a) The commercial and other banks,
- (b) Non-banking finance companies and
- (c) Co-operative societies.

The primary activity of these intermediaries is to accept deposits from the public and lend them on a short-term basis to industrial and trading organizations. In recent years, they have extended their activities to rural areas to support agricultural operations. There is also an active inter-bank loan market as part of the organized money market.

#### The salient features of the organized money market in India are:

- (i) A significant part if its operations which is dominated by commercial banks, is subject to tight control by the Reserve Bank of India which -
  - (a) regulates the interest rate structure (on deposits as well as loans), reserve requirements and sectoral allocation of credit and
  - (b) provides support to the banks by lending them on a short-term basis and insuring the deposits made by the public.
- (ii) It is characterized by rigid and complex rules which may prevent it from meeting the needs of some borrowers even though funds may be available.

(iii) Overall, there is a paucity of loanable funds, mainly because of the low rate of interest paid on deposits.

#### The principal participants in the unorganized money market are:

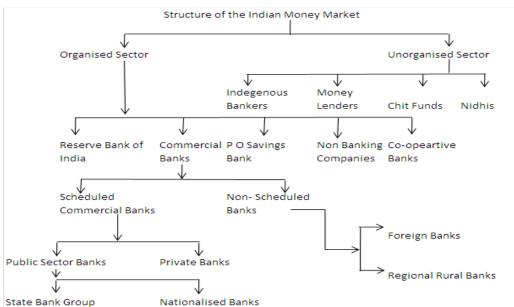
- (a) Money Lenders,
- (b) Indigenous Bankers,
- (c) Nidhis (mutual loan associations) and
- (d) Chit Funds.

They lend primarily to borrowers who are not able to get credit from the organized money market.

#### The characteristics of the unorganized money market are:

- (i) informal procedures,
- (ii) flexible terms,
- (iii) attractive rates of interest to depositors and
- (iv) high rates of interest to borrowers.

The size of the unorganized money market is difficult to estimate, though it appears to be large. However, its importance relative to that of the organized money market is declining. This is a welcome development from the point of view of the Reserve Bank of India because the existence of a large unorganized market frustrates its efforts to control credit.





# 2. MONEY MARKET PARTICIPANTS (INSTITUTIONS)

The important institutions operating in money market are:

- (i) Reserve Bank of India (RBI): RBI is the most important participant of money market which takes requisite measures to implement monetary policy of the country. As the Central bank, RBI regulates the money market in India and injects liquidity in the banking system, when it is deficient or contracts the same in opposite situation.
- (ii) Scheduled Commercial Banks (SCBs): SCBs form the nucleus of the money market. They are the most important borrower/supplier of short-term funds. They mobilize the savings of the people through acceptance of deposits and lend it to business houses for their short-term working capital requirements. While a portion of these deposits is invested in medium and long-term Government securities and corporate shares and bonds, they provide short-term funds to the Government by investing in the Treasury Bills.
- (iii) Co-operative Banks: Function similarly to the commercial banks.
- **(iv) Financial and Investment Institutions:** These institutions (e.g., LIC, UTI, GIC, Development Banks etc.) have been allowed to participate in the call money market as lenders only.
- (v) Corporates: Companies create demand for funds from the banking system. They raise short-term funds directly from the money market by issuing commercial paper. Moreover, they accept public deposits and indulge in inter-corporate deposits and investments.
- (vi) Mutual Funds: Mutual funds also invest their surplus funds in various money market instruments for short periods. They are also permitted to participate in the Call Money Market. Money Market Mutual Funds have been set up specifically for the purpose of mobilization of short-term funds for investment in money market instruments.
- (vii) Discount and Finance House of India: The Discount and Finance House of India Limited (DFHI) has been set up by the Reserve Bank of India jointly with public sector banks and all-India financial institutions to deal in short-term money market instruments. It started operations in April 1988. At present DFHI participates in the inter-bank call/notice money market and term deposit market, both as lender and borrower. It also rediscounts 182 Days Treasury Bills, commercial bills, CDs, and CPs.



# 3. MONEY MARKET INSTRUMENTS

The money market in India is an important source of finance to industry, trade, commerce, and the government sector for both national and international trade through bills—treasury/commercial, commercial papers and other financial instruments and provides an opportunity to the banks to deploy their surplus funds to reduce their cost of liquidity. The money market also provides leverage to the Reserve Bank of India to effectively implement and monitor its monetary policy.

The instruments of money market are characterised by -

- (a) short duration,
- (b) large volume
- (c) de-regulated interest rates.
- (d) The instruments are highly liquid.
- (e) They are safe investments owing to issuers inherent financial strength.

The traditional short-term money market instruments consist of mainly call money and notice money with limited players, treasury bills and commercial bills. The new money market instruments were introduced giving a wider choice to short term holders of money to reap yield on funds even for a day or two to earn a little more by parking funds through instruments for a few days more or until such time till they need it for lending at a higher rate.

The instruments used by above-mentioned players to borrow or lend in the money market, include, *inter-alia*, treasury bills (T-bills), Government of India securities (GOI secs), State government securities, government guaranteed bonds, public sector undertaking (PSU) bonds, commercial paper (CP) and certificates of deposit (CDs). Banks, which require short-term funds, borrow, or sell these securities and those having surplus funds would lend or buy the securities. Banks experiencing a temporary rise (fall) in their deposits and hence, a temporary rise (fall) in their statutory liquidity ratio (SLR) obligations, can borrow (lend) SLR securities from those experiencing a temporary fall (rise) in their deposits. Banks invest in T-bills, GOI and State government securities, government-guaranteed bonds, and PSU bonds to fulfill their SLR obligations.

The tenure of money market instruments is not standardized, and periodicity differs, further the short-term interest rates also fluctuate, thus, the instruments cannot be issued at specific interest rate. Therefore, money market instruments are issued at a discount and redeemable at par, but how much discount should be there shall be decided by the short-term interest rates prevailing in the market. Because the giver of funds also wants a return on the money. The discount is calculated on the basis of short-term interest rates prevailing in the market which are called as (overnight MIBOR + Premium). MIBOR is Mumbai Interbank Offer Rate.

The various features of individual instruments of money market are discussed in the following paragraphs:

# 3.1 Call/Notice money

Call money market, or inter-bank call money market, is a segment of the money market where scheduled commercial banks lend or borrow on call (i.e., overnight) or at short notice (i.e., for periods upto 14 days called notice money) to manage the day-to-day surpluses and deficits in their cash-flows.

However, under notice money market, funds are transacted for a period between two days and fourteen days. These day-to-day surpluses and deficits arise due to the very nature of their operations and the peculiar nature of the portfolios of their assets and liabilities.

- (i) <u>Location</u>: The core of the Indian money market structure is the inter-bank call money market, which is centralized primarily in Mumbai, but with sub-markets in Delhi, Kolkata, Chennai, and Ahmedabad.
- (ii) <u>Duration:</u> The activities in the call money are confined generally to inter-bank business, predominantly on an overnight basis, although a small amount of business, known as notice money, was also transacted side by side with call money with a maximum period of 14 days.

#### (iii) Participants:

- a. Those who can both borrow as well as lend in the market are RBI, Commercial Banks, Cooperative banks, and Primary Dealers.
- b. Non-bank institutions (other than PDs) are not permitted in the call/notice money market.

#### (iv) <u>Features</u>:

- a. Current and expected interest rates on call money are the basic rates to which other money markets and to some extent the Government securities market is anchored.
- b. Interest rate in the market is market driven and is highly sensitive to the forces of demand and supply. Within one fortnight, rates are known to have moved very high and may even touch a level as low as 0.50% to 1%. Intra-day variations are also quite large. Hence, the participants in the markets are exposed to a high degree of interest rate risk.

The call money rates have been fluctuating widely, going upto 70 per cent and dropping to around 3 per cent in the recent past.

For many years, while a set of institutions like State Bank of India, UTI, LIC, GIC, etc. continue to be lenders, some banks which have limited branch network are regular borrowers.

- c. Although by no means as pronounced as it was once, the activities in the money market are subjected to fluctuations due to seasonal factors, i.e., busy (November to April) and slack (May to October) seasons.
- d. One of the most important factors contributing to volatility in the market is mismatches in assets and liabilities created by the banks. Some banks over-extended themselves by using call money borrowings to finance the build-up of a large portfolio of Government of India securities, other long-term assets and non-food credit. It is this asset-liability mismatch which resulted in sporadic volatility in the market.
- e. Apart from the mismatches in assets and liabilities, the inherent weaknesses of the banks to reasonably forecast their liquidity position had often pushed some of them to the state of severe liquidity crunch.
- f. Large-scale diversion of working capital facilities for lending in the inter-corporate deposit market and investments in other treasury products by blue-chip companies amply testify the malady in the current system of working capital financing and its impact on the call money market. The uneasy calm in the money market is attributed to the corporates hunting for cheaper funds in the Euro Dollar and Indian money markets.

## 3.2 Treasury Bills (TBs)

Treasury Bills are one of the most popular money market instruments issued by the Reserve Bank of India on behalf of the Government of India. T- Bills are generally issued to ward off short-term mismatches in receipts and expenditure. Therefore, the purpose of issuing Treasury Bills is to tackle short term liquidity problems. Treasury bills are generally issued at a discount and redeemed at par. The difference between the issued amount and the redemption amount is the amount of interest which is to be paid to the holder of the treasury bills. Thus, the TBs are short-term promissory notes issued by Government of India at a discount.

More relevant to the money market is the introduction of 14 days, 28 days, 91 days, and 364 days TBs on auction basis. To provide investors with instruments of varying short-term maturities, Government of India introduced the auction of 14 days TBs since June 1997. Further, with a view to developing the TBs market and moving towards a market rate of interest on Government securities, the auction of 91 days TBs was first introduced in January 1993. The amount to be auctioned will be pre-announced and cut off rate of discount and the corresponding issue price will be determined in each auction.

The amount and rate of discount is determined based on the bids at the auctions. While the uniform price auction method is followed in respect of 91 days TBs, the cut off yield of other TBs are determined based on discriminatory price auctions. The non-competitive bids in respect of 14 and 364 days TBs are accepted outside the notified amount. The discretion to accept non-competitive bids fully or partially rests with RBI. The amount to be accepted at the auctions and the cut-off price

are decided by the Reserve Bank of India based on its public debt management policy, the conditions in money market and the monetary policy stance.

Although the State Government also issued treasury bills until 1950, since then it has been only the Central Government that has been selling them. In terms of liquidity, for short term financing, the descending order is cash, call loans, treasury bills and commercial bills. Although the degree of liquidity of treasury bills are greater than trade bills, they are not self-liquidating as the genuine trade bills are. T-bills are claimed against the government and do not require any grading or further endorsement or acceptance.

Following the abolition of 91 days Tap TBs, 14 days Intermediate TBs were introduced with effect from 1st April 1997. The 14 days TBs are available on tap. State Governments, foreign, Central Banks and other specialised bodies with whom RBI has an agreement are only allowed to invest in these TBs.

However, at present, the RBI issues Treasury Bills of three maturities i.e., 91 days, 182 days, and 364 days.

TBs are issued at discount and their yields can be calculated with the help of the following formula:

$$Y = \left[\frac{F - P}{P}\right] \times \frac{365}{M} \times 100$$

where Y = Yield,

F = Face Value,

P = Issue Price/Purchase Price,

M = Maturity.

#### Example

Enormous Money Ltd has enough cash on hand as of April 1, 2023, to last three months. For investing the extra money, it is considering purchasing TBs with a face value of ₹ 100 that mature in 64 days at a price of 98.25. Calculate the yield.

#### Calculation of Yield of Treasury Bill

= {(Face Value – Issue Price)/Issue Price} x (364/Maturity Period) x 100

 $= \{(100 - 98.25)/98.25\} \times (364/64) \times 100 = 10.13\%$ 

(₹ Crore)

Item	2021-22		2021			20	22	
		Jan. 29	Dec. 24	Dec. 31	Jan. 7	Jan. 14	Jan. 21	Jan. 28
	1	2	3	4	5	6	7	8
1 91-day								
1.1 Banks	5158	2964	12767	9354	7834	7232	6179	4606
1.2 Primary Dealers	15686	20930	29687	26882	19596	20064	20650	23278
1.3 State Governments	53546	62912	102016	103016	102899	97904	92809	89751
1.4 Others	77882	92430	100679	106541	107418	102457	97846	92332
2 182-day								
2.1 Banks	62566	68922	58141	56154	53625	52152	53310	53165
2.2 Primary Dealers	52764	31222	34421	32988	35996	39824	43400	46518
2.3 State Governments	9826	3816	6318	6458	5453	5428	5524	4026
2.4 Others	53438	68945	27631	19711	24906	29727	30924	32920
3 364-day								
3.1 Banks	119467	154467	119885	115964	117370	115765	118211	112628
3.2 Primary Dealers	127426	136064	111859	117965	114057	114598	119860	127319
3.3 State Governments	22851	15855	17843	21643	22001	21981	21981	23136
3.4 Others	122944	135156	97357	99125	104838	109545	105238	106626
4 14-day Intermediate								
4.1 Banks								
4.2 Primary Dealers								
4.3 State Governments	315325	193438	156242	139739	101003	92655	210638	224416
4.4 Others	1524	198	60	761	1123	743	1263	724
Total Treasury Bills (Excluding 14 day Intermediate T Bills) #	723556	793683	718603	715802	715994	716679	715931	716307

<sup># 14</sup>D intermediate T-Bills are non-marketable unlike 91D, 182D and 364D T-Bills. These bills are 'intermediate' by nature as these are liquidated to replenish shortfall in the daily minimum cash balances of State Governments

#### Treasury Bills - Ownership Pattern

(Source: RBI website)

#### 3.2.1 Features of T-bills

Some of the significant features of T-bills are as follows:

- (i) Form: The treasury bills are issued in the form of promissory note in physical form or by credit to Subsidiary General Ledger (SGL) account or Gilt account in dematerialized form.
- (ii) Eligibility: TBs can be purchased by any person, firm, company, body corporate and institutions. State Government, Non-Government Provident Funds governed by the PF Act, 1925 and Employees Provident Fund and Miscellaneous Provisions Act, 1952 are eligible to participate in the auctions of 14 days and 91 days TBs on a non-competitive basis. Non-competitive bids are accepted at the weighted average price arrived at based on competitive bids accepted at the auctions. TBs are approved securities for the purpose of SLR. While Reserve Bank of India does not participate in the auctions of 14 days and 364 days TBs, it will be at its liberty to participate in the auctions and to buy part or the whole of the amount notified in respect of 91 days TBs.
- (iii) Minimum Amount of Bids: TBs are issued in lots of ₹ 25,000.
- (iv) Repayment: The treasury bills are repaid at par on the expiry of their tenor at the office of the Reserve Bank of India, Mumbai.

- (v) Availability: All the treasury Bills are highly liquid instruments available both in the primary and secondary market.
- (vi) Day Count: For treasury bills the day count is taken as 364 days for a year.

#### 3.2.2 Additional Features

- T- Bills have the following additional features:
- (1) Government's contribution to the money market,
- (2) Mop-up short-term funds in the money market,
- (3) Sold through auctions,
- (4) Discount rate is market driven, and
- (5) Focal Point for monetary policy
- (6) Helps to meet the temporary mismatches in cash flows

### 3.2.3 Advantages to Investors

The following are the main advantages of T-bills.

- (i) Manage cash position with minimum balances,
- (ii) Increased liquidity,
- (iii) Absence of risk of default
- (iv) Market related assured yield,
- (v) Eligible for repos,
- (vi) SLR security,
- (vii) No capital loss,
- (viii) Two-way quotes by DFHI/Primary Dealers (PDs)/Banks.
- (ix) Low transaction cost
- (x) No tax deducted at source
- (xi) Transparency
- (xii) Simplified Settlement
- (xiii) High degree of tradability and active secondary market facilitates meeting unplanned fund requirements.

The **Primary Dealers (PDs)** have assumed the role of market makers in treasury bills, and they regularly provide two-way quotes. This has added to the liquidity and deepened the secondary market of this instrument. Thus, treasury bills have emerged as an effective instrument for dynamic asset-liability management. Apart from liquidating the treasury bills in the secondary market, treasury bills can be used for transactions which will help the fund managers to temporarily deploy or borrow funds without altering their assets portfolio. Due to its mode and periodicity of issue (weekly and fortnightly auctions) as also the existence of a well-developed secondary market, the fund manager could build-up a portfolio of treasury bills with varying maturities which will match their volatile liabilities.

The PDs are basically those organizations who are registered with RBI and have the license to buy and sell securities on their behalf. They generally buy government securities from the RBI and sell them to other buyers. They act as underwriters in the primary market and market makers in the secondary market.

#### 3.2.4 RBI Retail Direct Scheme

The Retail Direct scheme is a one-stop solution to facilitate investment in Government Securities by Individual Investors. Under this scheme Individual Retail investors can open Gilt Securities Account – "Retail Direct Gilt (RDG)" Account with the RBI.

Some Frequently Asked Questions on RBI Retail Direct Scheme has been given as follows to enable a good understanding of its concept:

## (i) Who can open a Retail Direct Scheme Account?

Retail investors would mean all individuals (natural persons)

- Retail investors, as defined under the RBI Retail Direct scheme, can register under the Scheme, and maintain a RDG Account, if they have the following:
  - Rupee savings bank account maintained in India;
  - Permanent Account Number (PAN) issued by the Income Tax Department;
  - Any OVD for KYC purpose;
  - Valid email id; and
  - Registered mobile number.
- Non-Resident retail investors eligible to invest in Government Securities under Foreign Exchange Management Act, 1999 are eligible under the scheme.
- The RDG account can be opened singly or jointly with another retail investor who meets the eligibility criteria.

#### (ii) What are the benefits of the scheme?

Retail investors (individuals) will have the facility to open and maintain the 'Retail Direct Gilt Account' (RDG Account) with RBI.

The investor can place non-competitive bids in Primary issuance of all Central Government securities (including Treasury Bills and Sovereign Gold bonds) as well as securities issued by various State Governments.

Under this scheme, the individual can also access Secondary market through "NDS OM" - RBI's trading system.

The investor will automatically receive any interest paid/maturity proceeds into his linked bank account on due dates.

## (iii) What are the facilities available on the RBI Retail Direct Portal?

The RBI Retail Direct Online Portal will facilitate the following:

- On-boarding of Retail Direct Investors,
- Opening and management of RDG Accounts,
- Facilitate participation in Non-Competitive Bidding in Primary G-sec Auctions through the Clearing Corporation of India (CCIL)
- Facilitate Investing in Sovereign Gold Bonds (SGBs) through CCIL
- Facilitate NDS OM access to Retail Direct Investors for secondary market trading and settlement of such trades through CCIL.
- Provide Investor Services such as:
  - Account Statement
  - Nomination Facility
  - Pledge/Lien
  - Gift Transactions
- Facilitate Corporate Actions such as:
  - Coupon Payments
  - Coupon Payments

#### (iv) What are the other services available under the Retail Direct Scheme?

The following additional services are proposed to be made available to the Retail Direct Investor on the RBI Retail Direct Portal:

- Nomination
- Gifting
- Pledge/Lien/Transfer

(Source: RBI Website)

## 3.3 Commercial Bills (CBs)

A commercial bill is one which arises out of a genuine trade transaction, i.e., a credit transaction. When the goods are sold, the seller draws a bill of exchange (BOE) on the buyer to pay a certain amount on a particular date. The buyer then accepts the BOE, signs it and sends it to the seller. The seller on the maturity date presents the BOE to the buyer and collects its payment. It is basically a negotiable instrument and issued for a short period generally ranging from 3 to 6 months.

Bill financing is the core component of meeting working capital needs of corporates in developed countries. Such a mode of financing facilitates an efficient payment system. The commercial bill is instrument drawn by a seller of goods on a buyer of goods. RBI has pioneered its efforts in developing bill culture in India, keeping in mind the distinct advantages of commercial bills, like, self-liquidating in nature, recourse to two parties, knowing exact date transactions, transparency of transactions etc.

#### Features:

The Commercial Bill money market has the following significant characteristics:

- (i) By offering the bills for rediscounting, CBs can be exchanged.
- (ii) Banks give credit to their customers by discounting CBs, and the customers are expected to pay back the credit when the bill matures.
- (iii) The banks have the option to rediscount the bills in the money market to have access to cash if they need it.
- (iv) CBs guarantee better loan quality, liquidity, and money market money management effectiveness.
- (v) CBs are fully secured money market instruments because they can be transferred through endorsement and delivery.

### Example:

If a bank re-discounted a commercial bill with a face value of ₹ 100/- @ 15% for 2 months, it will fetch ₹ 97.50, based on the following calculation.

Discount = 100 × 
$$\frac{15}{100}$$
 ×  $\frac{2}{12}$  = ₹ 2.50

However, the discount amount is paid at the front-end.

The yield to the investor or cost to the borrower will be higher than the discount rate because the discounter can deploy the amount of discount received for earning further income. This can be calculated with the following formula:

$$Y = \frac{FV - SV}{SV} \times \frac{Days \text{ or months in a year}}{M} \times 100$$

where

Y = Yield

FV = Face Value

SV = Sale Value

M = Period of Discount

Accordingly, the Yield as per the data given in the example will be:

$$\frac{100-97.50}{97.50} \times \frac{12}{2} \times 100 = 15.385\%$$

## 3.3.1 Advantages of a developed bill market

A developed bill market is useful to the borrowers, creditors and to the financial and monetary system. The bill market scheme will go a long way to develop the bill market in the country. Following are the various advantages of developed bill markets:

- Bill finance is better than cash credit. Bills are self-liquidating and the date of repayment of a bank's loans through discounting or rediscounting is certain.
- (ii) Bills provide greater liquidity to their holders because they can be shifted to others in the market in case of need for cash.
- (iii) A developed bill market is also useful to the banks in case of emergency. In the absence of such a market, the banks in need of cash must depend either on the call money market or on the Reserve Bank's loan window.

- (iv) The commercial bill rate is much higher than the Treasury bill rate. Thus, the commercial banks and other financial institutions with short-term surplus funds find CBs an attractive source of both liquidity as well as profit.
- (v) A developed bill market is also useful for the borrowers. The bills are time-bound, can be sold in the market, and carry the additional security in the form of acceptor's signature. Therefore, for the borrowers, the post of bill finance is lower than that of cash credit.
- (vi) A developed bill market makes the monetary system of the country more elastic. Whenever the economy requires more cash, the banks can get the bills rediscounted from the Reserve Bank and thus can increase the money supply.
- (vii) Development of the bill market will also make the monetary control measures, as adopted by the Reserve Bank, more effective.

#### Example

The period of maturity is 3 months in case of commercial bill; discount rate is 12 per cent. Find out the yield.

#### Calculation of yield

Actual Yield =  $[\{1+RD/100 \times p\}^{P} - 1] \times 100$ 

Where RD = Rate of Discounting

p = Period of Compounding in one year (i.e., if it is a two-month bill, period of compounding is 4 (12 months/3 months

So, Actual Yield = 
$$[{1 + 12/(100 \times 12/3)^{12/3} - 1} \times 100 = [(1 + 0.083)^4 - 1] \times 100$$

$$= (1.38 - 1) \times 100 = 38\%$$

## 3.3.2 Recent trends in bill/invoice discounting

First let us understand how invoice discounting works. When startups and SMEs (small and medium enterprises) turn vendors to supply goods to large corporations, they often must wait long periods, ranging from one to four months, to receive payments for the goods delivered. Such delays create a working capital crunch for these vendors and stifles their potential for expansion. Typically, in such a situation, the vendor often raises cash advance from banks and non-banking financial companies (NBFCs) against the invoice for the goods delivered. Such working capital loans are charged an interest rate of 18-30% per annum. The vendors repay the lenders as and when they receive their payment from the companies concerned.

Soon, online discounting platforms sniffed an opportunity here and started lending to these vendors at competitive rates, ranging from 14-18% per annum. The platforms, in turn, allowed retail investor participation, offering a sweet 10-13% internal rate of return (IRR) pretax.

Platforms like TredS, which is regulated by the Reserve Bank of India (RBI), and KredX were early movers in the invoice discounting space. Other players like Jiraaf, Leaf, and Grip made their presence felt during the covid pandemic.

Here is how invoice discounting is beneficial for all parties involved. Let's take the hypothetical example of vendor A, a goods supplier, which raises an invoice of Rs. 100 on C, a corporate buyer, and approaches an invoice discounting platform, say B, for financing since it needs immediate liquidity.

B evaluates the invoice and lists it on the platform to pool money from investors. It raises Rs. 96 from retail investors and transfers to A. After 3 months, when the corporate buyer C settles the payment by fulfilling the invoice of Rs. 100, the discount platform retains Rs. 1 as its fee and pays Rs. 99 (Rs. 3 as interest and Rs. 96 principal) to the investors. In this process, all parties benefit: The vendor enjoys enhanced financial flexibility, investors earn returns, and the discounting platform gets it cut for facilitating the transaction.

Most invoice discounting platforms secure their transaction by using an escrow account for transfer of funds. GripInvest, however, follows a slightly different method to its product Invoice X. It has a tie-up with an NBFC that provides loans on invoices as collateral and issues pass-through certificates (PTCs). The investment tenure for investors is longer at 9 months and the minimum investment is Rs. 10 lakhs.

"Invoice X is an RBI regulated instrument and rated by a credit rating agency to provide more transparency to investors. Grip's subsequent Invoice X offerings will also be listed on the stock exchange in compliance with SEBI Regulations. Our first Invoice X product is an A1+ rated instrument consisting of receivables from 200+invoices against 22 companies".

Barring this company, the minimum ticket size of invoice discounting investment for retail investors ranges from Rs. 50,000 to Rs. 3 lakhs. Returns from such investment are taxed at slab rates, with a standard 10% tax deducted at source (TDS) by the platform. Additionally, all investments are paid at maturity, providing investors with a predictable timeline for returns. It is worth noting that these investments remain unrated, indicating that they are not subject to external credit assessment.

Investors looking for different risk-return profiles can explore these platforms, which offer attractive pre-tax IRRs between 10% and 15%. The commonalties in these investments' structures provide investors with a range of options to suit their financial goals and risk appetites.

Retail investors believe that invoice discounting is a lucrative investment option. However, they do not completely understand the risks involved. An invoice receivable is an operational debt. The corporates very frequently delay payments on such invoices, and such delays do not impact on their credit rating. Sometimes corporates may raise disputes and not pay the invoice at all. Such instances have come to light where even large corporates did not make the payment, leaving investors to bear the losses, said an expert.

In case of defaults, investors are usually the last in the line of creditors to get relief. Earlier, invoice discounting platforms claimed to be financial creditors, implying that they had a higher priority in recovering funds in case of a default by the borrowers. Despite platforms claiming to prioritize security and protection for investors through tri-party agreements, penalty clauses, and by securing postdated cheques (PDCs) from vendors, delays and defaults have been increasing in frequency.

So, retail investors need to be cautious. "These are clearly not retail products. Most of these products are not regulated, which puts the retail investor at a disadvantage. Also, there are chances of a complete capital loss in some of these products for which no retail investor will be comfortable with that, cited an expert.

(Source: Mint)

# 3.4 Certificate of Deposits (CDs)

The CDs are negotiable term deposits accepted by commercial banks from bulk depositors at market-related rates. CDs are usually issued in demat form or as a Usance Promissory Note. A Usance Promissory Note is a promissory note which is payable after a pre-decided definite period.

- (i) Eligibility: All scheduled banks (except RRBs and Local Area Banks) are eligible to issue CDs. It can also be issued by select all India Financial Institutions. They can be issued to individuals, corporates, trusts, funds, and associations. NRIs can also subscribe to CDs but on a non-repatriable basis only. In secondary markets such CDs cannot be endorsed to another NRI.
- (ii) Term: The CDs can be issued by scheduled commercial banks (excluding RRBs) at a discount to face value for a period from 7 days to one year.

For CDs issued by financial institutions maturity is minimum 1 year and maximum 3 years.

- (iii) **Denomination:** The CDs can be issued for a minimum amount of ₹ 1 lakhs to a single investor and multiples of ₹ 1 lakh thereafter. There is, however, no limit on the total quantum of funds raised through CDs.
- (iv) Transferability: CDs issued in physical form are freely transferable by endorsement and delivery. The procedure of transfer of dematted CDs is like any other demat securities. There is no lock in period for the CDs.

- (v) Others: The CDs are to be reckoned for reserve requirements and are also subject to stamp duty. Banks are prohibited from granting loans against CDs as buy-back of their own CDs.
- (vi) Discount: CDs may be issued at a discount on face value. Banks / Fls are also allowed to issue CDs on a floating rate basis provided the methodology of compiling the floating rate is objective, transparent and market based. The issuing bank / Fl is free to determine the discount / coupon rate. The interest rate on floating rate CDs would have to be reset periodically in accordance with a pre-determined formula that indicates the spread over a transparent benchmark. The investor should be clearly informed of the same.
- (vii) Reserve Requirements: Banks must maintain appropriate reserve requirements, i.e., Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR), on the issue price of the CDs.

Just like Commercial Bills, Certificate of Deposit (CD) is a front–ended negotiable instrument, issued at a discount and the face value is payable at maturity by the issuing bank.

#### **Example:**

Amount of Issue – ₹ 100

Period - 6 months

Rate of discount - 20%

Discount = 
$$100 \times \frac{20}{100} \times \frac{6}{12} = ₹ 10.00$$

Hence the CD will be issued for ₹ 100 – 10 = ₹ 90.00. The effective rate to the bank will, however, be calculated because of the following formula:

$$E = \frac{FV - SV}{SV} \times \frac{Days \text{ or months in a year}}{M} \times 100$$

where

E = Effective Yield

FV = Face Value

SV = Sale Value

M = Period of Discount

Accordingly, the Yield as per the data given in the example will be:

$$\frac{100-90}{90} \times \frac{12}{6} \times 100 = 22.226\%$$

These instruments are subject to payment of stamp duty like the usance promissory notes. The maturity period of CDs issued by banks may range from 7 days to 12 months while those issued by specified financial institutions may range from 1 to 3 years. A CD is, therefore, another step in filling the gap between Treasury Bills/Commercial Bills and dated securities. Banks also find this instrument suitable to reward their big size depositors with a better rate of return as an incentive.

Despite the large size of the primary market for CDs, there has been virtually no activity in the secondary market and the holders keep the CDs till maturity. So long as there is sluggish growth of deposits at administered low rates vis-a-vis the high rates offered by the non-banking non-financial institutions and others, banks in distress for funds will always need CDs at any cost. They may be useful where the average yield on advances is higher than the effective cost of CDs.

#### **Certificates of Deposit**

Item	2022	2023					
	Sep.23	Aug.11	Aug.25	Sep.08	Sep.22		
	1	2	3	4	5		
Amount Outstanding (₹ Crore)	252148.25	304165.32	301277.83	297684.67	291829.65		
Amount Reported during the fortnight (₹ Crore)	19760.15	14893.63	34741.11	33248.85	31959.30		
Rate of Interest (percent)	5.80-6.73	6.77-7.71	6.88-7.67	6.85-7.67	6.88-7.70		

(Source: RBI website)

## 3.5 Commercial Paper

Commercial Paper (CP) has its origin in the financial markets of America and Europe. The concept of CPs originated in the USA in the early 19th century when commercial banks monopolized and charged high rate of interest on loans and advances. In India, the CP was introduced in January 1990 on the recommendation of Vaghul Committee subject to various conditions. When the process of financial dis-intermediation started in India in 1990, RBI allowed issue of two instruments, viz., the Commercial Paper (CP) and the Certificate of Deposit (CD) as a part of reform in the financial sector.

A notable feature of RBI Credit Policy announced on 16.10.1993 was the liberalisation of terms of issue of CP. At present it provides the cheapest source of funds for the corporate sector and has caught the fancy of the corporate sector and banks. Its market has picked up considerably in India due to interest rate differentials in the inter-bank and commercial lending rates.

CPs are unsecured and negotiable promissory notes issued by high rated corporate entities to raise short-term funds for meeting working capital requirements directly from the market instead of borrowing from banks. Its period ranges from 7 days to 1 year. CP is generally issued at discount to face value and is transferable by endorsement and delivery. The issue of CP seeks to bypass the intermediary role of the banking system through the process of securitisation.

It partly replaces the working capital limits enjoyed by companies with the commercial banks and there will be no net increase in their borrowing by issue of CP.

#### 3.5.1 Role of RBI

As a regulatory body, RBI lays down the policies and guidelines regarding commercial paper to maintain control on the operational aspects of the scheme.

- Prior approval of RBI is required before a company can issue CP in the market.
- RBI controls the broad timing of the issue to ensure orderly fund-raising.
- Every issue of CP launched by a company, including roll-over, will be treated as a fresh issue
  and the issuing company will be required to seek prior permission from RBI, before each rollover.

The CPs can be issued by all non-banking (financial as well as non-financial) companies and All-India Financial Institutions. The instrument is instantly advantageous to the issuer and the investor. The issue of CPs does not involve bulky documentation and its flexibility with the opportunities can be tailored to meet the cash flow of the issuer. A highly rated company can raise cheaper funds than financing from a bank while the investor can deploy its short-term surplus at relatively high return. The secondary market for CPs ensures liquidity and the compulsory credit rating imparts inherent strength to the issuer's ability to meet the obligations on maturity. The bank as managers or dealers of the instrument gets fees to supplement their income. Bank can also invest their surplus short-term funds in CP.

## 3.5.2 Timing of CP

The timing of the launch of the CP issue will be indicated by RBI while giving its permission, to ensure an orderly approach to the market.

#### 3.5.3 Denomination and size of CP

Denomination of CP note – ₹5 lacs or multiples thereof.

Maximum size of CP issue – 100% of the issuer's working capital (fund based)

limits (determined by the consortium leader).

The entire approved quantum of CP can be issued on a single date or in parts on different dates, within two weeks of the Reserve Bank of India's approval, subject to the condition that the entire amount of issue matures on the same date.

#### 3.5.4 Period of CP

Minimum currency – 7 days from the date of issue.

Maximum currency – One year from the date of issue.

The entire approved amount should be raised within a period of 2 weeks from the date on which issuer opens the issue for subscription.

Each CP issue (including roll-over) must be treated as a fresh issue and requires permission from RBI.

#### 3.5.5 Mode of CP

CP must be issued at a discount to face value.

The discount rate must be freely determined by the market.

#### 3.5.6 Negotiability of CP

CP (being usance promissory note) would be freely negotiable by endorsement and delivery.

#### 3.5.7 Underwriting/co-acceptance of CPs

The CP issue cannot be underwritten or co-accepted in any manner. Commercial Banks, however, can provide standby facility for redemption of CPs on the maturity date.

### 3.5.8 Issue expenses

The issue of CP would be subject to payment of stamp duty. All issue expenses such as dealer's fees, issuing and paying agent's fees, rating agency fees, charges levied by banks for providing redemption standby facilities and any other charges connected with the issue of CPs are to be borne by the issuer.

#### 3.5.9 The issuer

The CP issuer can be a company incorporated under the Companies Act subject to some requirements.

#### 3.5.10 Benefits of Commercial Paper

CPs have been introduced in the Indian market to provide a diversified source of funding to the borrowers as well as an additional investment option to the investors. CPs can now be issued as a low-cost alternative to bank financing to meet a part of working capital requirements.

- (A) Benefits to the Issuer The following are major benefits to issuer of CP:
  - (i) Low interest expenses: The interest cost associated with the issuance of CP is normally expected to be less than the cost of bank financing. Among other things, it is related to the inter-corporate money market rate, which in normal times is within the cost of bank finance.
  - (ii) Access to short-term funding: CP issuance provides a company with increased access to short-term funding sources. By bringing the short-term borrower into direct contact with investors, the CP market will, to some extent, disintermediate the established role of banks and pass on the benefit to both issuers and investors.
  - (iii) Flexibility and liquidity: CP enables the issuer to increase flexibility and liquidity in matching the exact amount and maturity of its debt to its current working capital requirement.
  - (iv) Investor recognition: The issuance of CP provides the issuer with favourable exposure to major institutional investors as well as wider distribution of its debt.
  - (v) Ease and low cost of establishment: A CP program can be established with ease at a low cost once the basic criteria have been satisfied.
- **(B)** Benefits to the Investor The following are major benefits to investor of CP:
  - (i) Higher yield: Higher yields are expected to be generally obtainable on CP than on other short-term money market instruments like bank deposits. Investment managers are increasingly looking to match investible excess cash with higher yielding securities as compared to those presently available in the market.
  - (ii) **Portfolio diversification:** Commercial Paper provides an attractive avenue for short-term portfolio diversification.
  - (iii) Flexibility: CPs can be issued for periods ranging from 15 days to less than one year, thereby affording an opportunity to precisely match cash flow requirements.
  - (iv) Liquidity: Liquidity in CP is generally provided by a dealer offering to buy it back from an investor prior to maturity, for which a market quote will be available. The investment in CP will therefore be quite liquid.

#### Difference between Commercial Bill and Commercial Paper

Commercial Bill				Commercial Paper				
Commercial	Bill	arises	from	sale	Commercial paper is an unsecured and			
transactions.	Banks	finance	comn	nercial	discounted promissory note issued to			
bills. Usually, the bills consist of an invoice					finance the short-term credit needs of large			

drawn on the buyer, the documents to title to goods and a bill of exchange. The bills are given to the bank for advancing money against sale of goods. Commercial Bill financing is post sale finance. The Bill of Exchange may be on D/P (document against Payment) or D/A (document against acceptance) terms.

institutional buyers. Banks, corporations, and foreign governments commonly use this type of funding.

#### **Commercial Paper**

Item	2022	2023					
	Sep.30	Aug.15	Aug.31	Sep.15	Sep.30		
	1	2	3	4	5		
Amount Outstanding (₹ Crore)	400866.35	447570.85	450064.05	432568.65	412234.35		
Amount Reported during the fortnight (₹ Crore)	62062.8	41800.2	73816.05	71469.15	49675.85		
Rate of Interest (percent)	5.90-12.25	6.81-12.55	6.93-16.55	6.84-12.50	6.89-11.36		

(Source: RBI website)

#### **Example on Commercial Paper**

Calculate the interest yield of the following commercial paper:

Face Value: ₹ 6,00,00,000

Sale Price: ₹ 5,90,00,0000

Maturity period: 90 days

Brokerage and Other charges: 3%

#### Solution:

Brokerage = 3% of ₹ 6,00,00,000 = ₹ 18,00,000

Net Sale Price = ₹ 5,90,00,0000 - ₹ 18,00,000 = ₹ 5,72,00,0000

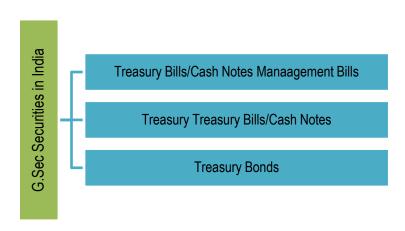
Yield = [(Face Value – Sale Price)/Sale Price] \* (360/Maturity Period) \* 100

= (6,00,00,000 - 5,72,00,0000)/ 5,72,00,0000 \* (360/90) \* 100= 19.58%

# 3.6 G Sec (Government Securities)

The Reserve Bank of India issues securities on behalf of the Government. The term Government Securities includes Central Government Securities, State Government Securities and Treasury Bills. The different types of Government Securities are –

Dated Securities	Zero Coupon Bonds or Deep Discount Bonds	Floating Rate Bonds	Capital Indexed Bonds			
Issued at par value.	Issued at discount to face value	Issued at face value.	Issued at face value.			
Interest or coupon rate is fixed at the time of issuances	Do not carry any interest	Interest rate is fixed % over a predetermined floating rate benchmark which may be MIBOR or INBMK (Indian Benchmark Swaps) curve	Interest Rate is reckoned as a % over Inflation benchmark may be WPI or CPI at the time of issuance.			
The tenor of the security is fixed	The tenor of the security is fixed	The tenor of the security is fixed	The tenor of the security is fixed			
The security is redeemed at face value on its maturity date	The security is redeemed at face value on its maturity date plus Zero coupon interest on the security	The security is redeemed at face value on its maturity date	The security is redeemed at face value on its maturity date			





# 4. Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR)

### (i) Cash Reserve Ratio (CRR)

CRR is the amount of reserve which banks must keep it with Reserve Bank of India (RBI). The current CRR rate is 3%. However, this rate may change from time to time as per the discretion of the RBI. So, CRR is basically a fraction of the total amount of deposits collected from the customers and kept as reserve either in cash or as deposits with the central bank. CRR is prescribed according to the guidelines of the central bank of a country.

The basic purpose is to ensure that banks do not run out of cash to meet the demands of their depositors. CRR is a crucial monetary policy tool and is used for controlling money supply in an economy.

#### Example:

A depositor deposits ₹ 10000 in a bank. Out of ₹ 10000, the bank keeps ₹ 300 as CRR. This works as a type of contingency fund to ward off any payment crises in future.

#### (ii) Statutory Liquidity Ratio (SLR)

SLR is the amount of reserve which banks must keep it with themselves. Apart from Cash Reserve Ratio (CRR), banks must maintain a certain portion of their deposits in the form of liquid assets like cash, gold, and non-mortgaged securities. Further, Banks which subscribe to Treasury bills, issued by RBI on behalf of Government, qualifies their SLR requirements. There is a reporting Friday in which Banks must report to the RBI every alternate Friday for their SLR maintenance. If they fail to make such payments, they must pay penalties for failing to maintain SLR as mandated. The current SLR is 18%. However, this rate may change from time to time as per the discretion of the RBI.

#### Example:

Government comes out with a tax-free bond worth ₹ 5000 crore, which RBI issues on behalf of the government. State bank of India subscribes ₹ 500 crore. This whole amount will qualify as SLR.



# 5. DETERMINATION OF INTEREST RATES

Call money rates were regulated in the past by the RBI or by a voluntary agreement between the participants through the intermediation of the Indian Banks Association (IBA). The interest rates have been deregulated and left to the market forces of demand for, and supply of, short-term money as part of the financial sector reforms.

The call money market is susceptible to volatility, for instance, sometimes the rates shot up and sometimes it comes down The reasons for increase in volatility in the call money market, amongst others, include advance corporate tax payments, investors' interest in primary and secondary capital markets including the units issued by mutual funds, large withdrawals on banks' credit lines, imprudent practices of banks, and developments in the foreign exchange market. Banks were reported to have invested in government securities by borrowing on call to earn the spread when call rates were low.

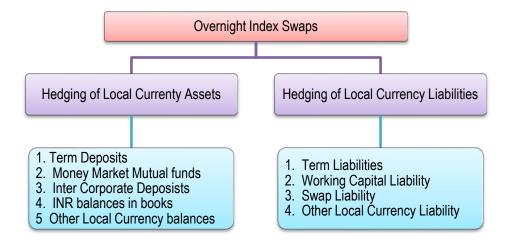
#### (i) Money Market – MIBOR (Thomson Reuters)

The Mumbai Interbank Offer Rate (MIBOR) is one iteration of India's interbank rate, which is the rate of interest charged by a bank on a short-term loan to another bank. As India's financial markets have continued to develop, India felt it needed a reference rate for its debt market, which led to the development and introduction of the MIBOR. MIBOR is used in conjunction with the Mumbai interbank bid and forward rates (MIBID and MIFOR) by the central bank of India to set short-term monetary policy.

The Mumbai Inter Bank Overnight Rate, or MIBOR, is the overnight lending offered rate for Indian commercial banks. MIBOR is calculated based on input from a panel of 30 banks and primary dealers. MIBOR was first established in 1998 and modeled after the more famous London Interbank Overnight Rate (LIBOR). Banks borrow and lend money to one another on the interbank market in order to maintain appropriate, legal liquidity levels, and to meet reserve requirements placed on them by regulators. Interbank rates are made available only to the largest and most creditworthy financial institutions.

MIBOR is calculated every day by the National Stock Exchange of India (NSEIL) as a weighted average of lending rates of a group of major banks throughout India, on funds lent to first-class borrowers. This is the interest rate at which banks can borrow funds from other banks in the Indian interbank market. (source https://www.investopedia.com/terms/m/mibor.asp)

Overnight Call Money rate in India is published by Reuters and known as "MIBOR" (Mumbai Interbank Offered Rate). MIBOR stands for overnight Call money rate in India which is getting fixed by Thomson Reuters every day. MIBOR is having an alternate leg which is known as OIS (Overnight Index Swaps). Overnight Index Swaps refers to hedging of local currency in local currency books and in local country which effectively means Hedging of INR denominated Assets/ (Liabilities) by an Indian Corporate in INR books and in India. OIS also means say Hedging of USD denominated Assets/ (Liabilities) by an American Corporate in USD books in NY markets.



#### (ii) What is 'LIBOR'?

LIBOR i.e. (London Interbank Offered Rate) or ICE LIBOR (previously <u>BBA</u>LIBOR) is a <u>benchmark</u> rate that some of the world's leading banks charge each other for short-term loans. It stands for Intercontinental Exchange London Interbank Offered Rate and serves as the first step to calculating interest rates on various loans throughout the world. LIBOR is administered by the ICE Benchmark Administration (IBA), and is based on five currencies: U.S. dollar (USD), <u>Euro (EUR)</u>, pound sterling (GBP), Japanese yen (JPY) and Swiss franc (CHF), and serves seven different maturities: overnight, one week, and 1, 2, 3, 6 and 12 months. There are a total of 35 different LIBOR rates each business day. The most quoted rate is the three-month U.S. dollar rate.

#### BREAKING DOWN 'LIBOR'

LIBOR (or ICE LIBOR) is the world's most widely used benchmark for short-term interest rates. It serves as the primary indicator for the average rate at which banks that contribute to the determination of LIBOR may obtain short-term loans in the London <u>interbank market</u>. Currently there are 11 to 18 contributor banks for five major <u>currencies</u> (US\$, EUR, GBP, JPY, CHF), giving rates for seven different <u>maturities</u>. A total of 35 rates are posted every <u>business day(number of currencies x number of different maturities)</u> with the 3-month U.S. <u>dollar rate</u> being the most common one (usually referred to as the "current LIBOR rate").

LIBOR or ICE LIBOR's primary function is to serve as the benchmark <u>reference rate</u> for <u>debt</u> <u>instruments</u>, including government and <u>corporate bonds</u>, mortgages, student loans, credit cards; as well as <u>derivatives</u> such as currency <u>and interests was</u>, among many other financial products.

For example, take a Swiss franc-denominated <u>Floating-Rate Note(or floater)</u> that pays coupons based on LIBOR plus a margin of 35 basis points (0.35%) annually. In this case, the LIBOR rate

used is the one-year LIBOR plus a 35 <u>basis point spread</u>. Every year, the <u>coupon rate</u> is reset to match the current Swiss franc one-year LIBOR, plus the predetermined spread.

If, for instance, the one-year LIBOR is 4% at the beginning of the year, the bond will pay 4.35% of its <u>par value</u> at the end of the year. The spread usually increases or decreases depending on the credit worthiness of the institution issuing debt.

Another prominent trait of LIBOR or <u>ICE</u>LIBOR is that it helps to evaluate the current state of the world's banking system as well as to set expectations for future <u>central bank</u> interest rates.

ICE LIBOR was previously known as BBA LIBOR until February 1, 2014, the date on which the ICE Benchmark Administration (IBA) took over the administration of LIBOR. (Source: Investopedia)

#### Replacement of LIBOR with SOFR

Financial institutions price loans for consumers and businesses using the SOFR benchmark. The name's reference to overnight financing describes how SOFR determines interest rates for lenders: It is determined by comparing the rates that big banks charge one another for short-term loans.

Libor was established using the interest rates that banks agreed to give one another on short-term loans. However, SOFR is more trustworthy than Libor because it considers actual lending transactions between institutions.

#### **How is SOFR Operated?**

Large financial institutions use Treasury bond repurchase agreements, or repos, to lend money to one another. With the use of Treasurys as collateral, these repo agreements enable banks to lend money overnight to satisfy reserve and liquidity requirements.

The weighted averages of the rates applied in these repo transactions make up SOFR. The SOFR rate for repo transactions from the previous business day is released each morning by the New York Federal Reserve Bank.

#### Why Was LIBOR Replaced with SOFR?

Since the middle of the 1980s, LIBOR has been one of the primary benchmarks for loans. But LIBOR was tainted by a string of scandals and worries about manipulation-related inaccuracies.

Some of the technical shortcomings of LIBOR were revealed during the financial crisis of 2008 and 2009. Banking regulators have been informed by multiple LIBOR rate-fixing scandals that a more reliable, risk-free reference is required as a long-term replacement for LIBOR.

According to Patel, the recent contraction of the interbank lending market contributed to or enabled these scandals. He claims that as there were fewer transactions, quoted rates rather than the actual

rates from transactions started to appear in the index. Furthermore, "the self-reported LIBOR rate might not fully reflect the actual cost.

Since the Treasury repo market is one of the most liquid in the world and offers a wealth of actual transaction data to rely on instead of self-reported hypothetical rates, SOFR is far less likely to be manipulated.

This market can't be easily manipulated because it reflects actual transactions, not quotes, and it averages over \$1 trillion daily.

#### What Separates SOFR from LIBOR?

As previously mentioned, one of the main distinctions between SOFR and LIBOR is that the latter is based on quotes from reporting banks that may or may not be derived from actual financial transactions, whereas the former is based on completed financial transactions.

#### The two rates do differ in other ways, though.

One important distinction between SOFR and LIBOR is that SOFR looks backward while LIBOR looks forward. This indicates that banks were aware of the borrowing rate at the start of the period when using LIBOR. However, because SOFR looks backward, the borrower won't be fully aware of their debt until the loan is over.

Furthermore, LIBOR included a credit risk premium because it was unsecured—the loans it was based on had no collateral. Since SOFR is a secured rate and is based on transactions involving Treasury securities as collateral, the rates do not include a premium for credit risk.

To reflect the need more accurately for pricing in adjustable-rate products, Patel anticipates that some rates based on SOFR will include a credit spread.

The methodology used to create the rates is the primary distinction between SOFR and LIBOR. SOFR is a general indicator of the cost of borrowing money overnight in the repurchase agreement (repo) market, while LIBOR is dependent on panel bank input.

Because of how it is calculated and the depth and liquidity of the underlying markets, SOFR has a far more robust rate than LIBOR. SOFR, being an overnight secured rate, more accurately represents the current funding methods used by financial institutions.

Compared to other U.S. money markets, SOFR's transaction volumes are significantly higher. As a result, it is transparent, representative of the market for a wide spectrum of market players and shielded from manipulation attempts. It also has no risk of expiration, unlike LIBOR, because it is derived from the U.S. Treasury repo market.



# RECENT DEVELOPMENT IN MONEY MARKET

#### 6.1 Debt Securitization

The buzzword in the money market is now debt securitisation, which refers to converting retail loans into wholesale loan and their reconverting into retail loans. For example, a bank lends ₹ 10 lakhs each to 300 borrowers as part of its loan portfolio. The total debt thus on the books of the bank will be ₹ 30 crores. By way of securitisation, the bank can break the entire portfolio of loans/debt of ₹ 30 crores into a paper of ₹ 300 each for instance, and market it in the secondary market to investors. The philosophy behind the arrangement is that an individual body cannot go on lending sizable amount for about a longer period continuously but if the loan amount is divided in small pieces and made transferable like negotiable instruments in the secondary market, it becomes easy to finance large projects having long gestation period.

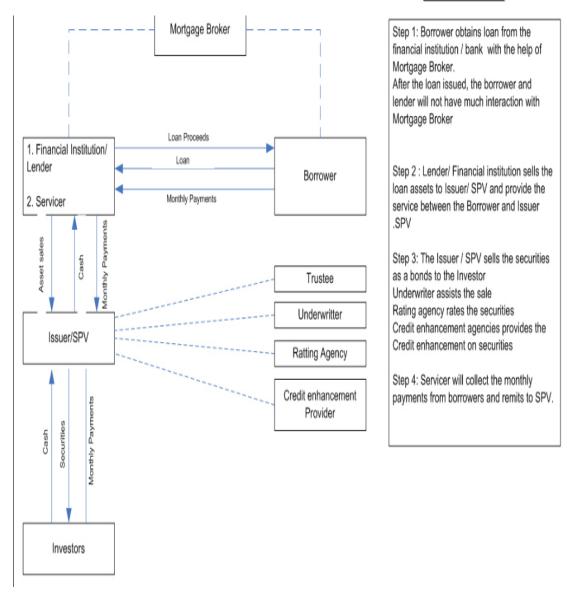
The experiment has already been initiated in India by the Housing Development Finance Corporation (HDFC) by selling a part of its loan to the Infrastructure Leasing and Financial Services Ltd. (ILFS) and has therefore become a pacesetter for other kinds of debt securitisation as well.

The Industrial Credit and Investment Corporation of India (ICICI) as well as other private financial companies have been trying similar deals for lease rentals. Some finance companies are also following the same route for financing promoters' contribution for projects. The HDFC has entered into an agreement with ILFS to securitise its individual housing loan portfolio to the extent of ₹ 100 crores.

Debt Securitisation will thus provide liquidity to the instrument. As market maker, ILFS will quote a bid and offer a price for the paper. Given the scarcity of resources and to provide flexibility to investors, innovative financing techniques such as debt securitisation which will mobilise additional resources through a wider investor base, is a step in the right direction.

A major trend in the international financial markets in recent years has been towards securitisation of long-dated assets, held by them as security/mortgage against credit to customers.

#### **Debt Securitization Process:**



(Source: Oracle)

# 6.2 Money Market Mutual Funds (MMMFs)

One of the recent developments in the sphere of money market is the establishment of Money Market Mutual Funds, the guidelines of which have been made public by the Reserve Bank of India. Money Market Mutual Funds (MMMFs) can be set up by the banks and public financial institutions. There can also be Money Market Deposit Accounts (MMDAs).

(i) Limit: The limit for raising resources under the MMMF scheme should not exceed 2% of the sponsoring bank's fortnightly average aggregate deposits. If the limit is less than ₹ 50 crores for any

bank, it may join with some other bank and jointly set up MMMF. In the case of public financial institutions, the limit should not exceed 2% of the long-term domestic borrowings as indicated in the latest available audited balance sheets.

- (ii) Eligibility: MMMFs are primarily intended for individual investors including NRIs who may invest on a non-repatriable basis. MMMFs would be free to determine the minimum size of the investment by a single investor.
- (iii) Minimum rate of return: There is no guaranteed minimum rate of return.
- (iv) Lock in period: The minimum lock in period would be 46 days.
- (v) Deployment of capital: The resources mobilized by MMMFs should be invested exclusively in various money market instruments.

Money Market Funds are debt funds that are lent to companies for a period of up to 1 year. These Funds are designed in a manner that allows the fund manager to generate higher returns while keeping risk under control through adjustment of lending duration. Higher loan tenure usually comes with higher returns. They are highly liquid, invest in short term debt instruments of high quality.

#### **Advantages of Money Market Funds**

- ♦ Ideal for an investment horizon of at least 3-6months
- ♦ Low chances of loss if someone stays invested for 6+ months
- ♦ These schemes tend to give better returns than Bank Fixed Deposits of similar duration

(Source https://www.etmoney.com/mutual-funds/debt/money-market/58)



# 7. REPURCHASE OPTIONS (REPO.), REVERSE REPURCHASE AGREEMENT (REVERSE REPO) AND READY FORWARD (RF) CONTRACTS

The term Repurchase Agreement (Repo) and Reverse Repurchase Agreement (Reverse Repo) refer to a type of transaction in which money market participant raises funds by selling securities and simultaneously agreeing to repurchase the same after a specified time generally at a specified price, which typically includes interest at an agreed upon rate. Sometimes it is also called a *Ready Forward Contract* as it involves funding by selling securities (held on Spot i.e., Ready Basis) and repurchasing them on a forward basis.

# 7.1 Difference between Repo and Reverse Repo

Following are major differences between Repo and Reverse Repo:

exam

- (a) Repo rate is the rate at which Reserve Bank of India (RBI) lends to Commercial Banks for a short period of time against Government Securities. On the other hand, Reverse Repo is the rate at which Commercial Banks lend to RBI.
- (b) A transaction is called a Repo when viewed from the perspective of the seller of securities (the party acquiring funds) and Reverse Repo when described from the point of view of the supplier of funds. Thus, whether a given agreement is termed a Repo or a Reverse Repo depends largely on which party initiated the transaction.
- (c) The purpose of Repo is to fulfill the deficiency of funds. While the purpose of Reverse repo is to make sure that there is liquidity in the economy.
- (d) The Repo rate is comparatively high in comparison to Reverse Repo rate.
- (e) The Repo rate strives to contain inflation in the economy. The Reverse repo aims to control money supply in the economy.
- (f) Repo is based on a Repurchase Agreement i.e., there will be an agreement between two parties on the condition that one party will sell securities to the other on the promise that it will be bought back by him after a certain period. On the other hand, Reverse repo is based on the Reverse Repurchase Agreement which is just the opposite of whatever has been explained above.

# 7.2 Characteristics of Repo

- (i) Origin: Repo transactions are of recent origin which has gained tremendous importance due to their short tenure and flexibility to suit both lender and borrower. Under these transactions the borrower places with the lender certain acceptable securities against funds received and agrees to reverse this transaction on a pre-determined future date at agreed interest cost.
- (ii) **Hybrid Instrument:** In many respects, Repos are hybrid transactions that combine features of both secured loans and outright purchase and sale transactions but do not fit clearly into their classification.
- (iii) Repo rates: The lender or buyer in a Repo is entitled to receive compensation for use of the funds provided to the counterparty. This is accomplished by setting the negotiated repurchase price over the initial sale price, the difference between the two representing the amount of interest or Repo rate owed to the lender. The Repo rate is negotiated by the counterparties independently of the coupon rate or rates of the underlying securities and is influenced by overall money market

conditions. In India, Reporates are determined based on expected call money rates during a reserve mark-up period.

- (iv) **Period:** Repo's are usually arranged with short-term maturity overnight or a few days. However, the minimum period of Repo in India is fixed at one day.
- (v) Interest: The interest on such transactions is market determined and built in the structure of the Repo.
- (vi) Eligibility: The transactions can be undertaken by commercial banks, financial institutions, brokers, DFHI.
- (vii) Hair Cut: The use of margins or haircuts in valuing repo securities, and the use of mark-to-market provisions are examples of Repo features that typically are characteristics of secured lending arrangements but are rarely found in outright purchase and sale transactions.

# 7.3 Dirty Price and Clean Price

#### **Dirty Price**

The dirty price depicts a bond's actual price. It includes accrued interests. Therefore, it is the price paid by an investor when they purchase a bond. Accrued interests are a culmination of interests between two coupon dates. The dirty price always remains equal to or higher than the clean price as interest is added to the market price. On the date of coupon payment, both prices are the same. In secondary markets, it is also referred to as an invoice price. The dirty price of a bond includes interest. Interests are accumulated between two coupon payments; it increases every day.

The actual amount paid by a buyer is called 'dirty' because the seller charges extra. Hence, this difference in prices becomes an income for the bond issuer.

Dirty price is the present value of a bond; specifically, it is the bond's discounted future cash flows.

Formula of Dirty Price = Clean price + Accrued Interest exam

#### Clean Price:

The clean price of a bond does not include accrued interests. Accrued interest is the accumulation of interest between two scheduled payments. When an investor checks a bond's price online, they are looking at the clean price, hence it is also known as a clean quote or quoted price.

A bond's quoted price can be derived by subtracting accrued interests from the dirty price.

The difference between a bond's quoted and dirty price becomes an added profit for the bond issuer.

Investors use the clean quote to compare between bonds, as it does not fluctuate based on the date. The clean quote fluctuates concerning market conditions.

#### Clean Price Explained

A clean price is the price of a bond without including accrued interest. It is also called the bond's quoted price or clean quote.

Formula of Clean Price = Dirty price - Accrued Interest

(Source: https://www.wallstreetmojo.com/dirty-price/)

#### 7.4 Role of RBI

The RBI intervenes in the market as and when required by conducting repos (ready forward purchases) through its two subsidiaries, namely, Securities Trading Corporation of India (STCI) and Discount and Finance House of India (DFHI). The central bank banned these transactions between banks following their misuse of diverting funds from the banks to the stock market and reintroduced the same in April 1992. The RBI has permitted repos in dated securities, and reverse repo transactions by non-bank subsidiary general ledger (SGL) account holders in the lean season credit policy announced in April 1997. Non-bank entities holding SGL accounts can lend their surplus money to banks by entering a reverse repurchase agreement or reverse repo. These entities entering a reverse repo with banks purchase (permitted) repo securities from banks with a commitment to sell the same at an agreed future date and price.

When there is a spurt in call rates, the RBI intervenes through STCI/DFHI by conducting these repos to inject the required liquidity. STCI and DFHI are market-makers in dated GOI secs and T-bills. They give a two-way quote for the securities which they make the market for. The bid, or the buying rate, is always lower than the ask, or selling rate, for a given security. The spread between bid and ask (or offer) rate accounts for the transaction cost and normal profit from operations. The RBI intervenes to prevent the diversion of investment funds to the call money market.

#### Example

Bank A (borrower - seller), which is short of cash, can sell its repo securities to Bank B (lender – purchaser) or STCl or DFHI at ₹ 96.25 with a commitment to repurchase them at ₹ 96.75 after 14 days. The difference between the sale price and the repurchase price or the spread represents the interest rate on the borrowed money.

The Repo buyer's rights to trade the securities during the term of the agreement, as it represents a transfer of ownership that typically does not occur in collateralized lending arrangements.

The amount of interest earned on funds invested in a Repo is determined as follows:

Interest earned = Funds Invested × Repo Rate × Number of Days/365

For example, if ₹ 1 crore is for 3 days @ 5% would yield interest return of ₹ 0.04 lakhs.

 $1,00,00,000 \times 0.05 \times 3/365 = \text{ } \text{ } 4110$ 

#### Illustration

Bank A enters a Repo for 14 days with Bank B in 12% GOI Bonds 2017 at a rate of 5.25% for ₹5 Crore. Assuming that the clean price is 99.42, initial margin be 2% and days of accrued interest be 292, you are required to determine:

- (a) Dirty Price
- (b) Start Proceeds (First Leg)
- (c) Repayment at Maturity (Second Leg)

Note: Number of days in a year is 360.

#### **Answer**

(a) Dirty Price

$$= 99.42 + 100 \times \frac{12}{100} \times \frac{292}{360} = 109.1533$$

(b) First Leg (Start Proceed)

= Nominal Value x 
$$\frac{\text{Dirty Price}}{100} \times \frac{100 - \text{Initial Margin}}{100}$$

= ₹5,00,00,000 x 
$$\frac{109.1533}{100}$$
 ×  $\frac{100-2}{100}$  = ₹5,34,85,117 say ₹5,34,85,000

(c) Second Leg (Repayment at Maturity)

= Start Proceed x (1+ Repo rate 
$$\times \frac{\text{No. of days}}{360}$$
)

= ₹5,34,85,000 x (1+ 0.0525 × 
$$\frac{14}{360}$$
) = ₹5,35,94,199

# (3)

# 8. DAY COUNT CONVENTION

**Day Count Convention** defines the way in which interest accrues over time. Generally, we know the interest is earned for some reference period, (for example, the time between coupon payments), and we are interested in calculating the interest earned over some other period.

In other words, Day count convention specifies the number of days that a year contains according to the bond market. The number of days in a year is important for the calculation of the interest that

has been accrued on the bond. However, the day count convention is not followed uniformly around the world. The trader in the Bond Market must have knowledge of the type of convention being used in a particular market as each market follows its own convention. Further, day count conventions can be segregated into three components:

- ♦ The year is assumed to be composed of 360 days
- ♦ The year is assumed to be composed of 365 days
- The year is assumed to be composed of the actual number of days i.e., 365 or 366 in a leap year

**So, Day Count Convention** refers to the method used for arriving at the holding period (number of days) of an instrument to calculate the accrued interest. The various types of day count conventions are explained as follows:

- ♦ 30/360 convention means that irrespective of the actual number of days in a month, the number of days in a month is taken as 30 and the number of days in a year is taken as 360. Indian Bond Market, mortgage-backed securities use the 30/360-day count convention.
- Actual/365 uses the actual number of days in a month, whereas the number of days in a year is taken as 365 days. Indian Money Market instruments use this convention. For example, Treasury bond or G- Sec bonds etc.
- Actual/Actual convention uses the actual number of days in the month and the actual number of days in the year, i.e., 366 days for a leap year. Indian corporate bonds use Actual/Actual day count convention.
- Actual/360 counts the actual number of days in a month but uses 360 as the number of days in the year. This convention is used mainly for commercial paper, T – Bills and other shortterm debt instruments.

The day count convention method has been illustrated below with the help of following example:

	Day Count Convention							
Field	30/360	Actual/360	Actual/365	Actual/Actual*				
Starting Date	01-May-18	01-May-18 01-May-1		01-May-18				
Settlement Date	01-Aug-18	01-Aug-18	01-Aug-18	01-Aug-18				
Coupon Rate (%)	10%	10%	10%	10%				
Face Value	100	100	100	100				
No. of Days	90	92	92	92				
Accrued Interest	2.5000	2.5556	2.52055	2.52055				

<sup>\* 2018</sup> is not a leap year so 365 days in a year have been taken for the interest calculation.

SEBI has clarified certain aspects relating to Day Count Convention, which are enumerated as below:

(i) If the interest payment date falls on a holiday, the payment may be made on the following working day. However, the dates of the future coupon payments would be as per the schedule originally stipulated at the time of issuing the security. In other words, the subsequent coupon schedule would not be disturbed merely because the payment date in respect of one coupon payment has been postponed earlier because of it having fallen on a holiday.

This is illustrated with the help of the following example:

Date of Issue of Corporate bonds: July 01, 2016

Date of Maturity : June 30, 2018

Date of coupon payments : January 01 and July 01

Coupon payable : semi-annually

In this case, January 01, 2017, is a Sunday, thus the coupon would be payable on January 02, 2017, i.e., the next working day. However, the calculation for payment of interest will be only till December 31, 2016, which would have been the case if January 01, 2017, were not a holiday. Also, the next dates of payment would remain July 01, 2017, and January 01, 2018, even though one of the interest payments was made on January 02, 2017.

(ii) In order to ensure consistency for interest calculation, a uniform methodology shall be followed for calculation of interest payments in the case of leap year, which shall be as follows:

In case of a leap year, if February 29 falls during the tenor of a security, then the number of days shall be reckoned as 366 days (Actual/Actual day count convention) for a whole one-year period, irrespective of whether the interest is payable annually, half yearly, quarterly, or monthly etc. It is thus emphasized that for a half yearly interest payment, 366 days would be reckoned twice as the denominator: for quarterly interest, four times and for monthly interest payment, twelve times.

This is illustrated with the help of the following example:

Date of issue of corporate bonds : January 01, 2016

Coupon payable : semi-annually

Date of coupon payments : July 01 and January 01

In the above example, in case of the leap year (i.e., 2016), 366 days would be reckoned as the denominator (Actual/Actual), for payment of interest, in both the half year periods i.e. Jan 01, 2016, to Jul 01, 2016, and Jul 01, 2016, to Jan 01, 2017.

(iii) In order to ensure uniformity for payment of interest/redemption with respect to debt securities, it has been decided that interest/redemption payments shall be made only on the days when the money market is functioning in Mumbai.

# **TEST YOUR KNOWLEDGE**

Mult	iple (	Choice Questions
1.	Redu	ction of borrowing amount for T-bills results in the of T-bills.
	(a)	increase in supply
	(b)	reduction in supply
	(c)	increase in demand
	(d)	increase in supply
2.		ant of face value of Certificate of Deposits (CDs) is `3000. Period of maturity is 3 months and rate is 12%. The issue price of CDs is
	(a)	2640
	(b)	3090
	(c)	2910
	(d)	3360
3.	On th	e basis of the facts of the above question, the effective rate of interest is
	(a)	12%
	(b)	31.2%
	(c)	15%
	(d)	18%
4.		refers to the market for extremely short period loans i.e., 1 day to 14 days
	(a)	Treasury Bill
	(b)	Call or notice money
	(c)	Repos
	(d)	Commercial papers

5.	Which	among the following is an unsecured promissory note?
	(a)	Treasury Bill
	(b)	Commercial Paper
	(c)	Commercial Bill
	(d)	Repos
6.	Durati	on of the call money market is for a maximum duration of days.
	(a)	7 days
	(b)	14 days
	(c)	21 days
	(d)	30 days
7.	-	ositor deposits ₹ 2,00,000 in a bank. Out of that amount bank shall keep ₹ as Reserve Ratio as per the present norms mandated by RBI.
	(a)	9000
	(b)	6000
	(c)	8000
	(d)	7000

## **Theoretical Questions**

- 1. Discuss the salient features of Money Market and the rigidities in the Indian Money Market.
- 2. Explain Commercial Papers. Discuss the various benefits of Commercial Paper.
- 3. Differentiate between Cash Reserve Ratio and Statutory Liquidity Ratio with examples.
- 4. Discuss the characteristics of Repo transactions.
- 5. What do you understand by Day Count Convention?

### **Practical Questions**

- 1. Abundant Cash Ltd has enough cash on hand as of April 1, 2022, to last three months. For investing the extra money, it is considering the two possibilities listed below.
  - To make investments in fixed deposits with an interest rate of 8% per year payable quarterly.

- To purchase TBs with a face value of `100 that mature in 64 days at a price of 98.25.
- Give reasons why the corporation should choose one option over the other for investing its surplus funds. Also calculate the yield of treasury bills.
- 2. 91-day Treasury Bills (T-Bills) were issued at a fixed price of ₹ 98. The face value of it was ₹ 100. You are required to calculate the Yield Rate of T-Bill and the rate of discount.

### **ANSWERS/SOLUTIONS**

# **Answer to Multiple Choice Questions**

1.	(b)	2.	(c)	3.	(a)	4.	(b)	5.	(b)
6.	(b)	7.	(a)						

## **Answer to Theoretical Questions**

- **1.** Please refer to paragraph 1.3 and 1.5
- 2. Please refer to paragraph 3.5
- 3. Please refer to paragraph 4
- 4. Please refer to paragraph 7
- **5.** Please refer to paragraph 8

#### **Answers to the Practical Questions**

- 1. Treasury bills are preferred over fixed deposits because of the following reasons:
  - (i) <u>Return:</u> The returns on Treasury bills are in most cases higher than those on fixed deposits. The fixed deposit rates in banks are around 7% while treasury bill rates for 2023 is upto 7.750%.
  - (ii) <u>Risk:</u> Since the government backs Treasury Bills, they are considered less dangerous than fixed deposits. Fixed deposits, on the other hand, come with a higher risk because they are not backed by the government and rely on the bank or institution providing them for financial stability.
  - (iii) <u>Liquidity:</u> Owing to their high liquidity, Treasury Bills can be quickly converted into cash. Prior to the maturity date, you can sell them on the secondary market. On the

other hand, fixed deposits have a fine if the money is withdrawn before the maturity date, although you can liquidate them immediately.

Calculation of Yield of Treasury Bill

- = {(Face Value Issue Price)/Issue Price} x (364/Maturity Period) x 100
- $= \{(100 98.25)/98.25\} \times (364/64) \times 100$
- = 10.13%
- 2. Yield Rate on Treasury Bill = (Face Value Purchase Price/Purchase Price) x (364/Maturity Period) x 100

So, Yield Rate on Treasury Bill =  $(100 - 98/98) \times (364/91) \times 100 = 8.16\%$ 

Also, the rate of discount = 100 - 98 = 2%

Note: In case of TBs, for the calculation of yield, a year is normally assumed to be of 364 days.

# **BOND MARKET**

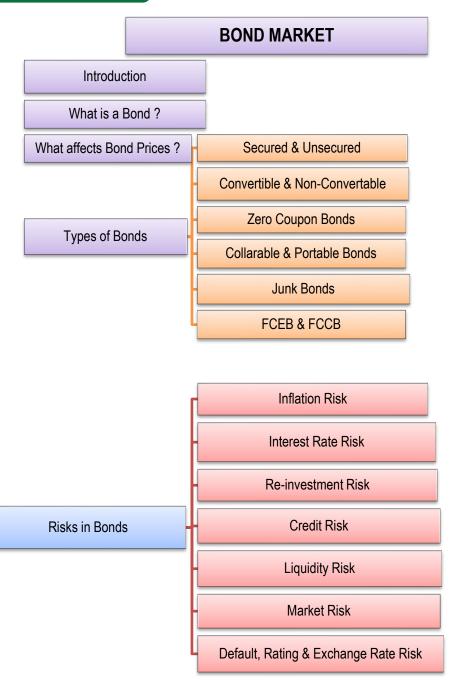


# **LEARNING OUTCOMES**

# After going through the chapter student shall be able to understand: Introduction to Bond Market

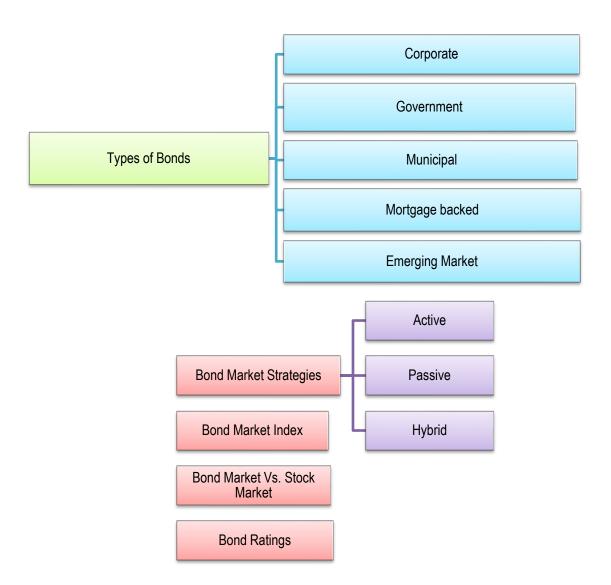
- What is a Bond?
- What affects Bond Prices?
- Types of Bonds
- Risks in Bonds
- Relation between Bond Price and Interest Rates
- Primary Bond Market Vs. Secondary Bond Market
- **Types of Bond Markets**
- **Bond Indices**
- Bond Market vs. Stock Market
- **Bond Ratings**

# CHAPTER OVERVIEW []



Relation between Bond Price and Interest Rates and Duration of Bonds

Primary and Secondary Bond Market



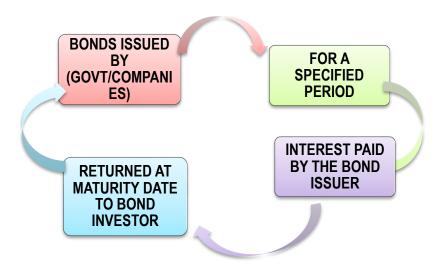


# 1. INTRODUCTION TO BOND MARKETS

#### 1.1 What is a Bond Market?

A bond market—often called the debt market, fixed-income market, or credit market- is the collective name given to all trades and issues of debt securities. Governments typically issue bonds to raise capital to pay down debts or fund infrastructural improvements.

Publicly traded companies issue bonds when they need to finance business expansion projects or maintain ongoing operations.



**Note:** In the above figure, bond issued will be returned to the investor at maturity date depending upon whether the bond is redeemable or irredeemable.

# 1.2 History

Bonds have been traded far longer than stocks have. In fact, loans that were assignable or transferrable to others appeared as early as in ancient Mesopotamia, where debts denominated in units of grain weight could be exchanged among debtors. In fact, the recorded history of debt instruments dates to 2400 B.C.—via a clay tablet discovered at Nippur, now present-day Iraq. This artifact records a guarantee for payment of grain and listed consequences if the debt was not repaid.

Later, in the Middle Ages, governments began issuing sovereign debts to fund wars. In fact, the Bank of England, the world's oldest central bank still in existence, was established to raise money

to rebuild the British navy in the 17th century through the issuance of bonds. The first U.S. Treasury Bonds, too, were issued to help fund the military, first in the war of independence from the British crown, and again in the form of "Liberty Bonds" to help raise funds to fight World War I.

#### 1.3 In Context of India

The East India Company played a huge role in bringing the concept of public borrowing. The East Indian Company started borrowing during the eighteenth century to finance its campaigns in South India. The debt which was owed by the government to the public was referred as the public debt. Public Debts are taken from public with the view to meet the deficit in revenue of the government.

In India, the first borrowing was made in 1867 for the purposes of railway construction. Apart from that a rise in public debt was also encountered during the first world war. Interest rate of bonds varied in India from time to time. In 1857 it came down to 5% and gradually to 4% in 1871.

Bonds are regarded as securities under Section 2(h) of the Securities Contract (Regulation) Act, 1956. Bonds could be referred as loans provided by investors to the organizations. Bonds have interest rates at which they are redeemed after a certain maturity period. The borrower has obligation to pay interest on the principal amount. The interest is termed as coupons in the Indian Bond Market. There are various types of bonds which currently exists in the Indian Bond Market.

The plain vanilla bond is the simplest amongst all bonds. The bonds that currently exists are callable bonds, puttable bonds, zero coupon bond, amortizing bond, floating rate bond, government securities, and corporate bonds.

# 1.4 Key Points

- ♦ The bond market broadly describes a marketplace where investors buy debt securities that are brought to the market by either governmental entities or corporations.
- National governments generally use the proceeds from bonds to finance infrastructural improvements and pay down debts.
- Companies issue bonds to raise the capital needed to maintain operations, grow their product lines, or open new locations.
- Bonds are either issued on the primary market, which rolls out new debt, or traded on the secondary market, in which investors may purchase existing debt via brokers or other third parties.
- Bonds tend to be less volatile and more conservative than stock investments, but they also have lower expected returns.



# 1.5 Let's Understand Bonds through Examples

(a) Company A issues five-year bonds on January 1, 2018, which cost ₹100 each and pay 5%. However, the current yield is 6%.

What is the yield?

The yield is 6%.

What is the principal?

The principal is ₹100.

What is the maturity period?

January 1, 2023 (the maturity date is in five years from the issue date).

What is the coupon rate?

- > The coupon rate is 5%.
- (b) Company B issues two-year notes on March 1, 2018, which cost ₹ 500 each and pay 6%, with the first payment made six months after the issue date.

Various dates at which the bondholder will be paid interest are as follows:

- > September 1, 2018
- March 1, 2019
- ➤ September 1, 2019
- March 1, 2020

How much will they be paid on each date?

- September 1, 2018: ₹ 500 x (6%/2) = ₹ 15
- $\triangleright$  March 1, 2019: ₹ 500 x (6%/2) = ₹ 15
- > September 1, 2019: ₹ 500 x (6%/2) = ₹ 15
- March 1, 2020: ₹ 500 x (6%/2) + ₹ 500 = ₹ 515

#### Note:

- (i) 6%/2 because the coupon rate is annual but is paid semi-annually.
- (ii) Last payment includes the principal.



# 2. WHAT IS A BOND?

What is a debt security? A bond. To raise capital from investors who are ready to lend them money for a predetermined period of time, borrowers issue bonds.

Lending to the issuer—which could be a federal agency, local government, business, or corporation—occurs when you purchase a bond. In exchange, the bond's issuer agrees to pay you a certain interest rate over the duration of the bond and to reimburse the principal—also referred to as the bond's face value or par value—when the bond "matures," or when the main amount is due after a predetermined amount of time. Bonds may be redeemed at par or at a premium, depending

on the terms stated when the bonds were issued. Additionally, they have monthly interest that must be paid by the issuer.

An investor acquires ownership of the company when he makes an equity investment. If there is a debt, the investor becomes the issuing entity's creditor. Investing in debt securities is essential for creating a solid and diverse portfolio since it guarantees fixed income.

Bonds are purchased by investors as a reliable source of income. Bonds issuers usually pay interest on a fixed timetable, like every six months.

Bonds are a means to protect capital when investing, as bondholders receive their entire principle back if the bonds are held to maturity. Bonds can serve as a buffer against investments in more erratic stocks.

Bonds are issued by businesses, governments, and municipalities to raise money for a variety of purposes, such as:

- a) Supplying operating cash flow
- b) Paying off debt
- c) Funding major projects including hospitals, schools, and roadways

# 2.1 Important Concepts in Bonds

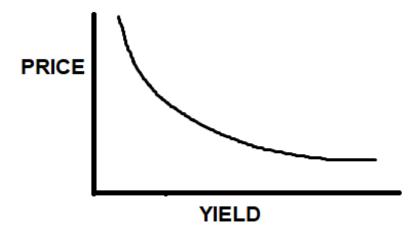
- (i) Face Value: Face value (or par value or principal) is the amount the investor will get back from the issuer once the debt instrument matures. Bonds may be issued at face value or at a discount to the face value. If a bond trades for a price higher than its face value, then it is said to be traded at a premium. If it is trading below the face value, it is said to be traded at discount.
- (ii) Coupon or Interest Rate: Coupon is the amount the investor will receive via interest payments for the debt instrument. The interest is calculated and paid on the face value of the instrument, irrespective of its price in the market.
  - **Example -** If the Bond with face value 1000 has 8% p.a. coupon rate, then interest shall be ₹ 800 per year which shall be paid by the issuer to the investor.
- (iii) Maturity: Maturity is the date on which the investor is repaid the principal by the issuer. The tenure for the maturity of an instrument can range from one day to 30 years. The maturity date is one of the important dates to consider for YTM or Yield.

(iv) Yield: Yield from a financial angle is the annual percentage return earned from the investment made on a security. For example, a 6% yield means that the investment averages a 6% return each year. Yield is the most popularly used tool to measure the return from a bond – be it a government bond or a corporate bond. The simplest way to understand yield is the situation where an investor purchases bonds directly from the issuer at face value. Here, if the coupon interest rate is 7%, the yield is 7% (coupon yield).

#### (v) Price Yield relationship:

- Price-yield relationship between bonds is not a straight line but it is convex (curved).

  This indicates that price changes for yield changes—both an increase and a drop in yield—are not symmetrical (or an exact match).
- Bonds vary in how sensitive their prices are to yield fluctuations. As a result, price variations for a given change in yield will vary based on the type of bond held.
- Higher the term to maturity of the bond, greater the price sensitivity.
- Lower the coupon, higher the price sensitivity because of higher interest rate risk (discussed later in the chapter). Other things remaining the same, bonds with higher coupon exhibit lower price sensitivity than bonds with lower coupo



**Note:** In the above figure, it is shown that when bond price increases the bond yield decreases.

(vi) Current yield: Current market price is different than secondary market price, so interest earned on current market price is known as current yield i.e. if I invest money at current market price what annual yield I will receive on my investment at today's price.

Formula: (Interest /Po) x 100.

Where Po is Spot Price or the current market price of bond.

**For example**, face value of a 12% bond is Rs. 100. An investor buys the bond from the market for (i) Rs. 90, Rs. 100, or (iii) Rs. 110. His current yield in all the three situations are as follows:

(i) 
$$\frac{\text{Interest}}{P_0} \times 100 = \frac{12}{90} \times 100 = 13.33\%$$

(ii) 
$$\frac{12}{100}$$
 x 100 = 12%

(iii) 
$$\frac{12}{110}$$
 x 100 = 10.91%

We can see from the above example that as the price of the bond increases, the yield decreases.

(vii) Yield to maturity (YTM): Yield to maturity is expressed as the average annual yield from a bond held till maturity. The return (in terms of percentage) paid on an instrument in the form of dividend or interest is called Yield. In the debt markets, yield to maturity is a widely used measure to compare bonds. This is the annual return on the bond if held to maturity considering when you bought the bond and what you paid for it.

Yield to maturity is a special concept applicable to bonds and the returns they generate. Usually, when calculating bond yield, the annual return earned from the bond is assessed. It is the IRR earned from holding a bond till maturity. Since bond prices change, YTM will also keep changing with change in bond price and thus helps in assessing the true worth of the bond. It helps you decide whether you should invest in the bond or not.

The formula for yield to maturity (YTM) is given as follows -

YTM = {Annual coupon rate + (Difference between the face value and market value of the bond / Remaining years to maturity)} / {(Face value + market value of the bond) / 2}

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#### Example 1:

For instance, say a bond has a face value of ₹ 100. Its current market value is ₹ 98. The bond is issued for five years. The annual coupon here is calculated as 10% of ₹ 100, which is ₹ 10.

The yield to maturity would be calculated as follows –

$$YTM = \{ ₹10 + (100 - 98 / 5) \} / \{ (100 + 98) / 2 \}$$

= 10.4 / 99 = 0.1050

= 10.50%

#### Example 2:

#### Calculate the YTM of 9.95% SBI 15-year bonds with the help of following information:

Face Value: ₹ 10000

Maturity Amount: ₹ 10000

ask

Tenure: 15 Years

Allotment Date: March 16, 2014

Maturity Date: March 16, 2029

Coupon/Interest: 9.95% p.a. payable annually (₹ 995 on the Face Value of ₹ 10000)

Interest Payment Date: April 2nd every year

Market Price: ₹ 10788.56 (July 23, 2015)

Remaining Tenure: 13 Years and 236 Days (or approx. 13.65 Years)

YTM is the discount rate in percentage which is going to make the present value of ₹ 995 payable every year on April 2nd and present value of ₹ 10000 payable on March 16, 2029, equal to the market price of ₹ 10788.56.

Thus, putting the same in YTM formula we arrive at YTM = 10.13%.

(Source: https://www.tickertape.in/glossary/yield-definition-types-formula-yield-to-maturity-and-more/)

- (viii) Calculation of Weighted Yield: Weighted Yield is calculated when an investor is holding a series of bonds in his/her portfolio. It is calculated as follows:
  - As is the case with all investment assets, the first step in calculating bond portfolio is to calculate the market value of portfolio.

- 2) Calculate individual yield of the bond.
- Calculate the Weight Yield by taking the product of each individual bond market value and its corresponding yield.
- **Volatility:** Volatility is the change in the market price of the bond with respect to say change in interest rates. The greater the length of the bond's remaining term, the more sensitive it will be to changes in interest rates.

**For example,** a one-year bond will change less than a 10-year bond or a 30-year bond, but it will have the same sensitivity to interest rates as a 30-year bond with 1 year to go until maturity.

Bonds with longer remaining terms will be more volatile than those with less time until maturity.

(x) Yield Curve: The yield curve is a graph used to show the relationship between yield and maturity. Yield curves work best when plotting different maturity dates for the same type of bond, meaning that the only major difference in the securities is their maturity date. Due to different economic situations at various times, the curve can take various shapes.

The five main types of the curves are:

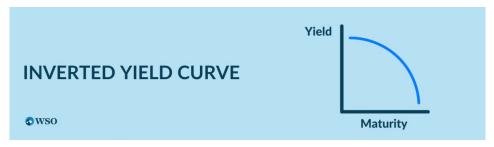
#### (a) Normal Yield Curve



The normal upward-sloping curve is the most common type of curve. It represents a market situation where the interest rates for long-term bonds are higher than for short-term bonds.

This upward sloping curve is considered normal because, in a rational market, investors expecting economic growth will generally ask for a higher compensation (interest rate) for greater exposure to risk, as longer-term securities are exposed to more uncertainty. This is usually associated with economic expansion.

#### (b) Inverted Yield Curve:



An inverted downward-sloping curve is an unusual type of curve. It represents a market situation where the interest rates for long-term bonds are lower than for short-term bonds.

This is because investors predict that long-term interest rates will decline due to various perceptions.

For example, an expected slower economy and a decline in inflation drive greater demand for higher-yielding short-term securities and lower demand for long-term securities.

The inverted curve is usually seen as a leading indicator of recession, suggesting the pessimistic market perception of the economy in estimated 6 - 18 months.

#### (c) Steep Yield Curve:



A steep curve represents a temporary scene in economic expansion, where the longterm yields increase quicker than the short-term yields.

A steep curve has a steeper slope than a normal curve. Therefore, compared to the normal curve, the difference between short-term and long-term yields is bigger in a steep curve.

This type of curve normally indicates the start of an economic expansion after a recession. As the curve steepens, banks can borrow money at lower rates and lend at higher rates.

#### (d) Flat Yield Curve:



A flat curve is normally associated with a transitory change between the normal and inverted curves. It represents a market situation where the yields from all maturities become similar.

A flat curve can denote a change in the bonds market but is not necessarily seen as a solid indicator of a change in investors' perspective on market expectations.

#### (e) Humped Yield Curve:



A humped curve, called a bell-shaped curve, is a rare situation where medium-term yields are higher than short-term and long-term yields.

It can result from a negative butterfly – a non-parallel shift in the yield curve where mid-term yields change by a greater magnitude than short-term and long-term yields.

Historically, returns following humped curves were either extremely good or tremendously poor. Like a flat curve, a humped curve represents a transitional state and isn't normally used as an indicator for future expectations of the market condition.

(Source: https://www.wallstreetoasis.com/resources/skills/finance/yield-curve)



Largely interest rates and credit quality of the issuer are the two main factors which affect bond prices.

#### (a) Interest Rates

- i. When interest rates fall, the existing fixed rate bonds become more valuable, and the prices move up until the yields become the same as the new bonds issued during the lower interest rate scenario.
- ii. When the credit quality of the issuer deteriorates, market expects higher interest from the company and the price of the bond falls and vice-versa.
- **(b)** Another factor that determines the sensitivity of a bond is the "**Maturity Period**". A longer maturity instrument will rise or fall more than a shorter maturity instrument.
- (c) Government Borrowing and Fiscal Deficit
- (d) RBI Policies revised from time to time
- (e) Bank Rate

## 4. TYPES OF BONDS

(i) Secured and unsecured Bonds: Secured bonds are backed by an asset, which could be real estate, machinery (particularly for railroads, airlines, and transportation firms), or an additional source of revenue. One example of a single bond type that is guaranteed by the borrowers' tangible assets—such as the titles to their homes—as well as their revenue stream from mortgage payments is mortgage-backed securities (MBS).

Bonds are collateralized because investors have a claim on the issuer's assets in the event of a default and failure to make interest or principal payments, allowing them to recoup their investment. But occasionally, this claim on the borrower's assets can be contested, or the proceeds from the sale of an asset would not be sufficient to reimburse investors in full. In either scenario, bondholders might expect to receive a partial return on their investment after a period of time that could vary from weeks to years.

Unsecured bonds are backed by "the full faith and credit" of the issuer rather than a particular asset. Put otherwise, the investor does not have a claim on any collateral, only the issuer's pledge to repay. However, this need not always be a negative thing.

After investors whose securities are higher in the capital structure are paid, owners of unsecured bonds have a claim on the assets of the defaulting issuer. The holders of the secured bonds, for instance, will obtain payment first if, for example, ABC Ltd. issued both unsecured and secured bonds and subsequently filed for bankruptcy.

- (ii) Convertible and non-convertible bonds/debentures: Debt products that require long-term investments are convertible bonds and debentures. Convertible refers to the fact that these can be changed into equity shares later. The issuing firm may occasionally have the authority to convert these, but the shareholders always have the final say. Compared to other debt products, convertible debentures have a lower coupon rate and offer tax advantages over interest paid. They can be entirely, partially, or selectively convertible, depending on both parties.
  - Fully Convertible Bonds/Debentures: These bonds/debentures, as specified in the agreement, are fully convertible into equity shares after a predetermined amount of time. Bond/debenture holders become company shareholders upon conversion.
  - Partially Convertible Bonds/Debentures: As the name implies, these bonds/debentures have a portion that can be partially converted into equity shares at the end of the designated tenure. The remaining bonds and debentures are still refundable within the terms of their maturity. Many investors prefer not to convert because it results in smaller equity capital.
  - Financial fixed-income instruments known as **Non-Convertible Bonds or Debentures** do not have the option to convert into equity shares at maturity. These are typically offered to the public by well-known businesses looking to raise long-term funding. The benefits of non-convertible bonds and debentures include tax advantages, low risk, high yields, higher interest rates, and liquidity. Depending on the terms of the contract, these have a defined maturity date and interest that might be paid monthly, quarterly, semi-annually, or annually.

## (iii) Zero Coupon Bonds

- A zero-coupon bond has a specific maturity date when it returns the bond principal.
- A zero-coupon bond pays no periodic income.
- The only cash inflow is the par value at maturity.
- > Zero Coupons are issued at discount to the Face value.

- > Zero Coupon bonds at maturity are redeemed for its full-face value.
- It is known as pure discount bond or deep discount bonds.

#### (iv) Callable and Puttable Bond

**Callable Bonds:** A callable bond, also known as a redeemable bond, gives its issuer the option—but not the responsibility—to redeem the bond before to its maturity date. A bond having an inbuilt call option is called a callable bond.

There are usually limitations on the call option associated with these bonds. For instance, it's possible that the bonds won't be redeemable within the first few initial years of their life. Furthermore, certain bonds permit redemption solely under certain exceptional circumstances.

If lower interest rates are anticipated, callable bonds can be advantageous to the bond issuers. The issuers may redeem their bonds in this situation and issue new bonds with reduced coupon rates.

Conversely, investors are exposed to greater risk when purchasing callable bonds. Investors will forfeit a portion of their future interest payments if the bonds are redeemed; this is commonly referred to as refinancing risk. Bonds that carry a higher level of risk typically carry a premium to offset the extra risk to investors.

**Puttable Bonds:** A debt instrument containing an integrated put option is called a puttable bond. The put option feature gives the bondholder the ability to compel the issuer to repay the principal early, but it does not impose any obligations on them.

Before the date of maturity, the put option may be executed on certain dates or after a predetermined amount of time. Bondholders who exercise a put option are required to sell the bond back to the issuer at a predetermined price, which is often the bond's par value, also known as its "face value."

The main advantage of the put option from the bondholder's point of view is defense against the possibility of rising interest rates in the financial markets. In essence, the bondholder gets the choice to reinvest the proceeds at the higher current interest rates after early redemption of the bond.

The choice to exercise the put option ultimately boils down to whether the risk-reward tradeoff is judged worthwhile, and the expected gain exceeds the amount of risk assumed. Investors are encouraged to buy a bond with an embedded put option since it provides a lower yield than similar bonds without the put feature. Furthermore, the efficacy of the puttable bonds in both the rising interest rates and falling interest rates is as follows:

- Rising Interest Rates: Bondholders have the option to redeem their bonds and return them to the issuer should interest rates rise. The bondholder might reinvest the capital in more advantageous circumstances after the funds are returned to increase return.
- Falling Interest Rates: On the other hand, a logical bondholder would choose to hold the bond until maturity because it would make no sense to exercise the put option at that point.
- (v) Junk bonds: Junk bonds are high-risk debt with ratings of BB or below by Moody's and Standard and Poor's. Junk bonds are also called high-yielding bonds because of the high interest rates they pay to the investors.

#### Some more types of Bonds:

- Foreign Currency Exchangeable Bonds (FCEB) It is a bond expressed in foreign currency and the principal and the interest of which is payable in foreign Currency. The issuer of the bond is an Indian company, and the bonds are subscribed by a person resident outside India.
  - The bonds are exchangeable into equity shares of another company which is also called the offered company. FCEB's are issued by the investment or holding company of a group to non-residents which are exchangeable for the shares of the specified group company at a predetermined price.
- Foreign Currency Convertible Bonds (FCCBs) are issued by a company to nonresidents giving them the option to convert them into shares of the same company at a predetermined price.

The basic difference between FCEB and FCCB is that FCCB involves just one company while FCEB involves at least two companies i.e. the bonds are usually of the parent company while the shares are of the operating company which must be a listed company.

## ©5. RISKS IN BONDS:

Bonds are generally considered secure investments, but all investments carry some level of risk. Risk-taking investors often pursue higher returns, while risk-averse investors might become uneasy during market downturns. Below is the list of most common types of Risks in Bond that investors should be aware of:

### #1 - Inflation Risk/Purchasing Power Risk

Inflation risk refers to the effect of inflation on investments. When inflation rises, the purchasing power of bond returns (principal plus coupons) declines. The same amount of income will buy lesser goods. For instance, when the inflation rate is 4%, every ₹ 1000 return from the bond investment will be worth only ₹ 960.

#### #2 - Interest Rate Risk

Interest rate risk refers to the impact of the movement in interest rates on bond returns. As rates rise, bond prices decline. In the event of rising rates, the attractiveness of existing fixed rate bonds with lower returns declines, and hence the price of such bonds falls. The reverse is also true. Short-term bonds are less exposed to this risk, while long-term bonds have a high probability of getting affected.

#### #3 - Reinvestment Risk

The probability that investors will not be able to reinvest the cash flows at a rate comparable to the bond's current return refers to reinvestment risk. This tends to happen when market rates are lower than the bond's coupon rate. Say, a \$100 bond's coupon rate is 8% while the prevailing market rate is 4%. The \$8 coupon earned will be reinvested in the market at 4% rather than 8%. This is called the risk of reinvestment.

#### #4 - Credit Risk

Credit risk results from the bond issuer's inability to make timely payments to the lenders. This leads to interrupted cash flow for the lender, where losses might range from moderate to severe. Credit history and capacity to repay are the two most important factors determining credit risk.

### #5 - Liquidity Risk

Liquidity risk arises when bonds become difficult to liquidate in a narrow market with very few buyers and sellers. Narrow markets are characterized by low liquidity and high volatility.

#### #6 - Market Risk/Systematic Risk

Market risk is the probability of losses due to market reasons like slowdown and rate changes. Market risk affects the entire market together. In a bond market, no matter how good an investment is, it is bound to lose value when the market declines. Interest rate risk is another form of market risk.

#### #7 - Default Risk

Default risk is the bond issuing company's inability to make required payments. Default risk is seen as other variants of credit risk where the borrowing company fails to meet the agreed terms of the issue.

#### #8 – Rating Risk

Bond investments can also sometimes suffer from rating risk where a slew of factors specific to the bond and the market environment affect the bond rating, thus decreasing the bond value and demand of the bond.

#### #9 – Re Pricing Risk

As maturity increases, price sensitivity increases at a decreasing rate. Price sensitivity is inversely related to a bond's coupon rate. Price sensitivity is inversely related to the yield to maturity at which the bond is selling.

## # 10 – Exchange Rate Risk

Exchange-rate risk is the risk of receiving less in domestic currency when investing in a bond that is in a different currency denomination than in the investor's home country. When investors purchase a bond that is designated in another currency other than their home countries, investors are open to exchange risk.

This is because the payment of interest and principal will be in a foreign currency. When investors receive that currency, they must go into the foreign currency markets and sell it to purchase their home currency. The risk is that their foreign currency will be devalued compared to the currency of their home countries and that they will receive less money than they expected to receive.

For example, a U.S. investor purchases a Rupee Denominated Bond. When the interest payment comes due and if the Rupee has depreciated in comparison to US Dollar, the investor will receive less in USD than expected at the time of selling in the foreign currency markets.

Different types of bond risks elucidated above almost always decrease the worth of the bond holding. The decline in the value of bonds decreases demand, thus leading to a loss of financing options for the issuing company. The nature of risks is such that it doesn't always affect both parties together. It favours one side while posing risks for the other.

## How to manage bond risk?

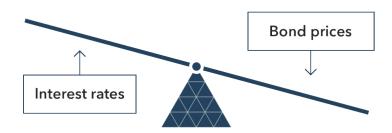
Managing bond risk involves diversifying your bond portfolio considering different bond types, maturities, and credit qualities. Additionally, staying informed about market trends and economic conditions can help you make informed decisions. Monitoring interest rate movements and conducting regular portfolio reviews are essential for adjusting your strategy based on changing risk factors.

(Source https://www.wallstreetmojo.com/bond-risk/)



# 6. RELATION BETWEEN BOND PRICE AND INTEREST RATES AND DURATION OF BOND

Bond Price and interest rates have inverse relation as depicted in the picture below. If the interest rate goes up the price of the bonds goes down and vice versa.



When Interest rate goes up the new bonds are issued at higher rates and the demand for the old, fixed rate bonds decline as there are new bonds available at higher interest rates. Thus, the price of the old bonds falls to make the Yield to maturity of the old bonds equal to the new bonds and the new investors become indifferent of their decision to choose between the old and new bonds.

When Interest rate goes down the new bonds are issued at lower rates and the demand for the old, fixed rate bonds increases as they provide more interest to investors, as the new bonds are available at lower rates. Thus, the price of the old bonds increases with more demand, to make the Yield to maturity of the old bonds equal to the new bonds and the new investors become indifferent of their decision to choose from the old and new bonds.

Furthermore, a bond's tenure indicates how sensitive its price is to shifts in interest rates. Put differently, the **bond duration** quantifies the amount that the bond's price changes in response to each 1% change in the interest rate.

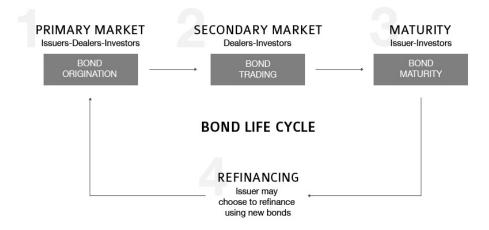
Years are used as the unit of bond duration measurement. As discussed, there is an inverse relationship between interest rates and bond prices. Consequently, a bond with a five-year tenure will see a 5% decrease in price for every 1% increase in interest rates, and vice versa. The bond price movement will be increased for each unit of change in interest rates the longer the bond duration.

## Relation of Bond price with Yield

Again, the inverse relation between Bond price and Yield. If the price goes up, the investor will get the interest at face value and in case of rise in price, the investor is paying higher to get the same return thus the effective yield goes down. Similarly, when the price of a bond goes down, the investor will get the same interest on the lower amount i.e. face value which he is paying to buy the bond thus increasing the yield.

# 7. PRIMARY BOND MARKET VS. SECONDARY BOND MARKET

The word "market" can have many different meanings, but it is used most often as a catch-all term to denote both the primary market and the secondary market. In fact, "primary market" and "secondary market" are both distinct terms; the primary market refers to the market where securities are created, while the secondary market is one in which they are traded among investors.



Basis for comparison	Primary Market	Secondary Market	
Definition	A primary market is a venue where businesses issue new shares to the public to raise the money, they need for long-term needs like expanding their business or acquiring a distinctive organization.	A secondary market serves as a model for the capital market, where investors trade company's debentures, current shares, options, bonds, treasury bills, commercial papers, etc.	
Named As	New issue market	Aftermarket	
Type of Purchase	Direct	Indirect	
Buyer and Seller	Buying and selling takes place between the company/ government and the investors.	Buying and selling takes place between the investors.	
Financing Benefit	It offers funding to the government or already-existing businesses to support their expansion and growth.	It does not provide any kind of financing.	
Intermediaries involved	Underwriters or Merchant Bankers	Brokers	
Pricing Levels	Fixed	Varies to demand and supply	



## 7.1 THE PRIMARY MARKET

The primary market is a market in which securities are created. Businesses first offer new stocks and bonds to the public in this market. One illustration of a primary market is an initial public offering, or IPO. Through these deals, investors can purchase securities directly from the bank that handled the initial underwriting of a specific stock or bond. An IPO occurs when a private company issues stock or bond to the public for the first time.

For example, a company Hari Ltd hires five underwriting firms to determine the financial details of its IPO. The underwriters suggested that the issue price of the bond will be Rs.100 and coupon rate is 10%. At that point, investors can purchase the IPO straight from the issuing business for this sum.

This is the first opportunity that investors must contribute through IPO to a company through the purchase of its bond. A company's liability is created of the funds generated by the sale of its bond in the primary market.

## **Types of Primary Offering**

Companies who have already had securities enter the secondary market are able to raise more stock through an offering on the primary market which is called a right issue. Proportionate rights are granted to current investors depending on the shares they now possess, while new investments in freshly issued shares are available to others.

Preferential allocation and private placement are two more forms of primary market offerings for equities. Companies can sell directly to larger investors, including banks and hedge funds, through private placement without having to make their shares publicly traded. Conversely, preferential allotment provides shares at a unique price that isn't offered to the public to a limited group of investors (often hedge funds, banks, and mutual funds).

Like this, companies and governments looking to raise debt capital may decide to issue fresh bonds on the primary market, both short- and long-term. Coupon rates on newly issued bonds are set to reflect the prevailing interest rates at the time of issuance, which may differ from those on previously issued bonds.

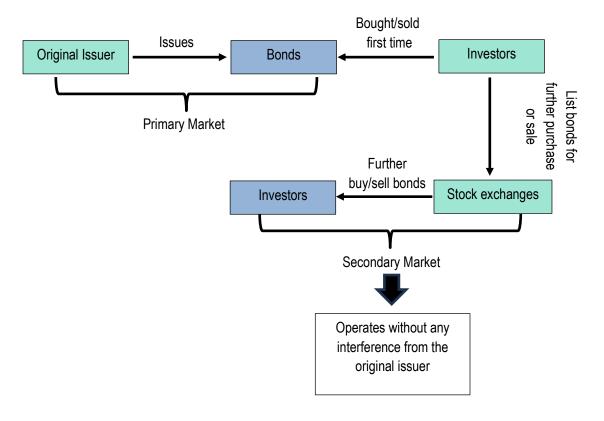
The primary market is where securities are bought directly from issuers, which is a crucial concept to grasp.

## 7.2 The Secondary Market

For buying equities, the secondary market is commonly referred to as the "stock market." This includes the National Stock Exchange (NSE), Bombay Stock Exchange (BSE), New York Stock Exchange (NYSE) and all major exchanges around the world. The fact that investors transact with one another is what makes the secondary market unique.

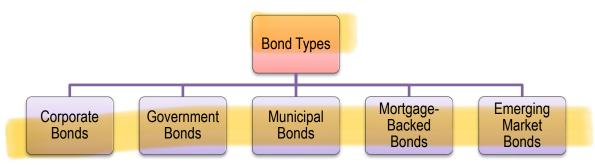
The secondary bond market is the market where bonds are bought and sold by investors. The revenues from the sale of bonds go to the counterparty, which could be a dealer or an investor, in contrast to the primary market where funds from investors go directly to the issuer. This is a significant distinction between the two markets. That is, investors exchange previously issued securities without the involvement of the issuing company in the secondary market.

For example, if you go to buy NHAI Bonds from marketplace, you are dealing only with another investor who owns bonds of NHAI. NHAI is not directly involved with the transaction.



## 8. TYPES OF BOND MARKETS

The general bond market can be segmented into the following bond classifications, each with its own set of attributes.



## 8.1 Corporate Bonds

Companies issue corporate bonds to raise money for various reasons, such as financing current operations, expanding product lines, or opening new manufacturing facilities. Corporate bonds are typically defined as longer-term financial securities with a minimum one-year maturity.

Generally, corporate bonds are categorized as high yield (often known as "junk") or investment grade. The credit rating given to the bond and its issuer serves as the basis for this classification. A bond with an investment grade rating is considered high-quality and has a low default risk. Bond rating firms like Fitch, Moody's, and Standard & Poor's use different designations, consisting of the upper and lowercase letters "A" and "B", to identify a bond's credit quality rating, for example- AAA, AA, BBB, BB, etc.

Junk bonds are bonds with a higher default risk than most bonds issued by governments and corporations. In exchange for purchasing a bond, an investor receives an obligation or promise to pay interest payments and the principal amount invested back. Junk bonds are issued by corporations that are having financial difficulties and run a high chance of defaulting—that is, failing to pay investors' principal amount and interest. High-yield bonds are another name for junk bonds because they require a higher yield to partially offset default risk. These bonds have credit ratings from S&P below BBB- or from Moody's below Baa.

In simple words, corporate bonds are nothing, but debt instruments issued by a company, the holder of which receives interest from the company periodically for a fixed period and gets back the principal along with the interest due at the end of the maturity period.

**Example-** Considering that you hold a 10% 5-year corporate bond issued by Aman Ltd with Face Value ₹ 100 and interest is paid annually:

#### Aman Ltd will

- Pay you ₹ 10 every year for 5 years.
- Redeem face value of the bond i.e. ₹100 + ₹ 10 accrued interest at the end of 5 years.

#### 8.2 Government Bonds

Incentives for purchasing government or sovereign bonds include periodic interest payments together with the payment of the face value shown on the bond certificate on the designated maturity date. For conservative investors, government bonds are appealing because of this feature. Sovereign debt bonds are often regarded as the least hazardous kind of bonds because their backing

comes from a government with the authority to impose taxes on its people or create new money to make the payments.

In India, state governments solely issue bonds or dated securities known as State Development Loans (SDLs), while the central government issues both treasury bills and bonds or dated securities. G-Secs are referred to as risk-free gilt-edged instruments since there is almost no default risk associated with them. G-Securities are securities that are paid on face value and have a fixed or variable coupon (interest rate). Securities typically have tenors of five to forty years.

## 8.3 Municipal Bonds

Municipal bonds are locally issued by states, cities, special-purpose districts, public utility districts, school districts, publicly owned airports and seaports, and other government-owned entities that seek to raise cash to fund various projects.

Municipal bonds are commonly tax-free at the central level and can be tax-exempt at state or local tax levels too, making them attractive to qualified tax-conscious investors.

Municipal bonds are of two main types. A general obligation bond (GO Bonds) is issued by governmental entities and not backed by revenue from a specific project, such as a toll road. Some GO bonds are backed by dedicated property taxes, others are payable from general funds. A revenue bond instead secures principal and interest payments through the issuer or sales, fuel, hotel occupancy, or other taxes. When a municipality is a reasonable issuer of bonds, a third party covers interest and principal payments.

## 8.4 **Emerging Market Bonds**

Emerging market bonds are fixed-income investments issued by the governments or corporations of countries that are not considered to be developed nations.

These are bonds issued by governments and companies located in emerging market economies, providing much greater growth opportunities, but also greater risk, than domestic or developed bond markets.

Today, bonds are issued in developing nations and by corporations located in these countries all over the world, including from Asia, Latin America, Eastern Europe, Africa, and the Middle East or particularly countries like- Argentina, Brazil, Mexico, etc.

Investing in developing market bonds entails conventional risks associated with all debt offerings, including the issuer's ability to fulfil payment obligations and the issuer's financial or economic performance. But because emerging countries can be politically and economically unstable, these

dangers are increased. While emerging economies have made significant progress in mitigating sovereign and country risks, the likelihood of socioeconomic instability remains higher in these countries than in developed ones, especially the United States.

Emerging markets also pose other cross-border risks, including exchange rate fluctuations and currency devaluations. If a bond is issued in a local currency, the rate of the INR versus that currency can positively or negatively affect your yield. When that local currency is strong compared to the INR, your returns will be positively affected, while a weak local currency adversely affects the exchange rate and negatively affects the yield.

#### For Example-

Assume you purchased a Mexican emerging market bond. The bond has a 10-year maturity and is issued by Mexico (MBONOS). As of October 2022, the face value is 100 pesos, or around 500 rupees. Interest is paid to you every six months, and ten years later, you get your main investment back plus all interest accrued up to that point.



## 9. BOND MARKET STRATEGIES

Investors use majorly three strategies for analysing and investing in Bonds Market. They are as follows: -

## **Active Strategy**

The first method is called Active method, and its only goal is to generate larger returns over an extended period. As a result, investors typically hold onto their investments for a longer period and attempt to profit from changes in interest rates, yield curve shifts, and variations brought on by changes in credit ratings.

## **Passive Strategy**

Investors who use the passive strategy would rather hold onto their bonds until they mature. The goal is to regularly generate respectable profits with the highest level of safety without engaging in frequent trading. Here, the goal is to minimize costs while matching cash flows to liabilities.

## **Hybrid Strategy**

It combines both active and passive strategies, as the name implies. It gets over both strategies' drawbacks.



## 10. BOND MARKET INDEX

An index is a way to consistently monitor the performance of a collection of assets. Typically, indexes track the performance of a group of securities meant to mimic a specific segment of the market.

A bond index or bond market index is a method of measuring the investment performance and characteristics of the bond market. There are numerous indices of differing construction that are designed to measure the aggregate bond market and its various sectors (government, municipal, corporate, etc.) A bond index is computed from the change in market prices, and, in the case of a total return index, the interest payments associated with selected bonds over a specified period of time.

Bond indexes or indices serve as a benchmark for investors and portfolio managers to assess the relative performance of actively managed bond portfolios, which aim to surpass the index, and passively managed bond portfolios, which are structured to equalize the index's performance. Bond indices are also used in determining the compensation of those who manage bond portfolios on a performance-fee basis.

An index is a mathematical construct, so it may not be invested in directly. But many mutual funds and exchange traded funds attempt to "track" an index, and those funds that do not may be judged against those which do.

## 10.1 History

Total return bond indices were first developed in the 1970s, at which point they measured only U.S. investment grade bonds. Indices for high-yield (below investment grade) U.S. bonds and non-U.S. government bonds were developed in the mid-1980s. During this period, it became increasingly apparent that most portfolio managers were unable to outperform the bond market. This resulted in the development of passively managed bond index funds, and the proliferation of indices themselves. (Source: Wikipedia)

#### 10.2 Characteristics

Characteristics that are meaningful in understanding bond indices include:

The sample of securities: The number of securities in the index, and the criteria used to determine the specific bonds included in the index.

- Market sector measured: Indices can be composed of government bonds, municipal bonds, corporate bonds. Indices may also consist of bonds within a certain range of maturities, e.g. long term, intermediate term, etc.
- Weighting of returns: The impact of each individual issue's return on the overall index may be weighted by market capitalization (the market value of the security), or equal-weighted for each security. Most bond indices are weighted by market capitalization. This results in the "bums" problem, in which less creditworthy issuers with a lot of outstanding debt constitute a larger part of the index than more creditworthy ones with less debt.
- Quality of price data: The market price used for each bond in the index may be based on actual transactions, a brokerage firm's estimate, or a computer model.
- Reinvestment assumptions: What does the rate of return calculation assume regarding reinvestment of periodic interest payments from the bonds in the index?

(Source: Wikipedia)

## 10.3 Indices and Passive Investment Management

In the 1970s, total return bond indices were created and were limited to measuring investment-grade U.S. bonds. The mid-1980s saw the development of indexes for both non-U.S. government bonds and high-yield (below investment grade) U.S. bonds. The fact that most portfolio managers couldn't beat the bond market during this time grew more and more evident. This led to the growth of indexes themselves and the creation of passively managed bond index funds.

Passive fund managers typically buy a portion of the stocks that make up their benchmark index. However, the performance of their entire portfolio is compared to the index. Passive bond fund managers have a harder time matching the performance of their benchmark than their stock index fund counterparts since bond indices usually incorporate more securities than stock indexes. The market's average duration is frequently not the best duration for a particular portfolio. Bond futures can be used to replicate the characteristics of an index by matching the bond index's duration.

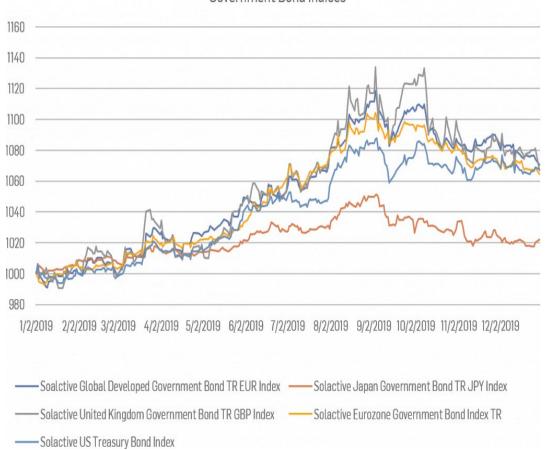
Broker/dealer companies have developed customized bond market indices of their own. For the company, these indices may open new revenue streams. The index's inventor will charge a fee for the index data required to build up and rebalance a portfolio linked to its exclusive index, but they also anticipate that their clients will execute most of the trades through their trading desk.

Customized indices are occasionally created by investment managers to satisfy the needs and long-term investing objectives of their clients.

### For example-

- ♦ Nifty Bharat Bond Index
- ♦ Nifty 8–13-year G-Sec Index
- ♦ Nifty 1D Rate Index
- ♦ Nifty CPSE Bond Plus SDL Sep 2024 50:50 Index
- ♦ Nifty AAA Bond Plus SDL Apr 2026 50:50 Index
- ♦ Nifty PSU Bond Plus SDL Apr 2026 50:50 Index
- ♦ Nifty SDL Apr 2026 Top 20 Equal Weight Index

#### Government Bond Indices



## 11. BOND MARKET VS. STOCK MARKET

Bonds differ from stocks in several ways. Bonds represent debt financing, while stocks equity financing. Bonds are a form of credit whereby the borrower (i.e. bond issuer) must repay the bond owner's principal plus additional interest along the way. Stocks do not entitle the shareholder to any return of capital, nor must they pay interest (or dividends). Because of the legal protections and guarantees in a bond stating repayment to creditors, bonds are typically less risky than stocks and therefore command lower expected returns than stocks.

Both stock and bond markets tend to be very active and liquid. Bond prices, however, tend to be very sensitive to interest rate changes, with their prices varying inversely to interest rate moves. Stock prices, on the other hand, are more sensitive to changes in future profitability and growth potential.

Basis for comparison	Stock Market	Bond Market	
Nature of investment	Investment in shares.	Investment in loans.	
Risk Involved	Riskier than the debt market	he debt market Less risky	
Nature of Returns	Reaps higher returns	Lower returns than the equity market	
Type of Earning	Dividends	Interest	
Volatility	More volatile than debt market	Less volatility	

## Let's understand this with the help of an example -

Suppose there is an MBA Burger Wala Stall (MBW) that recently opened. The founder of the MBW is receiving much more demand than anticipated and wants to take advantage of the situation by opening a second Stall of MBW. The second Stall will cost around ₹ 1,00,000/- to set up and running. However, the founder does not have money on hand to fund the second Stall even though he knows it will be successful.

The founder can go to various investors and pitch the success of his business to the investors to raise money for the second Stall.

The founder can raise money through a bond, by borrowing ₹1,00,000/- from investors and promising to pay back ₹1,00,000/- in five years plus an additional 10% interest. The founder is hoping that the Stall will be successful, and he will be able to make more than ₹1,10,000, so he can pay back the loan plus interest and keep the excess for himself.

The founder can also raise the funds through a stock by issuing 9000 shares to himself and selling 1000 shares to other people for ₹ 1,00,000/-. Each of the shares represents ownership of the company.

The shareholders are entitled to 10% of all the MBW Stall's future earnings, but the founder does not need to pay back the initial amount raised from investors, which contrasts with bonds.

If MBW goes bankrupt, the founder would owe money to the bondholders first, before receiving anything himself. It is because bondholders have seniority and extra protection from bankruptcy risk.

## 12. BOND RATINGS

The creditworthiness of corporate or government bonds is indicated by bond ratings. The ratings, which offer assessments of a bond issuer's financial stability and ability to repay the bond's principal and interest in accordance with the terms of the contract, are released by credit rating organizations.

S&P, Moody's, and Fitch, the three private independent rating agencies, own nearly 95% of the market share in the bond rating industry. Every rating agency has a different grading scheme. All rating systems, however, categorize bond investments according to risk (from default to best quality) and quality grade (investment grade, non-investment grade, or not rated). Although they offer low yields, investment-grade bonds are regarded as safe investments with little default risk. Bonds that aren't investment grade carry greater risk, but their yield is higher.

Professional analysts' bond ratings offer institutional and individual investors a trustworthy resource for decision-making.

## 12.1 S&P Global Bond Ratings EXM

As one of the three Nationally Recognized Statistical Rating Organizations (NRSRO) certified by the U.S. Securities and Exchange Commission, Standard & Poor's (S&P) is the oldest credit rating organization. The organization covers over a million credit ratings for securities, structured finance organizations, and corporate and government bonds.

S&P offers bond ratings for both the short and long terms. The evaluation of a security's default probability is the primary objective of the S&P credit rating.

Rating	Description	Grade
AAA	Extremely strong capacity to meet financial obligations.	Investment
AA	Very strong capacity to meet financial obligations.	Investment
A	Strong capacity to meet financial obligations, but somewhat susceptible to adverse economic conditions and changes in circumstances.	Investment
ВВВ	Adequate capacity to meet financial commitments, but more subject to adverse economic conditions.	Investment
ВВ	Less vulnerable in the near-term but faces major ongoing uncertainties to adverse business, financial and economic conditions.	Speculative
В	More vulnerable to adverse business, financial and economic conditions but currently has the capacity to meet financial commitments.	Speculative
CCC	Currently vulnerable and dependent on favorable business, financial and economic conditions to meet financial commitments.	Speculative
CC	Highly vulnerable; default has not yet occurred but is expected to be a virtual certainty.	Speculative
С	Currently highly vulnerable to non-payment, and ultimate recovery is expected to be lower than that of higher rated obligations.	Speculative
D	Payment on a financial commitment or breach of an imputed promise; also used when a bankruptcy petition has been filed or similar action taken.	Speculative
NR	The security was not rated.	-

## 12.2 Moody's Investors Service Bond Ratings

Another credit and bond rating company recognized by NRSRO is Moody's. In addition to more than 135 sovereign countries, the company serves 4,000 financial institutions, 5,000 non-financial corporate issuers, 18,000 public finance issuers, 11,000 structured finance transactions, and 1,000 issuers of infrastructure and project finance. The assessment of expected losses in the event of a default is the main objective of Moody's ratings, in contrast to S&P and Fitch.

Rating	Description	Grade
Aaa	Obligations of the highest quality, with minimal risk.	Investment
Aa	Obligations of high quality, with very low credit risk.	Investment
Α	Obligations of upper-medium-grade, with low credit risk.	Investment
Ваа	Obligations of moderate credit risk that may possess speculative characteristics.	Investment
Ва	Obligations with speculative elements that are subject to substantial credit risk.	Speculative
В	Obligations are considered speculative that are subject to high credit risk.	Speculative
Caa	Obligations of poor standing and are subject to very high credit risk.	Speculative
Ca	Highly speculative obligations that are likely in, or very near, default, with some prospect of recovery in principal and interest.	Speculative
С	Lowest-rate class of obligations that are typically in default, with little prospect of recovery of principal and interest.	

The current rating categories, which range from Aa to Caa, can have the number modifiers applied to them. The number 1 denotes the obligation's ranking at the top end of the rating category, the number 2 its mid-range ranking, and the number 3 its bottom end.

## 12.3 Fitch Ratings

Out of the "Big Three" credit rating organizations, Fitch is the smallest. Financial institutions, insurance providers, sovereigns, corporate finance, structured finance, Islamic finance, and international infrastructure are just a few of the industries the firm works with. Fitch's market share is, nevertheless, smaller than that of its more powerful competitors.

Like S&P, Fitch's rating is primarily used to evaluate the likelihood of a securities defaulting. It also makes use of an S&P-style bond rating system.

	xtremely strong capacity to meet financial obligations.	Investment
^^		
AA VE	Very strong capacity to meet financial obligations.	
SU	Strong capacity to meet financial obligations, but somewhat susceptible to adverse economic conditions and changes in circumstances.	
	dequate capacity to meet financial commitments, but more ubject to adverse economic conditions.	Investment
uı	ess vulnerable in the near-term but faces major ongoing incertainties to adverse business, financial and economic onditions.	Speculative
cc	Nore vulnerable to adverse business, financial and economic onditions but currently has the capacity to meet financial ommitments.	Speculative
	currently vulnerable and dependent on favorable business, inancial and economic conditions to meet financial commitments.	Speculative
	lighly vulnerable; default has not yet occurred but is expected to be a virtual certainty.	Speculative
re	Currently highly vulnerable to non-payment, and ultimate ecovery is expected to be lower than that of higher rated obligations.	Speculative
рі	layment on a financial commitment or breach of an imputed promise; also used when a bankruptcy petition has been filed or imilar action taken.	Speculative
NR Th	he security was not rated.	-

In the US and several European nations, credit rating organizations are heavily involved in credit laws and regulations. Furthermore, rating agencies have a big impact on the world's capital markets because they give investors an evaluation of assets. For investors, credit ratings continue to be one of the most important sources of information about credit research and credit risk.

Investors should not, however, only depend on the credit ratings that credit agencies provide. The strong ties between credit rating agencies and major financial institutions may lead to conflicts of interest, as the global financial crisis of 2007–2008 demonstrated. For instance, some mortgage-backed securities that were on the verge of being classified as junk securities received the highest ratings from credit rating organizations.

## **TEST YOUR KNOWLEDGE**

## **Multiple Choice Questions (MCQs)**

- 1. The bonds issued by Central Government, state government and a corporate body are respectively named as ...........
  - (a) State Bond, Sovereign Bond, Corporate Bond
  - (b) National Bond, Sovereign Bond, Corporate Bond
  - (c) Sovereign Bond, State Bond, Corporate Bond
  - (d) None of the above
- 2. When the required yield on a bond falls below its coupon rate, the bond ...........
  - (a) sells at par
  - (b) sells at discount
  - (c) sells at premium
  - (d) None of the above
- 3. Default risk is lower in ......
  - (a) Treasury bills
  - (b) Government bonds
  - (c) ICICI bonds
  - (d) SBI bonds
- 4. Bonds are an attractive form of Investment. Which of the following statements is false?
  - (a) The longer the time to maturity, the less sensitive the market price of the bond becomes to changes in prevailing market rates.
  - (b) Interest Rates and Bond Values are inversely related and in a non-linear way.
  - (c) The higher the coupon rate, the less sensitive the market price of the bond becomes to changes in prevailing market rates.
  - (d) When the prevailing market interest rate is higher than the coupon rate, the bond will be traded at a discount.

5.		orate bonds are less marketable than money market instruments and corporate equities use					
	(a)	corporate bonds are long-term securities, which tend to be riskier and less marketable					
	(b)	corporate bonds are in fact not less marketable than money market instruments and corporate equities.					
	(c)	the former are for smaller denominations.					
	(d)	corporate bonds are not tax exempt.					
6.	In wh	nich the place new stocks and bonds are created and sold to investors?					
	(a)	Primary market					
	(b)	Secondary market					
	(c)	Auction market					
	(d)	Stock exchange					
7.	Gove	Government securities with a period of more than 1 year are called					
	(a)	Government bonds					
	(b)	Treasury bills					
	(c)	Bill of exchange					
	(d)	Commercial Papers					
8.	The	call-option value of a callable bond is likely to be high when					
	(a)	interest rates are low and expected to remain low					
	(b)	interest rates are high and expected to remain high					
	(c)	interest rates are volatile					
	(d)	markets are inefficient					
9.	Whic	h of the following is a measure of interest rate sensitivity of a bond?					
	(a)	Duration					
	(b)	YTM					
	(c)	Current yield					
	(d)	None of the above					

10.	Whic	h among the following financial instruments is dealt with by Primary Dealers?			
	(a)	Bonds			
	(b)	Mutual Funds			
	(c)	Government securities			
	(d)	Debentures			
11.	Irrede	eemable bond is also known as			
	(a)	Fully convertible bond			
	(b)	Perpetual bond			
	(c)	Partially convertible bond			
	(d)	None of the above			
12.	Float	ing rate bonds carry			
	(a)	Fixed rate of interest			
	(b)	Varying rate of interest			
	(c)	Zero rate of interest			
	(d)	None of the above			
13.	Wher	n the risk perception is high, investor prefers to get the bond at			
	(a)	Higher rate			
	(b <mark>)</mark>	Reduced rate			
	(c)	Par rate			
	(d)	None of the above			
14.	If the maturity period of bond is more, investor prefers				
	(a)	Lesser returns			
	(b)	Higher returns			
	(c)	Zero returns			
	(d)	None of the above			

15.		st rate that every bond/debenture carries on its face value and is fixed at the time of is called			
	(a)	Bond rate			
	(b)	Repo rate			
	(c)	Coupon rate			
	(d)	All of the above			
16.	Marke	etability risk of bond is			
	(a)	The market risk which affect all the bonds			
	(b)	Va <mark>riation in return caused by d</mark> ifficulty in selling stocks			
	(c)	The failure to pay the agreed value of the bond by the user			
	(d)	A and C			
17.	Bonds	s issued at a discount and redeemed prior to its maturity is called			
	(a)	Mortgage bonds			
	(b)	Zero coupon bonds			
	(c)	Convertible bonds			
	(d)	All of the above			
18.	A bond that can be redeemed prior to its maturity is called				
	(a)	Callable bonds			
	(b)	Option bonds			
	(c)	Step-up bonds			
	(d)	Non-callable bonds			
19.	Value the lif invest	Parker Incorporation has outstanding, high yield Bond with following features: Face \$20,000 Coupon 10% Maturity Period 6 Years. Special Feature Company can extend e of Bond to 12 years. Presently the interest rate on the equivalent Bond is 8%. If an or expects that interest will be 8%, six years from now then the amount he should pay s bond now is			

21,846

(a)

	(c)	20,586
	(d)	21,800
20.	intere	suppose in above question, based on that expectation, he invests in the Bond, but st rate turns out to be 12%, six years from now, then his potential loss/ gain will be in comparison to the above question.
	(a)	4496 loss
	(b)	2284 loss
	(c)	3484 profit
	(d)	3484 loss
21.	Bond	duration, in general, measures the to a change in interest rates.
	(a)	sensitivity of the yield
	(b)	sensitivity of the yield to maturity
	(c)	sensitivity of the full price
	(d)	sensitivity of the convexity
22.		nal value of 10% bonds issued by a company is `100. The bonds are redeemable at `the end of year 5. The value of the bond if required yield is 5%.
	(a)	131.047
	(b)	129.48
	(c)	112.24
	(d)	125.42
23.	18%,	vestor is considering the purchase of the following Bond: Face value `100, Coupon rate Maturity 3 years. If he wants a yield of 20% is the maximum price he should ady to pay for.
	(a)	95.75
	(b)	95.81

(b)

22,866

	(c)	96.82
	(d)	97.64
24.	In abo	ve question, if the Bond is selling for `97.80, would be his yield.
	(a)	18%
	(b)	19%
	(c)	20%
	(d)	21%
25.	If the I	oonds already issued by the private sector are cancelled, it indicates that

- - Markets expect higher yields as fund raising from the private sector is likely to be (a) curtailed.
  - (b) Markets expect lower yields as fund raising from the private sector is likely to be curtailed.
  - (c) Markets expect lower yields as fund raising from the private sector is likely to be increased.
  - (d) None of the above.
- 26. If RBI decides to increase interest rates, the bond's price which is offering similar return as the current interest rates would ....... because its coupon payment is less attractive now on a relative basis. Therefore, investors would look for new bonds with ........
  - (a) rise; higher risk-free return
  - fall; lower risk-free return (b)
  - (c) fall; higher risk-free return
  - (d) rise; lower risk-free return

## **Theoretical Questions**

- 1. What is a Bond?
- 2. Illustrate the concept of yield curve with suitable diagrams.
- 3. Discuss the various types of bonds.

- 4. Explain the various types of risks in bonds.
- 5. What is the relationship between interest rates and the price of a bond?

### **ANSWERS/SOLUTIONS**

#### Answers to the MCQ based Questions.

1.	(c)	2.	(c)	3.	(a)	4.	(a)	5.	(a)
6.	(a)	7.	(a)	8.	(c)	9.	(a)	10.	(c)
11.	(b)	12.	(b)	13.	(b)	14.	(b)	15.	(c)
16.	(b)	17.	(b)	18.	(a)	19.	(a)	20.	(d)
21.	(c)	22.	(a)	23.	(b)	24.	(b)	25.	(a)
26.	(c)								

## **Explanations to the practical questions in the MCQs**

- 19. (a) If the current interest rate is 8%, the company will not extend the duration of Bond and the maximum amount the investor would be ready to pay will be: = \$2,000 PVIAF (8%, 6) + \$20,000 PVIF (8%, 6) = \$2,000 x 4.623 + \$20,000 x 0.630 = \$9,246 + \$ 12,600 = \$21,846.
- 20. (d) If the current interest rate is 12%, the company will extend the duration of the Bond. After six years the value of a Bond will be = \$2,000 PVIAF (12%, 6) + \$20,000 PVIF (12%, 6) = \$2,000 x 4.111 + \$20,000 x 0.507 = \$8,222 + \$10,140 = \$18,362 Thus, potential loss will be \$18,362 \$21,846 = \$3,484.
- 22. (a) Required yield rate = 5%

Year	Cash Flow ₹	DF (5%)	Present Value ₹
1-5	10	4.3295	43.295
5	87.752		
	Value of bond		131.047

**23. (b)** Calculation of Maximum price Bo = ₹ 18 × PVIFA (20%,3) + ₹ 100 × PVIF (20%,3) = ₹ 18 × 2.106 + ₹ 100 × 0.579 = ₹ 37.908 + ₹ 57.9 = ₹ 95.808

#### 24. (b) Calculation of yield

At 19% the value = ₹ 18 × PVIFA (19%,3) + 100 × PVIF (19%,3)

If the bond is selling at `97.80, which is more than the fair value, the YTM of the bond would be less than 20%. This value is almost equal to the amount price of `97.80. Therefore, the YTM of the bond would be 19%.

Alternatively,

YTM = 
$$\frac{₹ 18 + ₹ 100 - ₹ 97.8}{\frac{₹ 100 + ₹ 97.8}{2}} = 0.1894 \text{ or } 18.94\% \text{ say } 19\%$$

#### **Answers to the Theoretical Questions**

- 1. Please refer to paragraph 2
- 2. Please refer to paragraph 2 (x)
- 3. Please refer to paragraph 4
- 4. Please refer to paragraph 5
- 5. Please refer to paragraph 6

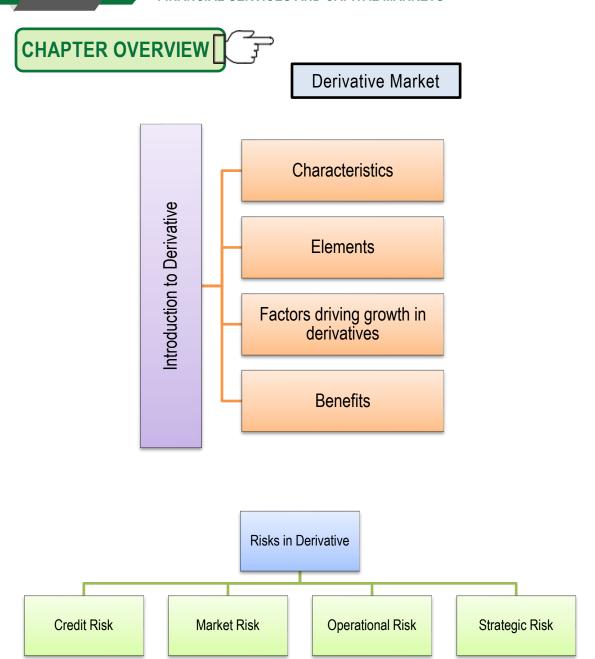
## **DERIVATIVE MARKET**

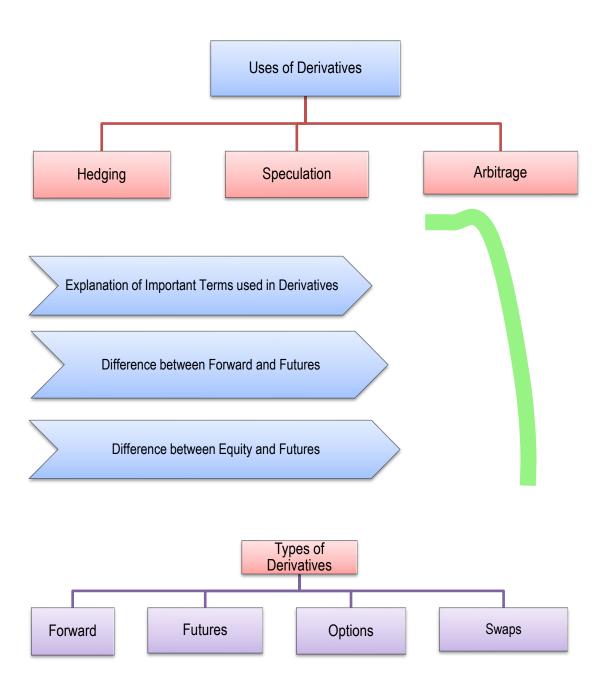


## **LEARNING OUTCOMES**

## By the end of this chapter, students shall be able to understand:

- Introduction to Derivatives
- Explanation of important terms used In Derivatives
- Difference between Forward and Futures
- □ Difference between Equity and Futures contracts
- Types of Derivatives
  - Forwards
  - Futures
  - Options
  - Swaps

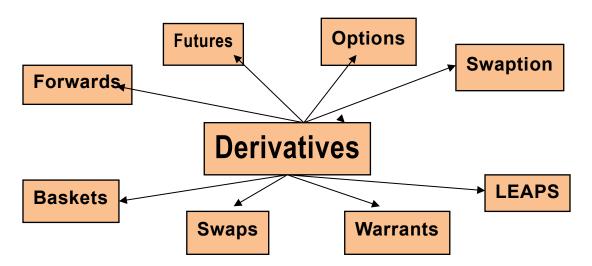






## I. INTRODUCTION

A derivative is an instrument which derives its value from an underlying instrument. The underlying instrument can be anything be it any asset, index, commodity, interest rate bond, debenture etc. An important thing to understand here is that the price of the derivative is decided by the movement/happening/value of some other instrument which is called "underlying".



#### 1.1 Characteristics of Derivatives:

- It is a contract which derives its value from an underlying asset i.e., their value depends on the movement in the prices of their underlying.
- It is a price discovery mechanism. Prices of derivative instruments such as futures and forwards can be used to determine what the market expects future spot prices to be.
- It is a vehicle for transferring risk.
- > It is used as a hedging instrument.
- It is a mechanism for speculation and arbitrage.
- It is a leveraged Instrument which increases its potential risks and rewards.
- > Settlement of obligations takes place at a future date (expiry date/maturity period).
- It can be cash / delivery settled, depending upon the derivative forward or future.

#### 1.2 Elements of Derivatives contract

A legally binding contract

- > There are two parties: buyer & seller
- > There is an underlying asset
- The contract is to be executed at a future date
- Future price (decided at the time of contract)
- Transfer of risk

## 1.3 Factors which drive growth in derivatives:

- > High volatility of assets prices in financial markets
- Increased integration of national markets with international markets
- > Increased advancement in communication facilities
- > Development of more sophisticated risk management tools
- > Innovations in the derivative markets

#### 1.4 Benefits of Derivatives:

- Price Risk Management buying, selling of risk.
- Price Discovery
- ➤ High Financial Leverage
- Beneficial to Banks & Financial Institutions
- Lower Transaction Cost
- Operational advantages
- Market efficiency
- > Ease of speculation

#### 1.5 Risks in Derivatives:

Derivatives, being leveraged instruments, have risks like counterparty risk (default by counterparty), price risk (loss on position because of price move), liquidity risk (inability to exit from a position), legal or regulatory risk (enforceability of contracts), operational risk (fraud, inadequate documentation, improper execution, etc.) and may not be an apt instrument for a person with limited resources, limited trading experience and low risk appetite. One should carefully read the Model Risk Disclosure Document, given by the broker to his clients at the time of signing the agreement. The Model Risk Disclosure Document is

issued by the members of Exchanges and contains important information on trading in Equities and F&O Segments of exchanges. Some other risks associated with Derivatives are:

- Credit risk (only OTC contracts)
- Market risk

#### Operational risk

- Settlement risk
- Legal risk
- Risk of error
- Strategic risk

#### 1.6 Uses of Derivatives:

#### 1. Hedging

Hedging is a tool to minimize risk. Risk means adverse deviation from the expectations which can occur due to "N" numbers of factors. Normally it is done to reduce the price risk, therefore hedging is taking a position in an instrument to protect against adverse price movement of another asset class. Normally, a hedge consists of taking the opposite position in a related security or in a derivative security based on the asset to be hedged.

For example, If you have long position in Reliance @ 2350 (Qty 250) and you are worried that the price may come down due to an upcoming event say election results, important AGM of company, big policy announcement by the company, important RBI policy or any other event which may have adverse impact on the market and specially on Reliance. Now, you would like to protect yourself and would like to buy some protection with a wish that if price goes up you enjoy the up move and if price comes down that protection protects you from the fall in price. Taking that protection in the shape of buying "PUT" of Reliance is known as Hedging i.e. protection against unexpected future risk of unfavorable movement.

#### 2. Speculation:

Speculation is a transaction which is settled without delivery. Speculation is buying and selling of any assets with a view to making profits through the price movement of the asset class without the intention of taking delivery of the same. Thus, intraday transactions are speculative transactions, because they are settled without delivery

i.e. only the difference in amounts are settled. For understanding only the intraday transactions of SPOT markets are known as speculative transactions.

### 3. Arbitrage

Arbitrage is the simultaneous purchase and sale of the same or similar asset in different markets or instruments to profit from difference in prices. It tries to capture price variations in identical instruments in different exchanges or similar financial instruments in different markets or in different forms. It can be possible in any asset class. Normally computer programs known as Algo's are used to exploit the price differences or inefficiencies wherever they exist.

**Example: 1** If price of a Stock in National Stock Exchange (NSE) is at 101 and at the same time price of the same stock in Bombay Stock Exchange (BSE) is say 102, now, if one buys the stock in NSE and sells at BSE at the same time to lock the profit of ₹ 1 per share is known as arbitrage. The benefit of arbitrage is that the person doing it gets fixed (locked) profit and for the market as a whole the discrepancy of price evaporates because of more demand in NSE (i.e. the exchange where the price is low) and more supply in BSE (i.e. where the price is high).

**Example 2**: If the spot price of Axis Bank is ₹ 1019 and the price of Axis Bank current month future is trading at ₹ 1038, there is an arbitrage opportunity available if one buys spot of Axis Bank (Qty. equal to lot size of future) @ ₹ 1019 and simultaneously sells 1 lot of Future of Axis Bank @ ₹ 1038. Because on expiry both spot and future will be at one price (i.e. future expires at spot rate on the date and time of expiry), thus, profit of ₹ 19 per share is locked by the person doing arbitrage, if, he/she closes its both, spot and future positions on the date and time of expiry.

# 2. EXPLANATION OF IMPORTANT TERMS USED IN DERIVATIVES:

- Basis: In the context of financial futures, basis is defined as the difference between the Spot price and Futures price. If the Futures price is higher than Spot price it is termed as Premium and if the Spot price is higher than the Futures price it is termed as Discount.
- 2. Cost of carry: The relationship between futures prices and spot prices can be summarized in terms of what is known as the cost of carry. This measures the storage cost plus the interest that is paid to finance the asset less the income earned on the asset. For example

Particulars	Spot	Future
Price	500	504
Today's date	Sept 08, 2023	-
Lot Size	-	1000
Expiry date	-	Sept 28, 2023

If risk free rate of interest prevailing in the market is @7% p.a. then, the interest amount on ₹ 5,00,000 (i.e. 500\*1000 lot size) for 21 days shall be (5,00,000\*7/100)\*21/365 = ₹ 2014 (approx.). Thus, the future shall trade with a premium of ₹ 4 (i.e. 2014/500). As the time approaches expiry, the premium will gradually come down and, on the date and time of expiry, the premium will become zero (i.e. the futures instrument will expire at spot price)

- 3. Initial margin: The amount that must be deposited at the time of entering a futures contract as security for the buy or sell position is known as the initial margin. It is refundable in nature.
- **4. Spot price**: the price at which an asset trades in the spot market.
- **5. Futures price**: the price at which the futures contract trades in the futures market.
- **6. Contract cycle**: the period over which a contract trades.
- 7. **Expiry date**: this is the last day on which the contract will be traded, at the end of which it will cease to exist.
- **8. Contract size**: the amount of assets that must be delivered under one contract. Also called as lot size.
- 9. Mark to Market Margin: It is calculated on a daily basis. The logic behind it is that both buy and sell position holder has same probability of risk for their positions say they entered a position to buy and sell an instrument at a price of ₹ 500 and Lot size 1000 with a 20% margin. They both will pay the margin of ₹ 1,00,000 (i.e., 20% of 500\*1000). Now, if at the end of the day the price closed at 490 then the buyer is at a loss of ₹ 10 per share i.e., 10\*1000 = ₹ 10,000 total losses. Mark to Market is bringing all positions at the closing price of the day and give the loss if any and take away the profit if any. In this case, Exchanges want a margin of 20% @490 i.e., closing price. Thus, Exchange does two things:

- (a) Buyer shall bear the Loss of ₹ 10,000 and Seller will gain the profit of ₹ 10,000.
- (b) Exchange will pay back/release the margin collected earlier on ₹ 500 and now will calculate fresh margin @ 490 (closing price) and will collect the same i.e., 490\*1000\*20% = 98,000. The details are as below:

Particulars	Buyer	Seller
Pay Loss	(10,000)	NA
Receive Profit	NA	10,000
Margin Release	1,00,000	1,00,000
Fresh Margin	(98,000)	(98,000)

All the positions are marked to market price. So, now the buy and sell positions are created at a closing price of 490. Therefore, if on next day the price closes at 494 then:

Particulars	Buyer	Seller
Pay Loss	NA	4,000 (4*1000)
Receive Profit	4,000 (4*1000)	NA
Margin Release	98,000	98,000
Fresh Margin	(98,800)	(98,800)

Now again the positions are brought at closing price i.e., ₹ 494. As if they have created the position at ₹ 494. Thus, in Mark to Market, the prices are marked to closing price and all the profits and losses are realized through transactions/entries in ledger account and margin is also calculated daily at latest closing price.

Maintenance margin: This is somewhat lower than the initial margin. This is set to ensure that the balance in the margin account never becomes negative. If the balance in the margin account falls below the maintenance margin, the investor receives a margin call and is expected to top up the margin account to the initial margin level before trading commences on the next day.



# 3. DIFFERENCE BETWEEN FORWARD AND FUTURES:

	Forward	Futures
Meaning	A customised agreement to buy or sell an asset at a future date.	Standardised agreement to buy or sell an asset at a future date through an exchange.
Trading Mechanism	Over the counter	Exchange Traded
Market Place	Traded on phone	Centralized exchange floor electronically networked.
Contract Size	Non-standardized, tailor made sizes	Standardized sizes decided by derivative exchange
Contract maturity / Payment date	Mutually decided by the parties to the contract	Fixed by derivatives exchange
Who can buy or Sell	Between 2 parties who know each other	Anyone, buyer & seller need not know each other
Regulation	Usually, self-regulatory	Regulated by derivatives exchange
Delivery & settlement date	On any day mutually decided by the parties	On the date fixed by the derivative exchange
Extent of Hedge	Being non-standardized and tailor-made contract, they provide exact hedge	Being standardized contract with specified lot size they are either over the hedge, under hedge or exact hedge.
Counter party	Buyer and seller	Clearing house of derivative exchange
Counter party risk	High	No Counterparty risk as exchange clearing house is the counter party
Liquidity	Illiquid. Not listed on exchange, so they are not tradable	Liquid. They are tradable since they are listed on exchange
Valuation	They are not traded, no standard valuation	Marked to market, since they are traded on daily basis

Margin requirement	No such requirement	Margin is required
Settlement method	Settled by actual delivery of underlying. Some are cancelled at cost.	Cash Settled or Physical Settlement by and through derivative exchange.

# 4. DIFFERENCE BETWEEN EQUITY AND FUTURES CONTRACTS

	Equity	Futures
Purpose	The main purpose of equities markets is to create capital.	Futures markets exist to facilitate risk shifting and price discovery.
Short positions	Short positions can only be taken on intraday Basis.	There is a short for every long position.
Margin	The buyer pays the full price for the purchase.	Involves paying different margins like initial + mark to market margins
Right to Vote in Company	Provide right to attend and vote in Meetings of the company	Does not provide any such right
Maturity	They are issued without a termination date	Have pre specified expiry date
Circuits	Have circuits	Do not have circuits
Ownership	Buyer becomes owner of the percent of shares bought	Does not provide ownership
Dividend	Right to receive Dividend	No such Right exists as no ownership right.

## 5. TYPES OF DERIVATIVES

## 5.1 Forward:

Forward contracts have been there for a long time but were not referred to by their name. They are present in every field of our life. **For example**:

- 1. When you go to book a new car, you negotiate and fix the price today & agree to take the delivery on some other day in future. It is a forward contract because irrespective of the price at future date your will buy at a predetermined rate.
- You go to a Gold Smith and select the ornament design and ask him to make the same as per your size. Further, you decide the price of Gold today and agree to take delivery at some other day in future. It is a forward contract because irrespective of the price at the future date you will buy at a predetermined rate.
  - Now, what if on the date of delivery of the Car and Gold as mentioned above the price increased drastically? You will insist that the price was decided in advance on the date of the contract and will make sure that the item is delivered to you at the agreed price, because it is your right to receive the same at the agreed price. This is what is called Forward contract.
- 3. Another example is that you have bought a Plant and machinery from USA at ₹ 1,00,000 USD and the billing is in USD. The current rate of USD/INR is 82 (i.e., 82 Rupees per US Dollar). You agree to make the payment in 3 months from now. This is a Forward contract. Now, you are worried about the rise in USD in those 3 months, because in that scenario you will end up paying higher INR. So, you want to lock the price of USD you ultimately pay, so that, you sleep happily, and any adverse movement of USD will not affect you.

For this, you decide to go to a Bank doing forward transactions and enter into an agreement to buy USD 1,00,000 after 3 months from now at USD/INR 82. (This is called hedging). After 3 months if the USD/INR rate is say 85 then you would not be affected as you are making ₹ 3 per Dollar in forward transaction from Bank.

#### Now, there are two options before you:

- (a) Either buy USD from Bank at ₹82 per US Dollar and pay to the Vendor.
- (b) Or agree to get the difference from the Bank i.e., ₹ 3 per US Dollar i.e., ₹ 3,00,000 from Bank and bring your 82,00,000 you agreed to while purchasing Plant & machinery and go and buy USD 1,00,000from Market at current price i.e., 85 per US Dollar and pay to the Vendor.

#### If the USD/INR rate fall to say 80. Now again you can:

- (a) Either buy USD from Bank at ₹ 82 per US Dollar and pay to the Vendor.
- (b) Or Pay ₹ 2 per US Dollar i.e., ₹ 2,00,000 to bank and go and buy USD 1,00,000 from Market which now will be available at ₹ 80 per US Dollar and pay to the Vendor. Here also the effective cost of USD/INR is 82 for you i.e., ₹ 2,00,000 plus ₹ 80,00,000.

Forwards are also known as "OTC" contracts i.e., Over the Counter contracts. A forward contract is a customized contract between two parties, where settlement takes place on a specific future date, but price is agreed today. In a forward contract, there is always a risk that any party may back out from the contract at any time.

Forwards are private contracts, and their terms are determined by the parties involved.

For example: Mr. A entered a contract with Mr. B to buy Gold at say ₹ 52000 per 10gm (Tola) after 3 months (here the price is decided now and the settlement shall be done after 3 months. But, if in between the price moves up or down then one person might think of backing out from the contract. Hence, these forward contracts have settlement risk.

#### 5.1.1 Long and Short positions:

One who buys the asset is referred to as a 'long' investor and is said to have taken a 'long position'.

One who sells the asset is referred to as a 'short' investor and is said to have taken a 'short position'.

#### 5.1.2 Physical settlement in forward contract

A forward contract is settled by the physical delivery of the underlying asset by a short seller investor (i.e., the seller) to the buy position holder/investor (i.e., the buyer) against the payment of pre agreed price. There is some transaction cost involved in the physical settlement. Futures and options contract are settled on the date of expiry as decided in advance on the date of contract. But forwards contracts can be settled early as per mutual consent between the parties.

#### 5.1.3 Cash Settlement in forward contract:

- ◆ Cash settlement does not involve actual delivery or receipt.
- ♦ Each party pays (receives) cash equal to the net loss (profit) arising out of their respective position in the contract.

#### In Cash settlement if:

- (a) Spot Price (SP) on the date of expiry of contract > Forward Price (FP) agreed in advance at the time of the contract then person with short position shall pay to the buyer who has taken a long position.
- (b) Spot Price (SP) < Forward Price (FP) then person with long position shall pay to the seller.
- (c) Spot Price (SP) = Forward Price (FP), then there is no obligation to pay any anything.

**Note:** Profit and loss position in case of physical settlement and cash settlement is the same except for the additional transaction costs which are there in the physical settlement.

#### 5.1.4 Pitfalls of "OTC" contracts:

- Forward contracts are subject to default risk i.e., not honouring the contract by any of the parties.
- The risk of incurring losses due to any of the parties defaulting is known as counter party risk.
- Illiquidity because it is not traded on any exchange.
- No centralized trading.
- Absence of any middleman between the parties, who could have ensured that the contract is honoured.

#### 5.2 Futures:

Any forward contract which is traded on the recognized exchange is known as a Futures contract.

In futures contract, the Exchange act as counterparty and it guarantees the settlement of trades done on its platform and for that it collects the initial margin from the parties involved in the contract and charge the Mark to Market margin on daily basis to ensure that both the parties always have equal margin available against their positions. It is because the risk of different prices in future is similar for both the parties i.e. (buyer and seller)

In Indian equity markets, the expiry date of the futures contract is last Thursday of every month and for Index i.e., Nifty and Bank Nifty the expiry is on weekly basis i.e., every Thursday in a month. Thus, the last Thursday of every month is monthly expiry of all derivatives contract as well as weekly expiry of Nifty and Bank Nifty contract too. However, now the weekly expiry of Bank Nifty is Wednesday. At any point of time, 3 months futures contracts trade simultaneously. For Example, if we are in January 2023, then 3 monthly contracts shall be:

January 2023 Contract	Near Month
February 2023 Contract	Next Month
March 2023 Contract	Far Month

Nifty Spot Price 17992.15 Date 05/01/2023			Date 05/01/2023
INSTRUMENT TYPE	SYMBOL	EXPIRY DATE	LAST
Index Futures	NIFTY	25-Jan-23	18,070.05
Index Futures	NIFTY	23-Feb-23	18,135.00
Index Futures	NIFTY	29-Mar-23	18,209.00

#### Thus, Futures contract is a contract which is:

- (a) Traded on the recognized exchange.
- (b) Can be for buy or sell positions.
- (c) Standardized contract (like lot Size, Expiry date and other rules and regulations are decided by the exchanges)
- (d) Predefined expiry date for settlement
- (e) For a price decided today.
- (f) The counter party is Derivatives exchange.

#### **Features of Futures Contract:**

- Highly standardised
  - Predefined underlying asset
  - Predefined Fixed expiry
  - Predefined Fixed lot size
- Payment of Initial Margin
- ◆ Daily Settlement mechanism Mark to Market
- Final Settlement mechanism on the date of expiry
- Hedging of price risk
- Unlimited Profit and Loss potential
- ◆ Traded on Secondary Market
- Used for hedging
- Used for speculation
- Used for arbitrage

## **5.2.1 Long Future Payoff Chart:**

If you have bought Futures Contract of Nifty lot Size 50 on Jan 17, 2023, at ₹ 18,088.80 and the Nifty goes up to 18120 then the profit shall be 18120-18088.80 =31.2\*50 = ₹ 1560.



## 5.2.2 Short Futures Payoff Chart:

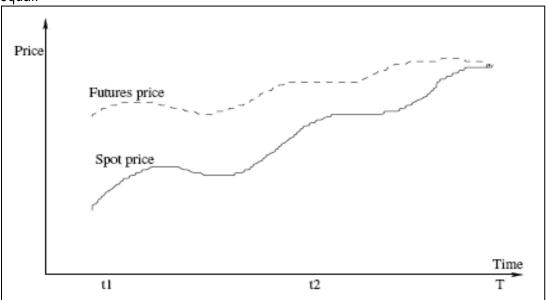
The below is Short Futures scenario, When Nifty spot is at 18053, and you have shorted Futures Contract of Nifty lot Size 50 on Jan 17, 2023, at ₹ 18,088.80 and the Nifty goes up to 18106 then there is a loss of ₹ 860 i.e., 18088.80 - 18106=17.2\*50=860.



## 5.2.3 Contango

**Contango** means seedha badla. It happens in normal conditions when future prices are greater than spot prices. Usually, the future prices are greater than spot prices as futures trades at Premium (as it contains interest cost, storage cost minus any income by way of dividend).

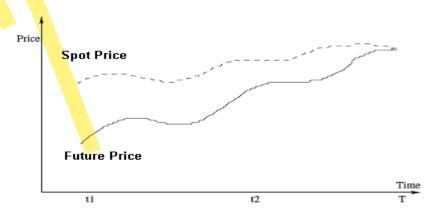
At the time of expiration, the future prices and spot price converge slowly and become equal.



### 5.2.4 Backwardation

**Backwardation** means Ulta Badla. It happens when future prices are lower than spot prices.

At the time of expiration, the future prices and spot price converge slowly and become equal.



## 5.2.5 Further explanation of the concepts learned

When you want to lock your price and get yourself immune from future price movement of the underlying, you call it Hedging. So, when we say the price movement of the underlying then, does it mean that you have locked your price in some other instrument? The Answer is Yes. You have used some other instrument to protect you. But that instrument is such which moves/behaves/derives its value from the movement of the underlying. Thus, that instrument will make sure that you stay protected.

To further explain it you might assume that Derivative is taking a position in say mirror image of the underlying to make sure that the movement of underlying can be fully obtained.

**Example:** When you want to have a long position in some stock or index then the choices available to you are:

- (a) Buy that Share i.e., Buy Spot (But the point is that if you buy the spot then you must take delivery of the same as per the settlement process within a few days. i.e., in Indian equity Markets as on January 01, 2023, it is T+2 delivery settlement, thus pay the money with 2 days and take the delivery of the stock. From Jan. 2023, the settlement cycle has changed to T+1.
- (b) If due to any reason you do not want to take the delivery of the stock immediately and you still want to take long position exposure in the stock, then can you, do it? The answer is yes. Buy any such instrument which moves or derives its value from the underlying asset. Now the instrument you are taking an exposure is called Derivatives. Here you can buy forward Contract, futures contract, options contract.
- (c) If you want to take only one leg position i.e., say only buy position in an instrument, say future then it means that you have taken a naked long position and if the price of the underlying comes down your instrument will also come down and you will incur loss.
- (d) If you have taken 2 leg positions, the 2nd being reverse position from the first one, then it is called hedging. Say you already hold a long position in spot (say, purchased shares in the stock market) and you are worried that the price of spot will come down (first leg) and now you take a reverse position by selling the futures contract then it is called hedging. Because if the price goes up, the spot will give you profit, and future will give loss offsetting each other and vice versa.

**Note:** The extent of offsetting shows how much hedging you have done. If the offsetting of loss is 100% then it is called fully hedged and so on and so forth.

- (e) Now, since the instrument possesses such type of characteristics, people started using the instrument for speculation purposes by taking only one leg of the position. Based on their view they enter the derivatives contract with the idea to make money out of it.
- (f) Similarly, if, you want to take conditional exposure that if the situation is profitable i.e., the movement of underlying is profitable to you then you will use the option/choice to take the decision and take benefit and if the movement of underlying is not favorable to you then you will not be liable to pay anything. This type of product is known as upto options (explained later in this chapter).

## 5.3 Options

Imagine a scenario that you enter such a kind of contract that if the outcome is favorable for you then you will come out and exercise your rights and if the outcome is not favorable for you nobody will come to find you.

Sounds Good!!! Let's take an example.

If a promoter of a company enters a contract with the company to buy more shares of the company at say ₹ 50 per share after 5 years and pays ₹ 6 per share upfront as token/advance money for the contract. The current market price of the shares is, say, ₹ 65.

If after 5 years the current market price of the share of the company is  $\stackrel{?}{\underset{?}{?}}$  350 then the promoter will come out and pay the balance  $\stackrel{?}{\underset{?}{?}}$  44 and buy the shares and enforce the company to issue shares to him. But if the price of the share of the company after 5 years is say  $\stackrel{?}{\underset{?}{?}}$  40 then promoter will not come out and will not be under obligation to buy shares of the company. The name given to the instrument is Call option i.e., right to buy but not the obligation to buy.

An Option is a contract that gives the right to the buyer, but not an obligation, to buy or sell the underlying asset on or before expiry day, at a predefined price. The person buying the option i.e., taking a long position is called buyer/ holder of the option and the person selling the option i.e., taking a short position is called the seller/ writer of the option.

Further, when we say right to buy/sell but not the obligation then we are talking from the buyer's perspective.

#### Therefore, to elaborate further -

- (a) The view of buyer and seller is opposite.
- (b) When we talk about the buyer's perspective then the view of the seller is not taken into consideration.

- (c) Option buyer has right but no obligation as discussed in the above example. So, the buyer has the right to come out and exercise his right.
- (d) Option seller (writer) has only obligation but no right as explained in the above example. The company i.e., seller of contract has only obligation in the sense that if the buyer comes out to exercise his right, the company is under obligation to sell it.

An important point to note is here is that the buyer can exercise the right only on the day of the expiry of the contract and not any time before the expiry.

Therefore, in view of the above, the option buyer/ holder will exercise his option only when the situation is favorable to him, but, when he decides to exercise, option writer i.e., seller would be legally bound to honour the contract.

#### Furthermore, there are two parties to the option contract – option buyer and option seller.

- Buyer of an option: The buyer of an option is the person who gets the right but not the obligation in the contract. For getting this right, a price called "Premium" must be paid to the seller of the option. A buyer can be a Buyer of Call option or a Buyer of Put Option. Furthermore, maximum profit of the buyer of the option can be unlimited but the loss is limited to the extent of the premium paid.
- Seller (Writer) of an option: The writer of an option is the person who has the obligation but not the right. Writer (Seller) of the option receives the premium and is therefore obliged to sell/buy the asset, if, the buyer of option exercises his right. The maximum profit of the seller/writer of the option is limited to the extent of the premium received but the loss can be unlimited.

## 5.3.1 Difference between Buyer and Seller of the option:

Basis of Difference	Buyer of the Option	Seller/ Writer of the Option
Right	Buyer of the option has the right to buy/sell the underlying asset.	Seller of the option does not have any such right.
Obligation	Buyer of the option does not have any obligation.	Seller of the option has obligation to buy/sell the underlying asset if the buyer exercises his right.
Premium	Buyer of the option pays the premium.	Seller of the option receives the premium.

Maximum profit	Profit of the buyer of the option can be unlimited.	Profit of the seller of the option is limited to the extent of the premium paid.
Maximum Loss	Loss of the buyer is limited to the extent of the premium paid.	

#### 5.3.2 Explanation of some important terms used in options:

- **Stock option:** These are the options in which the underlying asset is individual stocks, For example, options on Reliance, HDFC Bank etc.
- 2. Index option: These are the options in which the underlying asset is index. For example, options on Nifty, Sensex, etc. In India, the indexes like Nifty and Bank Nifty's options have both monthly and weekly expiry.
- **3. American option**: The owner of such option can exercise his right at any time on or before the expiry date/day of the contract.
- **4. European option**: The owner of such option can exercise his right only on the expiry date/day of the contract. In India, Index options are European.
- **5. Option price/Premium**: It is the price which the option buyer pays to the option seller. For example, in the case of Nifty, the option price for call option is ₹ 221.20 and for put option, it is ₹ 88.75. These premiums are for single unit of Nifty and to arrive at the total premium in a contract, we need to multiply this premium with the lot size.
- **6. Lot size**: Lot size is the number of units of underlying assets in a contract, say, in case of shares, the number of shares one must buy to enter into a futures contract. Lot size of Nifty option contracts is 50. Accordingly, total premium for all call options of a contract would be ₹ 221.20\*50= 11060 and total premium for put option of a contract would be ₹ 88.75\*50 = 4437.5.
- **7. Expiration Day**: The day on which a derivative contract ceases to exist. It is the last trading date/day of the contract.
- 8. Spot Market: It is the market where any instrument trades and buyer buys and takes delivery and seller sells and give delivery of the share/instrument/commodity etc. as per the normal market parlance/process. We can also call it "mandi" where commodities or instrument trades.
  - **Example** Gold futures trades in derivatives (F&O) market. Now, the question arises what is spot market of Gold and how it relates Gold Future. Physical gold trading in any market in any city is spot market and spot price of one city may vary from the spot

price of any other city. Thus, for F&O one city has to be marked and treated as underlying of gold future. In India, Ahmedabad spot market is treated as underlying i.e. spot for gold futures.

Similarly stocks trading in NSE and BSE are treated as spot for their respective futures and options in the respective exchanges.

- 9. Spot price (S): It is the price at which the underlying asset trades in the spot market, it is the value of the underlying instrument. The spot market is where financial instruments, such as commodities, currencies, and securities, are traded for immediate delivery. Delivery is the exchange of cash for a financial instrument. A futures contract, on the other hand, is based on the delivery of the underlying asset at a future date.
- **10. Strike price or Exercise price (X):** Strike price is the price at which the underlying security can be purchased or sold by the option holder, or it is the price at which the two parties (the buyer and the seller) agree to enter into an options agreement.
- 11. In the money (ITM) option: This option would give the holder a positive cash flow if it were exercised immediately. A call option is said to be ITM when spot price is higher than strike price. And a put option is said to be ITM when spot price is lower than strike price.
- **12. At the money (ATM) option**: At the money option would lead to zero cash flow if it were exercised immediately. Therefore, for both call and put ATM options, strike price is equal to spot price.
- 13. Out of the money (OTM) option: Out of the money option is one with a strike price worse than the spot price for the holder of the option. In other words, this option would give the holder a negative cash flow if it were exercised immediately. A call option is said to be OTM, when spot price is lower than strike price. And a put option is said to be OTM when spot price is higher than strike price.
- 14. Intrinsic value: Option premium, defined above, consists of two components intrinsic value and time value. In case of an option, intrinsic value refers to the amount by which option is in the money i.e., the amount an option buyer will realize, without adjusting for premium paid, if he exercises the option instantly.

Therefore, only in-the-money options have intrinsic value whereas at-the-money and out-of-the-money options have zero intrinsic value. The intrinsic value of an option can never be negative. Thus, for call option which is in-the-money, intrinsic value is the excess of spot price (S) over the exercise (strike) price (X), Similarly, for put option

- which is in-the-money, intrinsic value is the excess of strike price (X) over the spot price (S).
- **15. Time value**: It is the difference between premium and intrinsic value, if any, of an option.
- **16. Open Interest**: Open interest is the total number of option contracts outstanding for an underlying asset.
- 17. **Exercise of Options**: In case of American option, buyers can exercise their option any time before the maturity of contract. All these options are exercised with respect to the settlement value/ closing price of the stock on the day of exercise of option.
- 18. Assignment of Options: Assignment of options means the allocation of exercised options to one or more option sellers. The issue of assignment of options arises only in case of American options because a buyer can exercise his options at any point of time.

#### Example

Let us understand the above terms with the help of the following example in which the different terms are used in the options market:

Trade Information: Quote for **Nifty 17900 Call option** as on January 06, 2023:

1. Instrument type: Option Index

2. Underlying asset: Nifty

3. Expiry date: January 12, 2023

4. Option type: Call European

5.	Strike Price:	17900
6.	Open price:	196
7.	High price:	226
8.	Low price:	80.75
9.	Close price:	102.75
10.	Underlying value:	17859.45
11.	Traded Volume (Contracts)	19,75,975
12.	Traded Value (₹ Lakhs)	1,16,137.93

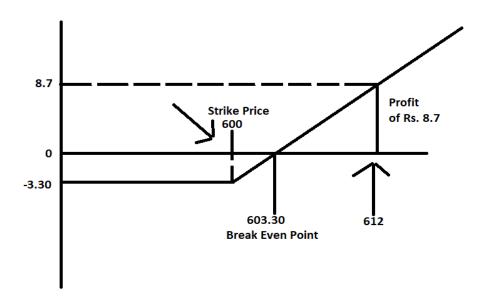
13.	Traded Value - Notional (₹ Lakhs)	1,78,01,114.18	
14.	Volume Weighted Average Price (VWAP)	117.55	
15.	Market Lot	50	
16.	Open Interest (Contracts)	96,398	
17.	Change in Open Interest (Contracts)	83,366	
18.	% Change in Open Interest	639.70	
Trade	Information: Quote for Nifty 17900 Put option	<b>n</b> as on January 06, 202	3:
1.	Instrument Type: Option Index		
2.	Underlying asset: Nifty		
3.	Expiry date: January 12, 2023		
4.	Option type: Put European		
5.	Strike Price:	17900	
6.	Open price:	72.05	
7.	High price:	164.80	
8.	Low price:	49.35	
9.	Close price:	115.65	
10.	Underlying value:	17859.45	
11.	Traded Volume (Contracts)	29,70,031	
12.	Traded Value (₹ Lakhs)	1,48,798.55	
13.	Traded Value - Notional (₹ Lakhs)	2,67,30,576.00	
14.	VWAP	100.20	
15.	Market Lot	50	
16.	Open Interest (Contracts)	66,773	
17.	Change in Open Interest	30,153	
18.	% Change in Open Interest	82.34	

### 5.3.3. Types of Options

#### Options are generally of two types: -

#### 5.3.3.1 Call Options:

(i) Call option Buyer: Buyer has a right to buy the underlying asset and the seller has the obligation to sell the underlying asset at predefined price. However, it is the wish of the buyer of call option buyer whether to exercise his right or not. If he/she exercises the right, then the seller of the option shall be bound to sell the underlying asset at a predefined price i.e. strike price. Another thing to ponder upon here is that the buyer of the call option shall only exercise his right if he/she feels that it is better or profitable to exercise the option. The maximum loss of the buyer is restricted to the amount of premium paid. But, his profit is unlimited. Breakeven point of Call option buyer = strike price + premium amount.



The above picture shows the payoff graph of call option buyer

Stock Name	SBI
Expiry	Jan 25, 2023
Current Date	19/01/2023
CMP (Current Mkt Price of Spot)	589.70
Strike Price	600
Premium on 19/01/2023	₹ 3.30
At the time of taking buy position	
Lot Size	1500

Now the buyer has three possibilities i.e. price expires below 600, at 600 or above 600.

Case 1: Expires below 600 then the call option will be worthless and become zero because the view of the buyer of the option that the price will expire above 600 proved wrong. Thus, he cannot force seller his right. Right can only be exercised once it accrues. Option premium will gradually reduce to zero as the time passes by and on the date and time of expiry it will be zero. This is also known as time decay.

Case 2: Expires at 600, the call option buyer's view was that the price will expire above 600. Thus in this case also the call option will be worthless and become zero. It will gradually reduce to zero as the time passes by and on the date and time of expiry becomes zero. This is also known as time decay.

**Case 3:** If the price expires above 600. Now, the view of Call option buyer is happening to be right. The more it goes above 600 the more beneficial it will be for buyer. Anything above 600 will belong to buyer and buyer will have the right to get that benefit. Consider the following charts:

<b>Expiry Rate</b>	Buyer will have the right to get	Profit
601	1*lot size	1-3.3= Loss of 2.3*lot size
603	3*lot size	3-3.3=Loss of 0.30*lot size
605	5*lot size	5-3.3 = Profit of 1.7*lot size
609	9*lot size	9-3.3= Profit of 5.7*lot size
618	18*lot size	18-3.3 = Profit of 14.7*lot size
655	55*lot size	55-3= Profit of 51.7*lot size
722	122*lot size	122-3.3= Profit of 118.7*lot size

#### Buyer can exercise his right in two manners:

(a) Cash Settlement: In the event of cash settlement, the buyer of the option does not get the delivery of the underlying asset but rather gets the cash amount i.e. money equal to his right.

By continuing the above example, in the case of cash settlement, the buyer will be entitled to get ₹ 1 i.e., if the underlying asset expires at 601 or anything above ₹ 600, that belongs to buyer of the option multiply with lot size. For instance, if lot size is 1500 then he will get ₹ 1500. Please note that if buyer is getting something due to his right then seller is under obligation to pay the same amount. Thus the right of buyer is automatically the obligation for the seller.

As far as the profit is concerned, in the above example the buyer has the right to get ₹ 1 per share i.e., ₹ 1500 but he has already paid ₹ 4950 (3.3\*1500) at the time of entering the contract as option premium. On expiry at 601 he will get ₹ 1500, so, effectively giving a loss of ₹ 4950-1500 = 3450.

However, what would be the scenario if the price had gone up to ₹ 603. Buyer would have the right to get ₹ 3 per share i.e., 3\*1500=4500, but already paid ₹ 4950 to enter the contract. So, again a loss of ₹ 450. Thus, the price of the stock of SBI must close at ₹603.30 to give the buyer the right to get ₹ 3.30 per share i.e., ₹ 3.30\*1500=4950 the same amount which he paid at the time of entering the contract and thus reaches the breakeven level.

And now any close above ₹ 603.30 of SBI spot will bring the buyer in profit. i.e., if the prices close at 608 then he will be entitled to get ₹ 8 per share (Right to get ₹ 8 per share) i.e., 8\*1500 = ₹ 12,000 and has paid ₹ 4950 (3.3\*1500) premium at the time of entering the contract and thus making a profit of ₹ 7050 (i.e., 12000-4950).

**Note:** Since what the buyer will get is dependent upon the price movement of the spot (underlying) of SBI that is why it is called the derivatives. An option itself cannot decide who will get what, but derives its value from the underlying instrument i.e., SBI Spot price.

	SBI OPTION CHAIN DATA DATED 19/01/2023 CMP SBI 589.70													
			CALLS								PUTS			
VOLUME	LTP	CHNG	BID QTY	BID	ASK	ASK QTY	STRIKE	BID QTY	BID	ASK	ASK QTY	CHNG	LTP	VOLUME
<b>1</b> 9	17.25	-4.4	1,500	17.2	17.95	1,500	<u>575</u>	3,000	1.55	1.75	1,500	-0.05	1.75	1,035
√ 585	13.8	-2.5	1,500	13.55	13.9	1,500	<u>580</u>	1,500	2.65	2.75	1,500	-0.05	2.65	3,306
467	10.25	-2.25	1,500	9.65	10.3	3,000	<u>585</u>	1,500	4	4.25	1,500	0.15	4.05	1,629
<b>4,570</b>	7.25	-2.15	6,000	7.2	7.3	25,500	<u>590</u>	1,500	5.95	6.15	1,500	0.5	6.15	3,864
2,835	4.85	-1.95	6,000	4.8	4.95	30,000	<u>595</u>	3,000	8.65	9	3,000	0.6	8.6	592
<sup>2</sup> 6,575	3.3	-1.45	1,500	3.25	3.3	22,500	<u>600</u>	1,500	12	12.1	1,500	1.2	12.25	1,068
2,262	2.15	-1	4,500	2	2.15	1,500	<u>605</u>	3,000	15.7	16.35	1,500	1.1	<u>15.8</u>	82
× 3,913	1.35	-0.75	9,000	1.35	1.4	6,000	<u>610</u>	1,500	20.05	20.5	1,500	1.65	<u>20</u>	41
<b>1,510</b>	0.9	-0.5	6,000	0.9	0.95	9,000	<u>615</u>	1,500	24.5	25.5	1,500	0.9	24.1	18
<b>2</b> ,171.00														15,446.00

As we can see from the diagram, there are different strike prices available, and each strike price is independent of the other. One can enter into an options agreement, at a specific strike price, by paying the required premium. For example, one can enter a call option at a strike price of  $\stackrel{?}{\sim}$  600 by paying a premium of  $\stackrel{?}{\sim}$  3.3 or strike price of  $\stackrel{?}{\sim}$  605 by paying a premium of  $\stackrel{?}{\sim}$  2.15

(b) Physical Settlement: The buyer of the call option shall have the right to buy the underlying asset/stock at strike price i.e. in other words at discounted price and the discount will be his benefit. This is also known as right of the buyer to get the underlying asset at predetermined price i.e. strike price. This automatically will become the obligation of seller to sell the underlying asset/stock at strike price, irrespective of current market price. Buyer will exercise his right if it is beneficial for him to do so.

In the above example, the buyer of the option will only exercise his right if SBI stock expires above 600. As the call option holder has the right to buy the share i.e., underlying at  $\stackrel{?}{\sim}$  600, the seller will be forced to sell the same at  $\stackrel{?}{\sim}$  600. Further, if the share expires at  $\stackrel{?}{\sim}$  601 and the buyer exercises his right then he will save  $\stackrel{?}{\sim}$  1. But don't forget that  $\stackrel{?}{\sim}$  3.30 already paid by him as premium while buying the Call option will lapse and even after exercising his right, he will still lose  $\stackrel{?}{\sim}$  2.3 i.e. (3.3-1). But if the share expires at 608 then he will save  $\stackrel{?}{\sim}$  8. And he will earn  $\stackrel{?}{\sim}$  4.7 i.e. (8-3.3).

(ii) Call option Seller (Writer): Seller of the options has the obligation and not the right to sell the underlying asset to the buyer at the predetermined price i.e., strike price. So, he has an obligation which he must fulfill if the future outcome is against him because in that case the buyer will exercise his right.

Again, by referring to the Figure in previous page, if, Mr. A would have sold the Call option at a Strike price of 605 at  $\stackrel{?}{_{\sim}}$  2.15 premium and the price go up and expires at  $\stackrel{?}{_{\sim}}$  620, then, he is under obligation to sell the shares (equal to lot size) of SBI @  $\stackrel{?}{_{\sim}}$  605 to the call option buyer in case of physical settlement. In the case of cash settlement, he must pay the difference i.e., closing price – strike price (620-605=15) i.e.,  $\stackrel{?}{_{\sim}}$  15 to the buyer of the call option obviously multiplied by lot size. Profit/loss of the call option seller is as follows:

```
= Premium – (Spot Price – Strike Price)
```

= 2.15 - (620 - 615)

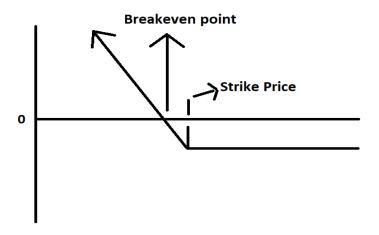
= 2.15 - 15 = -12.85

#### 5.3.3.2 Put Options

**Put option buyer:** Buyer has the right to sell the underlying asset and the seller of the put option has the obligation to buy the underlying asset at predefined price. Obviously, it is the wish of the buyer of put option whether to exercise his right or not. If he/she exercises the right, then the seller of the put option shall be bound to buy the underlying asset at a predefined price. Another thing to ponder upon here is that the buyer of the put option shall only exercise his right if he/she feels that it is better or profitable to exercise the option.

In the figure of SBI, in case of physical settlement, if Mr. Tarun buys a put option of strike price 590 @ ₹ 6.15 and the price comes down on the date of expiry to ₹ 570 then he will have the right to sell the shares to the seller of the put option @ ₹ 590, i.e., the strike price and the seller of the put option must buy the shares from Mr. Tarun. But, in the event of a cash settlement, the seller of the put option shall be under obligation to pay the difference between the strike price and expiry price i.e., ₹ 20 (590-570).

But if the price goes above 590 then the buyer of the put option shall not have any obligation to sell at a cheaper rate as the buyer of options has only the right but not the obligation.



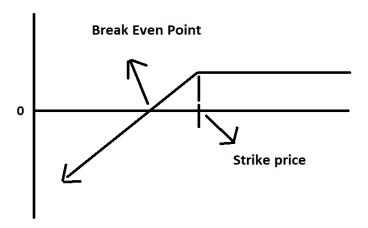
#### **Put option Seller:**

The seller of the options has the obligation to buy the underlying asset from the buyer at the predetermined price i.e., strike price. The seller does not have any right even if his view becomes right, but he has obligation if the future outcome is against him because in that case the buyer will exercise his right.

In the figure of SBI, in case of physical settlement, we have seen that the seller of the put option of strike price  $590@ \ \ 6.15$  will be under obligation to buy the underlying shares of SBI equal to lot size from Mr. Tarun  $@ \ \ \ 590$  if the share expires below 590 on the date of expiry.

The premium he has received from Mr. Tarun of ₹ 6.15 will remain with the seller and he is not required to pay it back. Note the premium received by seller belongs to him and is not to be paid back in any case.

But if the price expires above 590 say at 600 then what would have happened? The seller of the options does not have any right, he has only obligation, he cannot force buyer of the put option to sell the shares @ ? 590. Thus the premium he received will become his profit, as the buyer will not exercise his right because it will not be profitable for buyer of put option to exercise his right to sell the shares @ ? 590 when the market price is ? 600.



#### 5.3.4 Further explanation of the Concept of Intrinsic value and Time value:

The premium of the option consists of Intrinsic Value and time value. i.e., Premium = Intrinsic Value + Time Value.

Now, what is Intrinsic Value? It is the value you are entitled to get as an option buyer if the share expires at CMP i.e., if you have bought a Call option at ₹ 19 of Strike price at ₹ 540 when the CMP of the stock is 555. Now, if the stock expires at CMP i.e., at ₹ 555 then as a call holder do you have any right to get anything?

The answer is yes, because the strike price of 540 call means that anything above 540 you have the right to get. Here, since the price has closed above 540 then you have the right to get ₹ 15 (555-540). This is called Intrinsic Value. Then what about the balance ₹ 4 you paid out of ₹ 19. This is time value.

**Note:** Time value is what the buyer pays for the fact the future outcome can be beneficial for him. In other words, the value he pays for buying uncertainty with a probability that the future outcome may be in his favour. In the above example when the price of the 540-strike price call option is ₹ 19 when the CMP is 555, if the price would have gone up then the call option buyer would have been more comfortable as his view is getting right.

For example, if the CMP rises to 560 then the intrinsic value of the option would have moved up. Who knows if the price would have gone up to ₹ 580 in such a scenario the intrinsic value would have been ₹ 40.

Thus, we can also say the time value is the value which the buyer of the option pays to buy the time, with the hope that the stock will move in his desired direction and the option will become In the Money and will have more and more intrinsic value. Because at the time of expiry the option buyer will only get intrinsic value, as the time value will vanish at the time of expiry.

## Further note that at Strike price intrinsic value is zero both for calls and puts.

And the more the difference between the Strike price and CMP the more is intrinsic value. For calls Intrinsic Value is CMP-SP, and for Puts it is SP-CMP (SP is Strike Price)

And, also note that Intrinsic value cannot be negative i.e., either it is positive, or it is zero.

### Analysis for Intrinsic Value and Time Value for Calls: -

In case of Calls	Intrinsic value	Time Value
Price Increases and goes above Strike Price		
	Intrinsic value will also go up for calls if the price goes more and more above the strike price. i.e., CMP-Strike Price is intrinsic Value.	Time Value comes down with every passing day. As the time left to expiry is coming down it comes down.
If the Price stays at strike price.  (Time value decrease with every passing day	No Effect	Time Value comes down with every passing day. As the time left to expiry is coming down it comes down.

If the price goes down but still above Strike Price (For example coming down from 555 but still above 540 in above example)



If the CMP is above Strike price, then Call will have intrinsic value and when the price comes down the Intrinsic Value also comes down.



Time Value comes down with every passing day. As the time left to expiry is coming down it comes down.

If the price goes down and is below Strike Price (For Example coming down from 540 to say 538)

No Intrinsic Value in call option as the price is below 540 (Strike Price)

Time Value comes down with every passing day. As the time left to expiry is coming



#### In case of Puts:

Intrinsic value shall be there if price is below the Strike price.

In case of Puts	Intrinsic value	Time Value
Price Increases and is still below Strike Price		
	Intrinsic value will come down	Time Value comes down with
	for Puts as the price is below	every passing day. As the

SP there is some Intrinsic time left to expiry is coming down it comes down. value. But as soon as the price is approaching Strike price the Intrinsic Value will come down as the difference between SP and CMP is decreasing. i.e Strike Price - CMP is intrinsic Value No Effect If the Price stays at Strike Price. (Time value decrease with every passing day Time Value comes down with every passing day. As the time left to expiry is coming down it comes down. If the price goes down further below the Strike Price (For Example, coming down from 540 to 530 i.e.. further below the strike price of 540 mentioned in above example) If the CMP is below the Strike price, then put will have more Time Value comes down with intrinsic value as the difference every passing day. As the between SP and CMP is time left to expiry is coming increasing more and more. down it comes down. IV=SP-CMP

If the price goes up and is above the Strike Price (For example going up from 540 to say 545)



No Intrinsic Value in Put option as the price is above 540 (Strike Price).



As the time passes by the time value will keep decreasing

## The concept of Out of the Money (OTM), At the Money (ATM) and In the Money (ITM) has been further explained with the help of following chart:

Option Type	Underlying CMP	Strike Price	Option Price	OTM, ATM, ITM	Intrinsic value	Time Value
Call	652	640	18	ITM	12	6
Call	650	650	14	ATM	0	14
Call	651	650	14.5	ATM	1	13.5
Call	645	650	8	OTM	0	8
Put	687	680	8	OTM	0	8
Put	681	680	11.2	ATM	0	11.2
Put	679	680	12	ATM	1	11
Put	670	680	16	ITM	10	6

#### Furthermore ATM, OTM and ITM has been explained with the help of an example as follows:

In case of a call option, In the Money options takes place when strike price is below the CMP. For example, if the CMP price is at 510 then the strike price of 500, 490, 480, 470,460,450 are all in the money options because the price has already crossed these strike prices. You can also assume that when you talk about the call options you are looking up (technically it is buyers' perspective) On the other hand, where it is standing at par with CMP, it is ATM and those which have crossed CMP are OTM.

For Puts, ITM options are again the levels which are already crossed by the price. It CMP is 640 then 650,66,670,680,690,700....... are all ITM puts. You may also assume that when you talk about puts options you are looking down (technically it is buyers' perspective). Now, the level at 640 strike

price shall be known as ATM and 630,620,610,600,590...... the levels which are still to come will be known as OTM Puts.

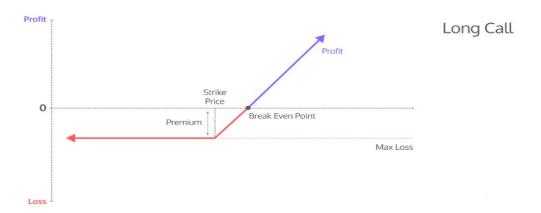
ATM options majorly have time value and may or may not have small intrinsic value. Example for Call Strike price 440 when CMP is 441 has ₹ 1 as intrinsic value and the balance is time value.

#### 5.3.5 Option Strategies:

Before understanding the strategies one thing is important to understand that if your view is right and price moves as per your view, then, you are entitled to get something. But, whether you will make a profit or loss will depend upon the fact that how much you are entitled to get. For example, you bought call of Strike Price 770 @ 8 when CMP is 765. Now if the price closes above 770 say at 772 then you are entitled to get  $\stackrel{?}{\sim}$  2 but still you will make a loss of  $\stackrel{?}{\sim}$  6 because of the price of options i.e., premium at  $\stackrel{?}{\sim}$  8.

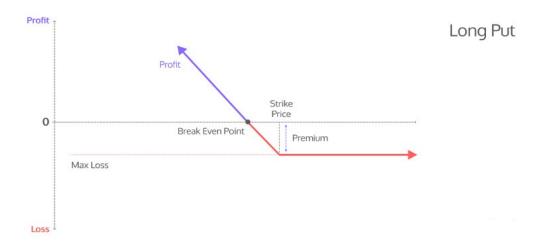
#### 5.3.5.1 Call Buy:

When a buyer buys the call, his view is that the price will go up and if the price goes up and expires above the strike price then he will get something. For example, at CMP 230, Mr. A buy a call of Strike price 240 at  $\stackrel{?}{\sim}$  5 and the price closes at 252. Then Mr. A will be entitled to get  $\stackrel{?}{\sim}$  12 and he has incurred  $\stackrel{?}{\sim}$  5, his profit is  $\stackrel{?}{\sim}$  7 (12 – 5).



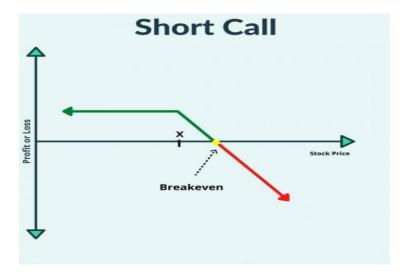
#### 5.3.5.2 Long Put:

When a buyer buys a put option his view is that the price will go down and if the price goes down and expires below the strike price then he will get something. Example at CMP of 409 Mr. A buy a put option of Strike price 400 at  $\stackrel{?}{\sim}$  6 and the price closes at 387.5. Then Mr. A will be entitled to get  $\stackrel{?}{\sim}$  12.5 and he has incurred  $\stackrel{?}{\sim}$  6 his profit is  $\stackrel{?}{\sim}$  6.5 (12.5 – 6).



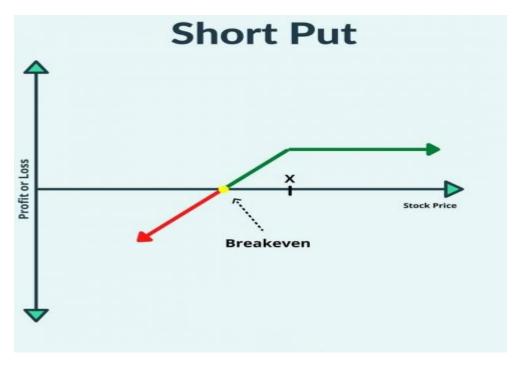
#### 5.3.5.3 Short Call:

When you are shorting (selling) the call option, the view is that the price will not go above the strike price. And if the price goes above the strike price, the buyer of call option will exercise his right if it covers the price of options i.e., the premium amount.



#### 5.3.5.4 Short Put:

When you are shorting the put option the view is the price will not go below the strike price. And if the price goes below the strike price, the buyer of the put option will exercise his right if it covers the price of the option i.e. the premium amount.



	Call Long	Call Short	Put Long	Put Short
Loss Potential	Limited	Unlimited	Limited	Unlimited
<b>Profit Potential</b>	Unlimited	Limited	Unlimited	Limited
Right	Yes	No Right	Yes	No Right
Obligation	No Obligation	Yes	No Obligation	Yes

View	Action 1	Action 2
Bullish	Call Long	Put Short
Bearish	Put Long	Call Short

## 5.4 SWAPS:

A swap is a part of derivative in which, two counterparties exchange future cash flows i.e., of one party's financial instrument for those of the other party's financial instrument.

These instruments can be almost anything, but most swaps involve cash flows based on a notional principal amount that both parties agree to. Usually, the principal does not change hands.

## 5.4.1 Important points in swaps:

- 1. It is an agreement between two parties to exchange cash flows in future.
- 2. Parties decide in advance the terms like dates when the cash flows will occur and currency in which it will be made and mode of payment.
- 3. Calculation of cash flows normally involves the future value of one or more market variables.
- 4. The swap agreement defines the dates when the cash flows are to be paid and the way they are accrued and calculated.
- 5. Usually at the time when the contract is initiated, at least one of these series of cash flows is determined by an uncertain variable such as a floating interest rate, foreign exchange rate, equity price, or commodity price.
- 6. The cash flows are calculated over a notional principal amount. Contrary to a future, a forward or an option, the notional amount is usually not exchanged between counterparties. Consequently, swaps can be in cash or collateral.
- 7. Swaps can be used to hedge certain risks such as interest rate risk, or to speculate on changes in the expected direction of underlying prices.

## 5.4.2 Swap Types

- 1. Most swaps are traded over the counter (OTC), "customized" for the counterparties.
- 2. Some types of swaps are also exchanged on futures markets.

## 5.4.3 Swap Bank

A swap bank is a term used to describe a financial institution that facilitates swapping arrangement between two counterparties. A swap bank can be an international commercial bank, an investment bank, a merchant bank, or an independent operator.

## 5.4.4 Features of a Swap Bank

- ♦ Serves as broker/swap dealer
- ♦ Matches counterparties but usually doesn't assume risk of swap
- ♦ Swap broker receives commission for this service
- Swap banks serve as dealers or market makers
- Willing to accept either side of a currency swap

• Sometimes, assumes a position in the swap

## 5.4.5 Examples of Swap

Suppose Mr. A lives in India has to send money to his Aunty in USA ₹ 82,000 i.e., 1000 dollars per month. But he is worried if the Dollar rate appreciates then what will happen to him.

He goes to a Swap Bank and asks for a solution. Banker says give me 5 days and will work out a solution for the same.

Now the swap banker will find some person living in USA that can constantly send dollars in India. It finds Mr. B who lives in USA and sends Dollars in India say 1000 USD per month. The swap Banker will now enter into a tri-party agreement.

Swap Banker will ensure that Mr. A must pay only ₹ 82,000 per month and assured him that all the dollar movements will not affect this contract. In the same way, it will assure Mr. B to keep paying only USD 1,000 per month and do not worry about currency movements. Swap bankers will charge small fees/commission or premium from both the parties.

Now, what this swap banker will do is, he will use the 1,000 US dollars paid by Mr. B to pay Aunty ji of Mr. A and use the ₹ 82,000 paid by Mr. A to pay for the obligation of Mr. B in INR. Thus, technically he has not allowed the currencies to cross the territories and thus will remain immune to any currency changes or in other words, Swap banker has swapped the obligations of both Mr. A and Mr. B.

In swapping, all the parties are winners i.e., it is a win-win situation for all. Mr. A and Mr. B get satisfaction and fear of adverse currency movement is taken care of. Swap banker will get his fee/commission.

## 5.4.7 Credit Default Swaps (CDS)

CDS can be defined as an insurance (not in sticker sense) against the risk of default on a debt which may be debentures, bonds etc.

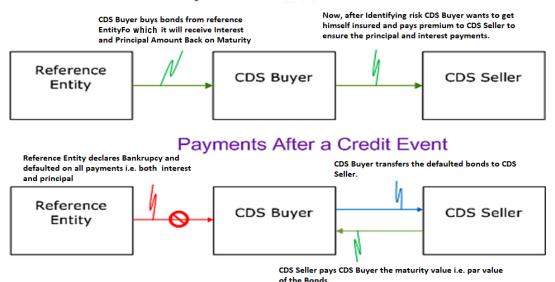
Let us take an example to understand CDS. One person who is willing to invest in bonds of a reference entity invests money in the same and buys the bonds for which it becomes entitled to get periodical interest and principal payment on maturity. Now, look at the thoughts of the buyer. If the company issuing bonds remains alive and does not default on payments then he will receive what it intended, and life will be cool. But, if the reference entity i.e. the company defaults on payments, then it will be a problem for the buyer.

So, the buyer decides to transfer his risk to CDS seller (just like insurance) by paying a fee commission or premium. He will enter a contract with the CDS seller that if the company defaults in interest and principal payments then CDS seller will pay to the CDS buyer. Now life for CDS buyer

is safe. He will get his money back, preferably from the company. But if the company defaults, then the CDS seller will pay to the buyer of bonds.

## Credit Default Swap Payments

## Payments Before a Credit Event



## Interest rate Swaps:

Suppose Company A and Company B wants to take loan and the details are as follows:

Now let's see how the swapping arrangement can be done for the same:

	•				
Company Name	View	Rate of Floating rate offered by Bank	Fixed Rate Loan offered by bank	Want To take	If takes loan as wanted
A Good Credit Worthiness	Interest rates will come down	9% Base Rate +3% Base Rate = 6%	8.5%	Floating rate loan	9%
B Comparatively less Credit Worthy	Interest rates will go up	11% Base Rate +5% Base Rate = 6%	11.5%	Fixed Rate loan	11.5%
	Total in	terest Both Compar		3.	

9% + 11.5% = 20.5%

Company Name	View	Swapping Banker	Loan Rate if Swapping Banker Suggestion accepted	Whether the loan is as per the view	Agreement with Swapping Banker done
A	Interest rates will come down	Says Company A should take Fixed loan instead of Floating as desired	8.5%	No	Yes
В	Interest rates will go up	Says Company B should take Floating Rate Loan instead of Fixed loan as desired	11%	NO	Yes

Total interest Both Company A and B pays. 8.5% + 11% = 19.5%

Here, the swapping banker sees an opportunity to save 1% interest rate on loan amount. Swapping Banker asks both the companies to enter into a tripartite agreement and the companies will take such type of loan as the swapping banker asks them to but will pay the installments as per their original view, i.e., company A will now take Fixed rate loan but will pay installments of Floating rate loan. The same applies to Company B also.

The modus operandi is that both the companies will pay to swapping banker and swapping banker will pay to the bank from which loan was taken. The benefit will be distributed between the three parties i.e., Swapping Banker, Company A and Company B. That is why it is said that swaps are a win-win situation for all the parties involved.

## **TEST YOUR KNOWLEDGE**

## **Multiple Choice Questions (MCQs)**

- 1. An out-of-the-money option is \_\_\_\_\_
  - (a) An option with a negative intrinsic value
  - (b) An option with a positive intrinsic value

	(c)	An opti <mark>on with zero intrinsic val</mark> ue
	(d)	None of the above
2.	Who	has the right to buy underlying asset at predetermined price?
	(a)	Buyer of Call option
	(b)	Seller of Call Option
	(c)	Buyer of Put option
	(d)	Seller of Put Option
3.		nave shorted the Future of Gail Ltd. at ₹ 880 lot size 500. You want to make a profit of 000 in your trade. What should be the price of Gail so that you will make the desired :
	(a)	₹ 860
	(b)	₹ 890
	(c)	₹ 870
	(d)	₹ 900
4.		ck is trading at ₹ 370. The Call options of Strike price ₹ 360 is trading at a premium of What is the Time value of the option:-
	(a)	21
	(b)	10
	(c)	11
	(d)	31
5.		Current Market price of the Stock Mind Tree Ltd. is 740. Which among the following is in the money Put Option :-
	(a)	Put Option of Strike Price 720
	(b)	Put Option of Strike Price 740
	(c)	Put Option of Strike Price 700

Put Option of Strike Price 780

(d)

- 6. The share of Reliance Ltd. has current market price of 1020. The Call option of Strike price of 1030 will be known as :-
  - (a) In-The -Money Call option
  - (b) Out-of-The-Money Call option
  - (c) At-The-Money Call Option
  - (d) Deep In the Money
- 7. Which of the below statement is true:-
  - (a) Buyer of the Option has Unlimited loss potential
  - (b) Buyer of the Option has Limited loss potential
  - (c) Seller of the Option has Limited loss potential
  - (d) Seller of the Option has Unlimited Profit potential
- 8. Tick the false statement in Options :-
  - (a) Buyer of the option pays the premium.
  - (b) Buyer of the option has the right and not the obligation.
  - (c) Loss of the seller of the option can be unlimited.
  - (d) Profit of the seller of the Option is unlimited
- 9. If you have sold a XYZ futures contract (Lot Size 50) at 5600 and bought it back at 5700, what is your gain/loss?
  - (a) Loss of ₹ 10,000
  - (b) Loss of ₹ 5,000
  - (c) Gain of ₹ 10,000
  - (d) Gain of ₹ 5,000
- 10. If the price of the Stock is ₹ 570 the Call option of 560 strike price will be known as :-
  - (a) In the Money
  - (b) Out of the Money
  - (c) At the money
  - (d) Deep out of the Money

#### **Theoretical Questions**

- 1. Define Hedging.
- 2. Write a note on Arbitrage.
- 3. What are the risks in Derivatives?
- 4. What is Contango?
- 5. Differentiate between Cash Settlement and Physical Settlement in options contract.
- 6. Discuss the differences between Intrinsic Value and Time Value?

#### **Practical Questions**

- 1. Miss Sherlyn sold the futures contract of a Stock at CMP 758. Now, she is worried about her position. Suggest to her the ways to protect her position.
- 2. The CMP of a stock is 977 Put option of Strike price 990 is 32. Calculate Intrinsic Value.
- 3. Mr. Akash purchased a 3-month call option for 200 shares in ABC Ltd. at a premium of ₹ 25 per share, with an exercise price of ₹ 500. He also purchased a 3-month put option for 200 shares of the same company at a premium of ₹ 10 per share with an exercise price of ₹ 400. The market price of the shares on the date of Mr. Akash's purchase of options, is ₹ 450. Calculate the profit or loss that Mr. Akash would make if the market price fell to ₹ 325 at the end of 3 months.
- 4. ABC bank has loaned \$50 million to a company for 6 years requiring periodic interest payments equal to LIBOR + 2.4%. The bank's policy requires all loans to be backed by a credit default swap on the principal amount of loans made. In this case, the bank can buy a CDS with a notional amount of \$50 million. The CDS costs 3%.

What is the annual premium bank must pay to the CDS seller? Also calculate the amount which the CDS seller must pay to ABC Bank in case the borrower defaulted on the final principal payment and bank was able to collect only 60% of its principal amount.

#### **ANSWERS/SOLUTIONS**

#### **Answers to Multiple choice Questions:**

1.	(c)	2.	(a)	3.	(a)	4.	(a)	5.	(d)
6.	(b)	7.	(b)	8.	(d)	9.	(b)	10.	(a)

#### **Answers to Theoretical Questions:**

- **1.** Please refer to paragraph 1.6
- **2.** Please refer to paragraph 1.6
- 3. Please refer to paragraph 1.5
- **4.** Please refer to paragraph 5.2.3
- **5.** Please refer to paragraph 5.3.3.1
- **6.** Please refer to paragraph 5.3.4

#### **Answers to Practical Questions:**

- 1. There are multiple ways to hedge the short position in Futures contract:
  - (a) Buy Call option (also known as Protective call)
  - (b) Sell Put Option (also known as covered put)
- 2. Intrinsic value shall be 990-977=13.
- 3. Since the market price at the end of 3 months fell to ₹ 325 which is below the exercise price under the call option, the call option will not be exercised. Only put option is viable.

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The gain per share = ₹ 400 - ₹ 325 = ₹ 75
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Total gain per 200 shares = 200 shares x ₹ 75 = ₹ 15000

Cost of premium paid = (₹ 25 x 200 shares) + (₹ 10 x 200 shares) = ₹ 5000 + ₹ 2000 = ₹ 7000

So, net gain = ₹ 15000 - ₹ 7000 = ₹ 8000.

**4.** The bank must pay an amount equal to 3% of the notional amount to the CDS seller each year. Annual premium amounts to \$1.5 million (3% × \$50 million).

If the borrower defaults on the final principal payment and the bank collects only 60% of its principal back, it can claim the differential from the seller of the CDS.

The amount it will receive from the CDS seller is approximately equal to \$20 million (\$50 million  $\times$  (1 – 60%)).

If the borrower doesn't default on the final principal amount, the bank will not receive anything from the CDS seller.

CHAPTER

# INSTITUTIONS AND INTERMEDIARIES

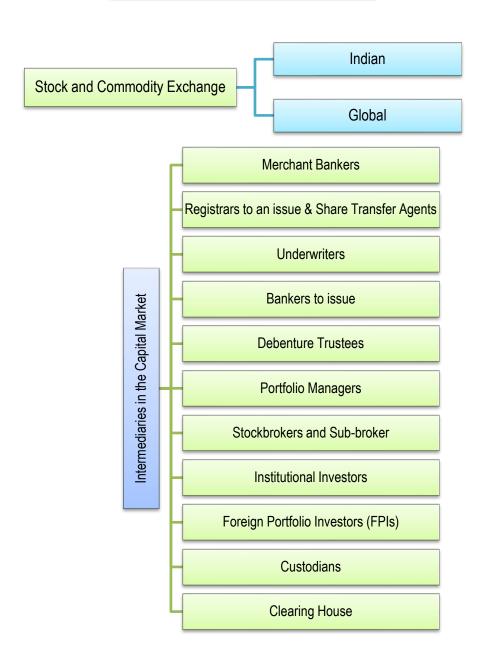


#### **LEARNING OUTCOMES**

- Depository
- □ Stock and Commodity Exchanges Indian and Global
- Intermediaries
- Institutional Investors
- FPIs
- Custodians
- Clearing Houses







# (3)

#### I. DEPOSITORY

Depository in simple terms means a place where security is kept safely. Depository is an organization which keeps securities in electronic form and helps in the transfer of ownership of securities. As per section 2(e) of the Depositories Act, 1996, 'Depository means a company formed and registered under the Companies Act, 2013 and which has been granted a certificate of registration under Securities and Exchange Board of India Act, 1992.'

In the depository system, transactions in securities are done entirely on paperless or electronic basis. This is quite like the banking system where one opens an account with a bank. Similarly, in the case of depository system, an investor willing to invest in the securities market opens an account (which is called a 'Demat Account') with a depository. Whenever securities are allotted to a particular investor, his account will be credited. In the same way, whenever any securities are sold by that investor, his demat account will be debited by the number of shares sold by him. A depository also acts as a securities bank where dematerialized securities in electronic are kept in safe custody.

#### 1.1 Benefits of a Depository System

#### To the Investors

- i) It eliminates bad deliveries of securities.
- ii) The settlement cycle has become quicker. It is now T + 2.
- iii) Immediate transfer and registration of securities are possible now.
- iv) It eliminates the risks present in physical certificate for e.g., forgery, delays, mutilation, theft, and damage of share certificates.
- v) The electronic transfer of securities enables the investor to get dividends, bonus shares and right shares quickly.
- vi) Transaction costs are lower as transfer of securities in electronic form is exempt from stamp duty.
- vii) Further, as trading in the depository system is paperless, no share certificate and share transfer deed is required.
- viii) Lastly, the rate of interest on loan against the pledged demat shares are lower in comparison to physical shares.

#### To the Company

- i) The depository system helps a company to maintain and update its shareholding pattern periodically. The company always has knowledge of the beneficial ownership and their holdings.
- ii) The cost of issue of securities also gets lowered because of dematerialisation of securities.
- iii) Another advantage of the depository system is that many transactions can be settled promptly.
- (iv) Distribution of dividends and issuance of rights shares and bonus shares will be quicker as the ownership can be easily identified.
- v) The transfer process under the depository system is quick and without any defects. Therefore, complaints against the company by investors have been drastically reduced in this respect.

#### To the Capital Market

- i) The capital market is more transparent, as trading, clearing and settlement are automatic and always inter linked with the depository.
- ii) Use of latest technology in the depository system has made the capital market activities more efficient.
- iii) That has made the investors have more confidence in the capital market.
- iv) Use of depository system has attracted foreign institutional investors in large numbers.
- v) Use of electronic system has made the Indian Capital Market more flourishing. For instance, we can take the example of mutual funds which have increased substantially in the last few years.

#### 1.2 The Process of Depository System

Four parties are involved in a depository system i.e., the customer, the depository participant (DP), the depository, and the share registrar and transfer agent. The process of the depository system and the involvement of the four parties as mentioned above are discussed as below:

(a) Account Opening: An investor who wishes to avail the depository services must apply for opening an account with a depository through a Depository Participant (DP). A depository participant can either be a custodian, a bank, a broker, or an individual. After opening an account, the investor is allotted a client account number. The holder of a demat account is called a 'beneficial owner'. He has the option of opening more than one demat account either with the same DPs or multiple DPs.

- (b) Dematerialization: To convert physical shares into electronic ones, an investor has to make an application to the depository in a Dematerialization Request Form (DRF). DP forwards the form within seven days to the issuer company or its Registrar and Share Transfer Agent (RTA). The company or its RTA, then verifies the validity of the security certificates and the fact the person making an application is a registered member. After verification, the issuer company, or its RTA, on being satisfied, authorizes an electronic credit of security in favour of the investor. Thereafter, the depository also credits the demat account of the investor.
- (c) Rematerialisation: An investor having a demat account can apply for withdrawal of balance in his account in a Rematerialisation Request Form (RRF). On receipt of the RRF, if the DP is satisfied that there is sufficient balance, will block the balance of the investor to the extent of the rematerialisation quantity and electronically forwards the request to the depository. The depository will then block the balance of the investor to the extent of the rematerialisation quantity and forward the accepted rematerialisation application to the issuer or its Registrar and Share Transfer Agent (RTA). The RTA will confirm that RRF has been accepted. Then, the RTA will dispatch the physical share certificates within 30 days.
- (d) Distributing Dividend: A company or its RTA generally informs the depository of various dates such as book closures, redemption, or maturity of security etc. This enables the depository to electronically provide the company a list of the holdings of the investors on the day of distribution of dividend. The company will, then, distribute dividends on the basis of the list provided.
- (e) Closing an Account: If an investor wants to close his account, he shall make an application in the prescribed format to the DP. The DP may close his account if no balances are there in the investor's demat account. If any balances exist, then the account may be closed either by rematerialisation or transferring his securities to another account either with the same depository participant or with a different depository participant.

## (G

# 2. STOCK AND COMMODITY EXCHANGES – INDIAN AND GLOBAL

Stock exchanges are meant to facilitate mobilization of resources by companies. However, the regulation of stock exchanges is necessary to protect the interests of investors and safeguard the role of stock exchanges about the development of the capital market.

Stock exchanges are basically regulated by SEBI. The recognition given to a stock exchange to function in the capital market is given by SEBI. The Securities Contracts (Regulation) Act 1956 along with the Securities Contracts (Regulation) Rules 1957 has been the main laws to regulate the securities market in India. As per the Securities Contracts Regulations Act, 1956 a stock exchange

is defined as "an association, organization or body of individuals whether incorporated or not, established for the purpose of assisting, regulating and controlling business in buying, selling and dealing in securities".

#### 2.1 Growth of Stock Exchanges

The history of Stock Exchanges in India goes back to the eighteenth century, when securities of the East India Company were transacted. There were 50-60 brokers led by the legendary Premchand Roychand. They formed the backbone of share floatation by East India Company and a few commercial banks. Corporate shares made their entry in the 1830s and assumed significance with the enactment of the Companies Act in the 1850s. The Bombay Stock Exchange, the oldest stock exchange in India was established in 1875 under the name, Share and Stockbrokers Association.

The stock exchanges are tightly regulated as self-regulatory organizations (SROs) under the Act. In addition to ordinary regulatory powers over the stock exchanges, the Central Government and/or SEBI may nominate up to three members to the board of each stock exchange [Section 4(2) (iii) of the SC (R) Act, 1956 and Section 10 of SC(R) Rules, 1957]. The government and/or the agency have the authority to make, approve and amend the byelaws of the stock exchanges [Section 4(1)(a) &8 of the SC(R) Act, 1956]. In return, the stock exchanges have been granted strong disciplinary authority (as well as obligations) over their member stockbrokers.

#### 2.1.1 Leading Stock Exchanges in India

The two leading stock exchanges in India are Bombay Stock Exchange (BSE) and National Stock Exchange (NSE). A brief about them has been discussed as below:

(a) Bombay Stock Exchange Limited: It is the oldest stock exchange in Asia and was established as "The Native Share & Stockbrokers Association" in 1875. The Securities Contract (Regulation) Act, 1956 gives permanent recognition to Bombay Stock Exchange in 1956. BSE became the first stock exchange in India to obtain such permission from the Government under the Act.

The Exchange's pivotal and pre-eminent role in the development of the Indian capital market is widely recognized and its index, *SENSEX*, is tracked worldwide. Earlier, an Association of Persons (AOP), the Exchange is now a demutualized and corporatized entity incorporated under the provisions of the Companies Act, 1956, pursuant to the BSE (Corporatization and Demutualization) Scheme, 2005 notified by the Securities and Exchange Board of India (SEBI).

The Exchange has nationwide coverage. The BSE's systems and processes are designed in such a way that it safeguards the integrity of the market and ensures transparency in its operations.

Therefore, the traders can freely trade in equity, debt, and derivative instruments as they are pretty much sure of the BSE's transparent and efficient operations. The BSE's Online Trading System (BOLT) is a proprietary system of the Exchange and is BS 7799-2-2002 certified. Similarly, the surveillance and clearing & settlement functions of the Exchange are ISO 9001:2000 certified.

(b) National Stock Exchange: NSE was incorporated in 1992. It was recognized as a stock exchange by SEBI in April 1993 and commenced operations in 1994 with the launch of the wholesale debt market, followed shortly after the launch of the cash market segment.

NSE also has strategic investments in complementary businesses, including mutual fund registry services, back-end exchange support services for its platforms, depository services, e-corporate governance and commodity, power and receivables exchanges.

The National Stock Exchange of India Ltd. (NSE) is the leading stock exchange in India and the second largest in the world by number of trades in equity shares from January to June 2018, according to World Federation of Exchanges (WFE) report.

NSE launched electronic screen-based trading in 1994, derivatives trading (in the form of index futures) and internet trading in 2000, which were each the first of its kind in India.

NSE has a fully integrated business model comprising our exchange listings, trading services, clearing and settlement services, indices, market data feeds, technology solutions and financial education offerings. NSE also oversees compliance by trading and clearing members and listed companies with the rules and regulations of the exchange.

NSE is a pioneer in technology and ensures the reliability and performance of its systems through a culture of innovation and investment in technology. NSE believes that the scale and breadth of its products and services, sustained leadership positions across multiple asset classes in India and globally enable it to be highly reactive to market demands and changes and deliver innovation in both trading and non-trading businesses to provide high-quality data and services to market participants and clients. [Source: NSE Website]

#### 2.1.2 Stock Exchanges Abroad

With the increasing globalization and liberalization, the prices of securities on Indian stock exchanges are influenced by stock exchanges abroad. Under this heading we have tried to give a brief introduction of the major stock exchanges abroad.

(a) New York Stock Exchange (NYSE): The New York Stock Exchange was established more than 200 years ago in 1792. NYSE is the world's foremost securities marketplace.

Each day on the NYSE trading floor an auction takes place. Open bids and offers are made by investors which are efficiently managed by exchange members who act on behalf of institutions and individual investors. Prices are determined through the forces of demand and supply. Buy and sell orders given by investors for the listed securities are given an assigned location where a NYSE member from employed broker acts as an auctioneer in an open outcry market. However, from January 24, 2007, onwards NYSE stocks are also being traded electronically.

(b) Nasdaq: Nasdaq is known for its growth, liquidity, depth of market and the world's most powerful, forward-looking technologies. This makes NASDAQ the leading choice of some of the well-known companies in the world. NASDAQ was founded in 1971. Since then, it has outformed the other market to become the fastest growing stock exchange in the USA. In Nasdaq, trading takes place in electronic trading platform having the highest level of efficiency.

As Nasdaq is one of the world's most popular stock exchanges, the companies to get listed on it must satisfy the strictest earnings, capitalization and corporate governance norms.

In contrast to NYSE, the Nasdaq is a fully electronic trading platform for securities. So, it has no individual specialist broker through which the transactions go through. Nasdaq's market structure is such that it allows many participants to undergo trading in stocks though a highly sophisticated computer network. Together, these participants help ensure transparency and liquidity for a company's stock while maintaining an orderly market and functioning under tight regulatory controls.

(c) London Stock Exchange: The history of the formation of the London stock exchange can be traced back to 1760 when 150 brokers fired from royal Exchange for misbehavior formed a club at Jonathan's Coffee House to buy and sell shares. In 1773, members voted to change the name to Stock Exchange and 2000 shareholders voted it to become a public limited company and thus the London Stock Exchange was formed. Dealing in shares is conducted via an off-market trading facility operated by Cazenove and Co.

London Stock Exchange provides a range of services for companies and investors:

- (i) Company Services -It provides several markets which allow companies large and small to raise capital, and a range of services to increase the profile of the companies.
- (ii) **Trading Services** -It gives market users access to a well-developed trading environment with a proven record of stability and flexibility.
- (iii) Information Services It provides high quality real-time price information to market users worldwide, as well as historical and reference data.

Supporting these activities, the exchange regulates the markets to give protection to investors and companies and to maintain its reputation for high standards and integrity. In addition, in partnership with others, it helps to track the performance of the markets through various indices.

#### 2.2 Characteristics of Stock Exchanges in India

Stock exchange is an association of individual members called brokers. It is formed with the aim of regulating and facilitating the buying and selling of securities by retail investors and institutions. Corporate membership of stock exchanges was introduced lately.

A stock exchange is typically governed by a board consisting of directors. Some Members of the Board have been nominated by the Government. Government nominees include representatives of the Ministry of Finance, as well as some public representatives, who are expected to safeguard the interest of investors in the functioning of the exchanges. The board is headed by a President, who is an elected member, usually nominated by the government, from among the elected members. The Executive Director, who is appointed by the stock exchange with government approval, is the operational chief of the stock exchange. His duty is to ensure that the day-to-day operations of the stock exchange are carried out in accordance with the rules and regulations governing its functioning.

Securities and Exchanges Board of India (SEBI) has been set up in Mumbai by the Government to oversee the orderly development of stock exchanges in the country. Every company which wishes to raise capital from the public is required to get its securities listed on atleast one stock exchange. Thus, all ordinary shares, preference shares and debentures of publicly held companies are listed in one or more stock exchanges.

#### 2.3 Functions of Stock Exchanges

The Stock Exchange is a marketplace where investors buy and sell securities. Functions of the stock exchanges can be summarized as follows:

- (a) Liquidity and Marketability of Securities: The basic function of the stock market is the creation of a continuous market for securities, enabling them to be liquidated, where investors can convert their securities into cash at any time at the prevailing market price. It also provides investors with the opportunity to change their portfolio as and when they want to change, i.e. they can at any time sell one security and purchase another, thus giving them marketability.
- (b) Fair Price Determination: The stock market is almost a perfectly competitive market. The reason is that there are large number of buyers and sellers, near perfect information and active bidding from both the buyer's and the seller's side. The reasons as mentioned above ensure that fair price is determined by the forces of demand and supply.

- (c) Source for Long term Funds: Corporates, Government and public bodies raise funds from the equity market. These securities are negotiable and transferable. They are traded and change hands from one investor to the other without affecting the long-term availability of funds to the issuing companies.
- (d) Helps in Capital Formation: Savings and investments of the people are closely interrelated. The savings of the community are mobilized and channeled by stock exchanges for investment into those sectors and units which are favoured by the community at large, based on such criteria as good return, appreciation of capital, and so on. It is the preference of investors for individual units as well as industry groups, which is reflected in the share price that decides the mode of investment.

Stock exchanges render this service by arranging for the preliminary distribution of new issues of capital, offered through prospectus, as also offers for sale of existing securities, in an orderly and systematic manner. They themselves administer the same, by ensuring that the various requisites of listing (such as offering at least the prescribed minimum percentage of capital to the public, keeping the subscription list open for a minimum number of days, enlisting prescribed centres for receiving of applications, allotting shares against application received are complied with.

Stock exchanges also provide a forum for trading in rights shares of companies already listed, thereby enabling a new class of investors to take up a part of the rights in the place of existing shareholders who renounce their rights for monetary considerations.

(e) Reflects the General State of Economy: The way stock markets perform is indicative of the manner of economic health of a country i.e. whether the economy is undergoing boom or depression. It indicates the general state of the economy to all those concerned, who can take suitable steps in time. The Government takes suitable monetary and fiscal steps depending upon the state of the economy.

#### 2.4 Indian Commodity Exchanges

Presently four national commodity exchanges are operational: National Multi-Commodity Exchange of India (NMCE), Indian Commodity Exchange (ICEX), National Commodity and Derivatives Exchange (NCDEX) and Multi Commodity Exchange (MCX).

(a) National Commodity & Derivatives Exchange Limited (NCDEX): NCDEX is a professionally managed online multi commodity exchange. It is promoted by ICICI Bank Limited (ICICI Bank), Life Insurance Corporation of India (LIC), National Bank for Agriculture and Rural Development (NABARD) and National Stock Exchange of India Limited (NSE), Punjab National Bank (PNB), CRISIL Limited (formerly the Credit Rating Information Services of India Limited), Indian Farmers Fertiliser Cooperative Limited (IFFCO), Canara Bank and Goldman Sachs by subscribing

to the equity shares of the Exchange. NCDEX is the only commodity exchange in the country promoted by national level institutions.

NCDEX is a public limited company incorporated on April 23, 2003, under the Companies Act, 1956. It commenced its operations on December 15, 2003.

It is a national level, technology driven demutualized on-line commodity exchange with an independent Board of Directors and professionals not having any vested interest in commodity markets. It is committed to providing a world-class commodity exchange platform for market participants to trade in a wide spectrum of commodity derivatives driven by best global practices, professionalism, and transparency.

Initially, it was regulated by the Forward Market Commission in respect of futures trading in commodities. However, FMC merged with SEBI in 2015. Now, SEBI is also the regulator of commodity exchanges. Further, NCDEX is also required to comply with various laws like the Companies Act, Stamp Act, Contract Act, SEBI Act, and various other legislations, which generally hamper its working.

(b) Multi Commodity Exchange (MCX): MCX is an independent and demutualized multi commodity exchange. The government has given it permanent recognition for facilitating online trading, clearing and settlement operations for commodities futures market across the country.

Because of the opportunities galore offered by the MCX to a large cross section of participants including producers/ processors, traders, corporate, regional trading centre, importers, exporters, co-operatives, and industry associations amongst others, it offers trading in more than 30 commodity futures contracts. The headquarters of MCX is in Mumbai. Further, it is led by an expert management team with good knowledge of the commodities futures market.

Being a nation-wide commodity exchange having state-of-the-art infrastructure, offering multiple commodities for trading with wide reach and penetration, MCX is well placed to tap the vast potential posed by the commodities market.

The key shareholders of MCX are Financial Technologies (I) Ltd. (now, 63 Moons Technologies Limited), State Bank of India and its' associates, National Bank for Agriculture and Rural Development (NABARD), National Stock Exchange of India Ltd. (NSE), Fid Fund (Mauritius) Ltd. - an affiliate of Fidelity International, Corporation Bank, Union Bank of India, Canara Bank, Bank of India, Bank of Baroda, HDFC Bank and SBI Life Insurance Co. Ltd.

(c) Indian Commodity Exchange (ICEX): It is a screen based on-line derivatives exchange for commodities. It has robust assaying and warehousing facilities to facilitate deliveries. It has Reliance Exchange Next Ltd. as anchor investor and has MMTC Ltd., India Bulls Financial Services Ltd., Indian Potash Ltd., KRIBHCO and IDFC among others, as its partners.

The head office is in Mumbai and has regional offices spread across the country which covers agri belt, with a vision to encourage participation of farmers, traders, and actual users to hedge their positions against the wide price fluctuations.

It provides the widest range of benchmark future products available on any exchange, covering all major commodities. It offers future trading in Agriculture Commodities, Bullions, Base Metals and Energy.

(d) National Multi-Commodity Exchange of India (NMCE): It is the first demutualized Electronic Multi-Commodity Exchange of India and has been granted the National status on a permanent basis by the Government of India. NMCE has been operational since 26th November 2002.

It is promoted by commodity-relevant public institutions, viz., Central Warehousing Corporation (CWC), National Agricultural Cooperative Marketing Federation of India (NAFED), Gujarat Agro-Industries Corporation Limited (GAICL), Gujarat State Agricultural Marketing Board (GSAMB), National Institute of Agricultural Marketing (NIAM), and Neptune Overseas Limited (NOL) and Punjab National Bank (PNB).

There are many positive features of NMCE. It is a zero-debt company and has been regularly following prudent accounting and auditing practices. The delivery mechanism is very good, which makes it the most suitable participants in the physical commodity market.

To attract speculative volume, the exchange does not compromise on delivery mechanism. The main motive is public interest rather than commercial considerations. It has transparent rule-based procedures which has almost eliminated any conflict of interest.

#### 2.5 International Commodity Exchanges

Major international commodity exchanges of the world are briefly discussed as below:

- Chicago Mercantile Exchange (CME): It is a financial and commodity derivative trading platform which has its headquarter in Chicago. It was established in 1898 as the Chicago Butter and Egg Board. Presently, Chicago offers contracts of all kinds which include agriculture, credit, equity index, interest rates and other futures/options investments.
- Chicago Board of Trade (CBOT): It is formed in 1848 and being considered among oldest
  future/options trading exchanges in the world. The exchange offers more than 50 different
  futures and option contracts for investors which are scattered over several asset classes.
- New York Mercantile Exchange (NYMEX): The NYMEX is the world's largest physical commodity futures exchange, which offers a wide variety of products. Commodity Exchange

Inc. (COMEX), which acts as a division of the NYMEX, also offers exposure to various metals contracts.

- ◆ London Metal Exchange (LME): LME was established in 1877. However, it has its roots in 1571, when the Royal Exchange in London was founded, trading only copper at that time. It is a major exchange which offers exposure to futures and options of various varieties of base metals and other commodity products. Some of the metals which have been traded include aluminum, copper, tin, nickel, zinc, and lead.
- ◆ Intercontinental Exchange Inc. (ICE): The Intercontinental Exchange is an American company which operates futures and over-the-counter contracts through internet. In the beginning, the company was operating energy contracts but has increased its scope by offering exposure to several commodities including cocoa, cotton, sugar, iron ore, natural gas, and crude products.



#### 3. INTERMEDIARIES IN THE CAPITAL MARKET

The following market intermediaries are involved in the Capital Market:

- Merchant Bankers
- Registrars to an issue and Share Transfer Agents
- Underwriters
- Bankers to issue
- ♦ Debenture Trustees
- Portfolio managers
- Stockbrokers and sub-broker

We will discuss them one by one in the following paragraphs:

#### 3.1 Merchant Bankers

SEBI (Merchant Banker) Regulations, 1992, define 'merchant banker' as any person who is engaged in the business of issue management, either by making arrangements regarding selling, buying, or subscribing, or acting as a manager, consultant, or advisor, or rendering corporate-advisory services in relation to such issue management.

In case of both the public issues and right issues, it is mandatory to appoint a Merchant Banker. The task of Merchant Banker is basically that of a facilitator or coordinator. It coordinates the process of

issue management by helping the underwriters, registrars, and bankers, in pricing and marketing the issue and complying with the SEBI guidelines.

Merchant Bankers are prohibited from carrying on certain activities such as acceptance of deposits, leasing, and bill discounting. They are not allowed to borrow any money from the market. They are also debarred from engaging in the acquisition and sale of securities on a commercial basis.

#### 3.2 Registrars to an issue and Share Transfer Agents

'Registrar to an Issue' means a person who is involved with the following activities:

- (a) Collecting applications on behalf of the investors and keep a proper record of monies received and paid.
- (b) Helping the company which has issued shares in determining the basis of allotment of the securities in consultation with the stock exchange.
- (c) Finalizing the list of persons entitled to allotment of securities.
- (d) Processing and dispatching of allotment letters, share certificates and refund orders.

'Share Transfer Agent' means a person who on behalf of the issuer company maintains the records of holders of securities issued by such company.

The Registrars to an Issue and Share Transfer Agents are important intermediaries in the primary market. They help in mobilizing new capital and ensure that proper records of the details of the investors are maintained, so that the decisions regarding the basis for allotment and the number of securities to be allotted can be smoothly implemented.

#### 3.3 Underwriters

An underwriter is a person who engages in the business of underwriting the public issue of securities of a particular company. An underwriting is an arrangement in which a SEBI registered underwriter gives an undertaking to the issuing company that in case the company's public issue is not fully subscribed, the underwriter will purchase the unsubscribed portion of the public issue.

Underwriting is compulsory for a public issue. It is necessary for a public company which invites public subscription for its securities to ensure that 90% of its public issue is fully subscribed, otherwise the whole issued amount must be refunded. The company cannot fully rely on advertisements to ensure full subscription. In case of any subscription, it must be made good by the underwriters. And the underwriting agreement must be made in advance of the opening of the public issue.

#### 3.4 Bankers to an issue

Banker to an Issue means a scheduled bank doing any one of the following tasks:

- (i) Acceptance of application money;
- (ii) Acceptance of allotment or call money;
- (iii) Refund of application money;
- (iv) Payment of dividend or interest warrants.

Therefore, as the name indicates, bankers to the issue carries out the important task of ensuring that the funds are collected and transferred to the Escrow accounts. The banks do a great favour to the companies in mobilization of capital.

#### 3.5 Debenture Trustee

A debenture trust deed is a document created by the company where debenture trustees are appointed to protect the interest of the debenture holders. To act as debenture trustee, the entity should either be a scheduled bank carrying on commercial activity, a public financial institution, an insurance company, or a body corporate. The entity should be registered with SEBI to act as a debenture trustee. The contract deed entered with a debenture trustee must specify the interest rate and date of interest and principal repayments.

#### **Duties of the Debenture Trustee include:**

- (a) Call for periodical reports from the body corporate, i.e., issuer of debentures.
- (b) Take possession of trust property in accordance with the provisions of the trust deed.
- (c) Enforce security in the interest of the debenture holders.
- (d) Ensure on a continuous basis that the property charged to the debenture is always available and adequate to discharge the interest and principal amount payable in respect of the debentures and that such property is free from any other encumbrances except those which are specifically agreed with the debenture trustee.
- (e) Exercise due diligence to ensure compliance by the body corporate with the provisions of the Companies Act, the listing agreement of the stock exchange or the trust deed.
- (f) To take appropriate measures for protecting the interest of the debenture holders as soon as any breach of the trust deed or law comes to his notice.
- (g) To ascertain that the debentures have been converted or redeemed in accordance with the provisions and conditions under which they are offered to the debenture holders.

- (h) Inform the Board immediately of any breach of trust deed or provision of any law.
- (i) Appoint a nominee director on the board of the body corporate when required.

(Source: SEBI FAQ's - Debenture Trustee)

#### 3.6 Portfolio Managers

As per SEBI, a portfolio manager is a body corporate who, pursuant to a contract or arrangement with a client, advises or directs or undertakes on behalf of the client (whether as a discretionary portfolio manager or otherwise), the management or administration of a portfolio of securities or the funds of the client.

Simply stated, a portfolio manager is a person who is responsible for investing a fund's assets, monitoring investment strategy and doing day-to-day trading. A portfolio manager manages mutual funds and other investment funds, such as hedge or venture funds. He may be an experienced investor, a broker, a fund manager, or a trader with good knowledge of industry and a having a track record of producing good results.

The portfolio manager provides the client with the Disclosure Document at least two days prior to entering into an agreement with the client. The Disclosure Document contains the quantum and manner of payment of fees payable by the client for each activity, portfolio risks, complete disclosures in respect of transactions with related parties, the performance of the portfolio manager and the audited financial statements of the portfolio manager for the immediately preceding three years. Please note that the disclosure document is neither approved nor disapproved by SEBI nor does SEBI certify the accuracy or adequacy of the contents of the Documents.

(Source: SEBI FAQ's - Portfolio Managers)

#### 3.7 Stockbrokers and Sub-Broker

A stockbroker is a person who buys and sells stocks and other securities for its clients through a stock exchange. Stockbrokers should be registered with SEBI and are governed by SEBI Act and Securities Contract Regulation Act. Stockbrokers may also call themselves investment consultants and financial consultants. A stockbroker should have a good knowledge of the securities market. Further, he should be good with numbers, have excellent interpersonal skills and should be attentive enough not to oversee any important details.

On the other hand, a sub broker is a person who is not a trading Member of a Stock Exchange but who acts on behalf of a trading member as an agent. His task is to help investors in dealing in securities through such trading members(brokers). The leading stockbrokers in India are listed as below:

- India Infoline
- ♦ ICICI Direct
- Share Khan
- India Bulls
- Geojit Securities
- ♦ HDFC
- Reliance Money
- ♦ Religare
- ♦ Angel Broking

#### New Margin Rules for brokers and its implications

The new margin rules have come into effect from 1 September 2020 after SEBI's refusal to extend the deadline to implement the new rules on margin pledge any further. SEBI's new margin rules aim at bringing transparency and preventing brokerages from misusing clients' securities. These norms came out earlier in February 2020 and were initially scheduled to come into effect from June 1, 2020. The date was then extended to August 1, 2020, and thereafter to September 1, 2020. While the brokers and other participants requested more time to make their systems ready, SEBI's refused to extend this by saying there was enough time to make the changes.

#### Here are the changes:

- The stock will continue to remain in the investor's demat account and can be directly pledged to the clearing corporation. As the securities remain in investors' own demat account, they will enjoy all corporate benefits on their shares.
  - Under the old system, cash margins were taken care of by the broker. Investors either had to transfer their shares to the brokers' account or give power of attorney (POA) to the broker. Some brokers went on to misuse the POA assigned to them.
- It is mandatory for brokers to collect margins from investors upfront for any purchase of sale of shares. Failing to do so will attract a penalty.
- No Power of Attorney (POA) to be assigned to brokers. The investors used to give authority to the brokers by way of POA to execute transactions on their behalf. The POA cannot be used for pledges anymore.
- Investors who want to avail margin now must create margin pledge separately.

- Earlier collecting upfront margin wasn't mandatory, but under the new system, investors will
  have to pay at least 30% margin upfront to avail themselves of a margin loan.
- Shares bought today cannot be sold tomorrow. Currently, investors can use intraday realized profits for taking new positions on the same trading day. According to the new norms, you will be able to use it only after T+2 days in case of equity/stocks once you receive the delivery of shares in your account.
- Till now, clients needed to meet margin requirements in their account once at the end of the day. But, the new margin rules of SEBI will require them to fulfill their margin obligations at the beginning of the deal.
  (Source: Livemint)



#### 4. INSTITUTIONAL INVESTORS

An institutional investor is a large organization that has large cash reserves by which it invests in securities and other investment assets. Institutional investors include endowment funds, hedge funds, insurance companies, pension funds, mutual funds, etc. An institutional investor is basically a non-bank organization that trades in large quantities to qualify for preferential treatment. They are considered as specialized investors and supply capital to organizations that require funds or are in dire straits. Moreover, they exert good influence in the management of the corporations exercising voting rights.

So, basically, an institutional investor is an organization that invests on behalf of the investors. Institutional investors have the required resources to do detailed research on various investment avenues, and because of their extensive knowledge, they generally have an edge over retail investors. Various institutional investors are briefly discussed as below:

(i) Commercial Banks: They play an important role in taking deposits from the public and giving loans to various sectors of the economy. A sound banking system ensures that mobilized savings are effectively deployed to needy sectors of the economy. When banks provide loans in the form of working capital, they are providing loans for funding the current assets. The working capital loan should be short term in nature, and it is given in the form of a limit.

Banks provide long term loans for asset purchase as well as margin money for working capital purposes. In the case of asset purchase, a bank would provide a long- term loan which would be repaid either from the cash flow generated from the business or from refinancing or disinvestment. In such a case, security is generally created on the asset which is purchased out of the term loan. Besides, some other collateral is also taken as security in the form of term loan. In the case of term loans for working capital purpose, generally, other assets are taken as security. This asset can be immovable properties the borrower happens to have.

- (ii) Insurance Companies: Insurance is basically the process of safeguarding the interests of people from loss and uncertainty. Insurance companies do a lot of service to the economy of the nation by protecting companies from contingencies and compensating them from any loss. They collect premiums for providing these services. The role and responsibilities of insurance companies have been outlined as below:
- a) The insurance companies provide safety and security against a particular event.
- b) They generate financial resources by collecting premiums and utilizing the premium amount for fruitful investment purposes.
- c) Life insurance encourages savings through payment of regular premium amount.
- d) The insurance companies promote economic growth by making accumulated capital into productive investment purposes. They help to reduce loss, bring financial stability by providing compensation at the time of any uncertain event and promote trade and commerce activities resulting in economic growth and development.
- e) And, finally, insurance help in shifting of risk from the insured to the insurer.
- (iii) Mutual Funds: Mutual Fund is a trust that pools together the savings of investors by making investments in the capital market thereby making the investor to be a part owner of the assets of the mutual fund. The fund is managed by a professional money manager who invests the money collected from different investors in various stocks, bonds, or other securities according to specific investment objectives as established by the fund. If the value of the mutual fund investments goes up, the return on them increases and vice versa. The net income earned from the funds, along with capital appreciation of the investment, is shared amongst the unit holders in proportion to the units owned by them. Mutual Fund is therefore an indirect vehicle for the investor investing in capital markets. In return for administering the fund and managing its investment portfolio, the fund manager charges fees based on the value of the fund's assets.
- (iv) Pension Funds: A pension fund is a fund from which pensions are paid which are accumulated from contributions from employers and employees. Pension systems throughout the world have been under scrutiny over the last couple of decades. Numerous reforms have been carried out to tackle the sustainability and adequacy of pension arrangements in the face of the rising global demographic challenge.

In India, now Pension funds are regulated by Pension Fund Regulatory and Development Authority (PFRDA). Moreover, the funds contributed by the Subscribers are invested by the Pension Fund Regulatory and Development Authority (PFRDA) registered Pension Fund Managers (PFM's) as per the investment guidelines provided by PFRDA. The investment guidelines are framed in a very professional manner in such a way that there is negligible effect on the subscribers' contributions

even if the market is not doing well by a prudent mix of investment vehicles like Government securities, corporate bonds, and equities.

(v) Endowment Funds: An endowment fund is an investment vehicle where periodic withdrawal from the money invested into the fund is possible. The money put into the endowment funds is often used by universities, nonprofit organizations, churches, and hospitals, and is generally used for specific requirement or to give a boost to the company's operating process.

An endowment fund is a financial asset, basically held by a non-profit organization, which contains the capital investments and related earnings used by the non-profit organization to fund the overall objective of the organization. Further, endowment funds are organized by stringent contractual obligations and rules to be followed by the non-profit organization. The main aim of the fund is to further the goal of the long-term financial health of the non-profit organization and its beneficiaries.

(vi) Hedge Funds: A hedge fund can be explained as a package of funds that takes both short and long positions, buys, and sells equities, initiates arbitrage, and trades bonds, currencies, convertible securities, commodities, and derivative products to give returns at minimum possible risk. The hedge fund tries to minimize risks to investor's capital against market volatility by employing various hedging strategies as outlined above. Hedge fund investors typically include High Networth Individuals (HNIs), endowments and pension funds, insurance companies, and banks. These funds work either as private investment partnerships or offshore investment companies.



### 5. FOREIGN PORTFOLIO INVESTORS (FPIs)

#### Who are FPIs?

FPIs are basically registered foreign funds, which put their money in the stock markets in India. They invest through various methods in the capital market, that is either in the debt segment or in the equity segment. Therefore, an FPI is an investor or investment fund that is registered in a country outside of the one in which it is currently investing. Institutional investors include hedge funds, insurance companies, pension funds and mutual funds. If we try to explain it in the Indian context, it refers to foreign companies investing in the financial markets of India. The Institutional investors based internationally must register with the Securities and Exchange Board of India (SEBI) to participate in the market.

#### **Categorization of FPIs**

Before making its investment in India, the FPI shall obtain a certificate of registration from a designated depository participant on behalf of the SEBI. They can be divided into following categories:

(a) Category I foreign portfolio investor" which shall include –

- Government and Government related investors such as central banks, sovereign wealth funds, international or multilateral organizations or agencies including entities controlled or at least 75% directly or indirectly owned by such Government and Government related investor(s);
- (ii) Pension funds and university funds;
- (iii) Appropriately regulated entities such as insurance or reinsurance entities, banks, asset management companies, investment managers, investment advisors, portfolio managers, broker dealers and swap dealers;
- (iv) Entities from the Financial Action Task Force member countries or from any country specified by the Central Government by an order or by way of an agreement or treaty with other sovereign Governments, which are
  - (I) appropriately regulated funds;
  - (II) unregulated funds whose investment manager is appropriately regulated and registered as a Category I foreign portfolio investor:
    - Provided that the investment manager undertakes the responsibility of all the acts of commission or omission of such unregulated fund;
  - (III) university related endowments of such universities that have been in existence for more than five years;
- (v) An entity (A) whose investment manager is from the Financial Action Task Force member country and such an investment manager is registered as a Category I foreign portfolio investor; or (B) which is at least seventy-five per cent owned, directly or indirectly by another entity, eligible under sub-clause (ii), (iii) and (iv) of clause (a) of this regulation and such an eligible entity is from a Financial Action Task Force member country:
  - Provided that such an investment manager or eligible entity undertakes responsibility of all the acts of commission or omission of the applicant's seeking registration under this sub-clause.
- (b) "Category II foreign portfolio investor" shall include all the investors not eligible under Category I foreign portfolio investors such as
  - appropriately regulated funds not eligible as Category-I foreign portfolio investor;
  - (ii) endowments and foundations;
  - (iii) charitable organisations;

- (iv) corporate bodies;
- (v) family offices;
- (vi) Individuals;
- (vii) appropriately regulated entities investing on behalf of their client, as per conditions specified by the Board from time to time;
- (viii) Unregulated funds in the form of limited partnership and trusts;

**Explanation:** An applicant incorporated or established in an International Financial Services Centre shall be deemed to be appropriately regulated.

#### An interesting fact about FPIs

Foreign Portfolio Investors have made good money in the last few years. However, the problem for the Indian markets is that if interest rates in the US rise, they may sell stocks they held in the Indian Stock Market to make higher yields in the US. The reason for this action is that they may earn higher return in the US than what they may earn by investing in the Indian Stock market. This may lead to high sell off in the Indian Capital market. So, interest rate hike by US Fed can influence the Indian Stock Market hugely.

#### Investment restrictions on FPIs

As per the SEBI (Foreign Portfolio Investors) Regulations), 2019

- (1) A foreign portfolio investor shall invest only in the following securities, namely-
  - (i) shares, debentures and warrants issued by a body corporate; listed or to be listed on a recognized stock exchange in India;
  - (ii) units of schemes launched by mutual funds under Chapter V, VI-A and VI-B of the Securities and Exchange Board of India (Mutual Fund) Regulations, 1996;
  - (iii) units of schemes floated by a Collective Investment Scheme in accordance with the Securities and Exchange Board of India (Collective Investment Schemes) Regulations, 1999;
  - (iv) derivatives traded on a recognized stock exchange;
  - (v) units of real estate investment trusts, infrastructure investment trusts and units of Category III Alternative Investment Funds registered with the Board;
  - (vi) Indian Depository Receipts;
  - (vii) any debt securities or other instruments as permitted by the Reserve Bank of India for foreign portfolio investors to invest in from time to time; and
  - (viii) such other instruments as specified by the Board from time to time.

#### **Recent Trends**

Foreign portfolio investors (FPIs) remained net sellers in Indian markets in July 2020 so far on account of both domestic and global factors, including rising number of coronavirus cases and increasing tension between the US and China.

According to the depositories data, overseas investors invested  $\hat{}$  2,336 crore in equities but pulled out  $\hat{}$  2,422 crore from the debt segment, leading to net outflows of  $\hat{}$  86 crore from Indian markets between July 1-24. In the previous month i.e., June 2020 FPIs were net buyers to the tuneof  $\hat{}$  24,053 crore. (Source: Livemint)

About 70% of the foreign portfolio investor (FPI) inflows into Indian equities in the month of October 2020 have gone into two sectors — banking and technology, according to NSDL data. These investors have pumped ₹ 16,945 crore into local stocks in October. Out of this, they have invested nearly ₹ 9,500 crore in banking stocks. Better-than-expected September quarter earnings, improvement in asset quality, and lower valuations because of the recent share underperformance FPIs' purchases in shares of private banks in October 2020.

FPIs put ₹ 3,327 crore into technology shares in October as the companies are cash-rich and their earnings have been resilient even when the disruptions on account of Covid-19 dragged down other sectors.

FPIs have also increased their stakes in automobiles, consumer discretions, capital goods, consumer durables and construction companies. Data show these investors have pulled out ₹ 871 cr from oil & gas companies, ₹ 847 crore from metals and a total of ₹ 350 crore from telecom and insurance sectors.

(Source: Economic Times)



#### 6. CUSTODIANS

The custodians play a critical role in the secondary market. SEBI (Custodian) Regulation, 1996 was framed for the proper conduct of their business. According to SEBI regulations, custodial services in relation to securities of a client or gold/gold related instrument held by a mutual fund or title deeds of real estate assets held by a real estate mutual fund mean safekeeping of such securities or gold/gold related instruments or title deeds of real estate assets and providing related services.

The related services provided by them are as follows:

- Maintaining accounts of the securities of a client.
- Collecting the benefits /rights accruing to the client in respect of securities.
- Keeping the client informed of the actions taken by the issuer of securities.
- Maintaining and reconciling records of the services as referred above.

Further, every custodian should appoint a compliance officer to monitor the compliance of SEBI Act and its various rules, regulations, and guidelines and for redressal of investor grievances. The compliance officer should immediately report any non-compliance observed by him to the SEBI.

SEBI can also ask for information from the custodian regarding his activities. Such information must be given within a reasonable period as laid down by SEBI. Further, SEBI is also empowered to conduct inspection/investigation including audit of books of account, records etc. of custodians to ensure that they are being properly maintained. SEBI's task is also to ascertain that compliance of provisions of SEBI Act and its regulations have been duly complied with. Moreover, his job is also to investigate complaints received from investors or clients.



### 7. CLEARING HOUSES

Clearing house is an exchange-associated body charged with the function of ensuring (guaranteeing) the financial integrity of each trade. Orders are cleared by means of the clearing house acting as the buyer to all sellers and the seller to all buyers. Clearing houses provide a range of services related to the guarantee of contracts, clearance and settlement of trades, and management of risk for their members and associated exchanges.

#### 7.1 Role of Clearing Houses

- It ensures adherence to the system and procedures for smooth trading.
- It minimises credit risks by being a counter party to all trades.
- It involves daily accounting of all gains or losses.
- It ensures delivery of payment for assets on the maturity dates for all outstanding contracts.
- It monitors the maintenance of speculation margins.

#### 7.2 Working of Clearing Houses

The clearinghouse acts as the medium of transaction between the buyer and the seller. Every contract between a buyer and a seller is substituted by two contracts so that clearing house becomes the buyer to every seller and the seller to every buyer. In a transaction where P sells futures to R, R is replaced by the clearinghouse and the risk taken by P becomes insignificant. Similarly, the credit risk of R is taken over by the clearing house; thus, the credit risk is now assumed by the clearing house rather than by individuals. The credit risk of the clearing house is then minimised by employing some deposits as collateral by both buyers and sellers. These deposits, known as margins, are levied on each transaction depending upon the volatility of the instrument and adjusted every day

for price movements. Margins, which normally are in form of cash or T-bills, can be categorised into the following types: -

- Initial Margins on Securities: It is paid by purchasers and short sellers, generally functions as
  a security for loan, and is like a down payment required for the purchase of a security.
- Initial Margins on Derivatives: It refers to funds paid as a guarantee to ensure that the party to the transaction will perform its obligation under the contract. The initial margin on derivatives is designed to cover future changes that may occur in the value.
- Maintenance Margins: It refers to the value over and above the initial margin, which must always be maintained in a margin account after the initial margin requirement, if any, is satisfied.
- Variation Margin: It refers to funds that are required to be deposited in, or paid out of, a margin account that reflects changes in the value of the relevant instrument.

#### 7.3 Trading Procedure of Clearing Houses

Clients must open an account with a member of the exchange. When they want to trade in futures, they instruct members to execute orders in their account. The trade details are reported to the clearing house. If a member of the exchange is also a member of clearing house, then he directly deposits the margins with the clearing house. If he is not a member, then he should route all transactions through a clearing member to maintain margins.

#### **TEST YOUR KNOWLEDGE**

#### **Multiple Choice Questions (MCQs)**

- 1. Which among the following is not an advantage of depository?
  - (a) It eliminates bad deliveries of securities.
  - (b) The settlement cycle has become quicker. It is now T + 2.
  - (c) Immediate transfer and registration of securities are possible now.
  - (d) the rate of interest on loan against the pledged demat shares are higher in comparison to physical shares.
- 2. ...... is known for its growth, liquidity, depth of market and the world's most powerful, forward-looking technologies.
  - (a) National Stock Exchange

- (b) London Stock Exchange
- (c) Nasdaq
- (d) New York Stock Exchange
- 3. .....is the person who collects applications on behalf of the investors and keeps a proper record of monies received and paid.
  - (a) Merchant Bankers
  - (b) Registrars to an issue and Share Transfer Agents
  - (c) Underwriters
  - (d) Bankers to an issue
- 4. .....is an investment vehicle where periodic withdrawal from the money invested into the fund is possible.
  - (a) Hedge Funds
  - (b) Endowment Funds
  - (c) Pension Funds
  - (d) Mutual Funds
- 5. Which among the following services are not provided by Custodians?
  - (a) Maintaining accounts of the securities of a client.
  - (b) Collecting the benefits /rights accruing to the client in respect of securities.
  - (c) It minimizes credit risk by being a counter party to all trades.
  - (d) Keeping the client informed of the actions taken by the issuer of securities.

#### **Theoretical Questions**

- 1. Briefly discuss the process of depository system and give a conceptual clarity of what a depository system is.
- 2. Write a short note on international commodity exchanges.
- 3. Who is the custodian and what are the services provided by a custodian?
- 4. Briefly explain the working of clearing houses and their trading procedure?

#### **ANSWERS/SOLUTIONS**

#### **Answers to Multiple choice Questions:**

1.	(d)	2.	(c)	3.	(b)	4.	(b)	5.	(c)	١
----	-----	----	-----	----	-----	----	-----	----	-----	---

#### **Answers to Theoretical Questions:**

- 1. Please refer to paragraph 1
- 2. Please refer to paragraph 2.5
- 3. Please refer to paragraph 6
- 4. Please refer to paragraph 7.3

CHAPTER 9

# **COMMODITY MARKET**

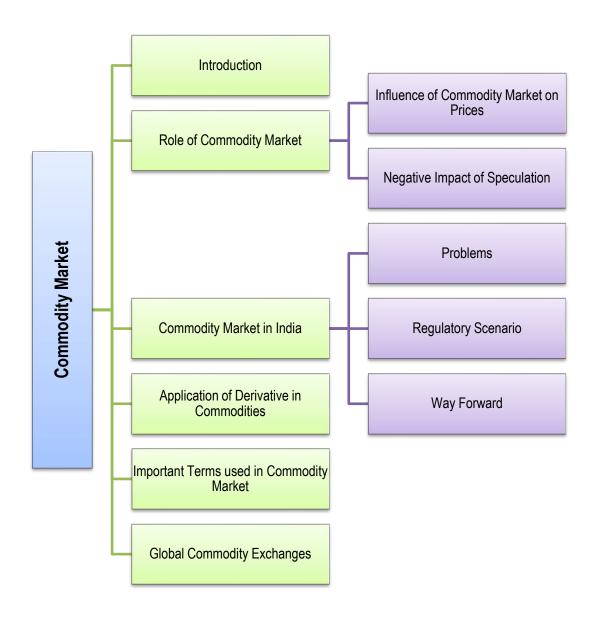


#### **LEARNING OUTCOMES**

After g	oing	through	the	chapter	student	shall	be	able	to u	underst	and	:
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- ☐ Introduction of Commodity Markets
- □ Role of Commodity Markets
- Commodity Market in India
- Application of derivative in commodities
- ☐ Global Commodities Exchanges

# CHAPTER OVERVIEW []





## 1. INTRODUCTION

Like financial markets which deal with money and shares, the commodity markets deal with trading of 'commodities' like metals, raw material commodities like cotton, pulses etc. In fact, the commodity market is the foremost form of market which was structured more of a barter of commodity exchanges – usually dissimilar products – which later got one leg as money as time progressed. The contemporary commodity market is as sophisticated as its stock market counterpart, with the only distinction being commodities, instead of stocks, traded.

The commodity market is essential to understand how the prices get influenced by many factors ranging from monsoon predictions to political decisions. The commodity market acts as the barometer of how the markets perceive these factors, which in turn will impact the demand-supply dynamics, thereby influencing the futures prices. This leads to a market driven price discovery mechanism

For example, a farmer will be very much interested to 'lock in' prices for his harvest of pulses next crop season due in 3 months. Hence, he would 'sell' an estimated quantity, say 100 kilograms (kg.) of his future produce at the future rate of ₹ 80 per kg, thereby assuring himself of a fixed price. A wholesaler in pulses would similarly like to have a committed purchase price and would enter the 'buy' leg (futures long) at ₹ 80 per kg. Assume after 3 months, the contract closes out at 81 per kg. That means the farmer has lost ₹ 1 per kg whereas the wholesaler has gained by Re 1 per kg. in the futures contract. Of course, the contracts are settled in cash - rarely there is actual physical delivery of the commodities involved.



#### **ROLE OF COMMODITY MARKETS**

Since ancient times people used to trade in primary commodities like cotton, spices, and livestock. The traders used to engage in futures with the time frame normally that of the harvest duration. Later with the advent of the Industrial Revolution, people started trading in base metals. In the 2000s, the matured economies of US and UK also started to have exchange traded commodities (ETCs) and exchange traded funds (ETFs).

#### The major role of the early commodity markets was to:

- a) Act as a platform for enabling farm produce growers and the end buyers to interact.
- b) Enabling intermediaries to engage in representing both the demand and the supply side of the commodity chain.

#### c) Price discovery.

Even today the above characteristics hold good in commodity exchanges. The added feature is of course, a regulated market that is transparent, and real time.

#### 2.1 Influence of commodity markets on prices

Commodity markets influence prices at two levels:

- Enabling as a platform for both demand and supply factors to determine the prices for a particular commodity or grade of a particular commodity.
- b) Acting as an indicator for produce growers to take informed decision on which product to grow to reap better prices.

Essentially both the above objectives culminate in price discovery.

However, it's very important that the information that is getting used to determine the price is real time and transmitted across markets. In structured markets, the market prices are close to the 'fair value' prices.

#### 2.2 Negative Impact of Speculation

The bane of the commodity market is speculation driven trades and short selling done to gain short-term profits. Precious metals like gold and diamond attract speculative investors given the hedge value of these assets. In some cases, there are also instances of black money and money laundering that mires the true features of an efficient commodity market. A report released by World Bank in 2012 has laid the blame that 'food prices globally soared by 10 percent' squarely on the want on speculative trades executed in parts of the globe.

Speculation cannot be ended in any market; however, it can be regulated, and offenders treated with high penalties. The European Securities and Markets Authority (ESMA), based in Paris and formed in 2011, is an "EU-wide financial markets watchdog", which aims at orderly pricing and settlement conditions. The individual exchanges also have brought their own checking mechanisms like position limits, trade cutoffs, etc. to discourage pure arbitrage traders.



#### 3. COMMODITY MARKET IN INDIA

#### 3.1 Indian Commodity Markets

MCX (Multi Commodity Exchange of India Limited) and the NCDEX (National Commodity & Derivatives Exchange Limited) are the primary commodity trading platforms in India. MCX is a commodity futures exchange started in 2003 and is listed on the BSE. NCDEX is another exchange that is promoted jointly by LIC, NABARD, etc. and has a robust online trading system.

The National Multiple Commodity Exchange (NMCE) started its operations on November 26, 2002, as the country's first, online, demutualized, multi-commodity exchange with nationwide reach. It not only revived futures trade electronically in the commodities in India after a gap of 41 years, but also integrated the centuries old commodity market with the latest technology. It is backed by compulsory delivery-based settlement to ensure transparent and fair-trade practices. NMCE offers an electronic platform for future trading in plantation, spices, food grains, non-ferrous metals, oil seeds and their derivatives.

NCDEX started its first agricultural index — 'Dhanya' — in 2012, which was later named 'N-Krishi' but this index was not tradable.

The National Commodity and Derivatives Exchange (NCDEX) in May 2020 launched the country's first agricultural futures trading index — 'Agridex' — with four contracts expiring in June, July, September, and December. This agriculture index is based on the revised guidelines issued by the Securities and Exchange Board of India, which allowed futures trading in commodity indices.

Agridex, launched on 25 May 2020 comprises 10 liquid commodities traded on NCDEX. The spot and future of these 10 commodities — soybean, chana, coriander, cottonseed oilcake, guar gum, guar seed, mustard seed, refined soy oil, castor seed and jeera — will define the value of this index.

The index represents various agricultural commodities of both kharif and rabi seasons, with price references throughout the year. Agridex will also facilitate the participants in hedging their commodity risk based on price anticipation of the products.

In the present times, due to disruption in domestic business and exports, the volumes of individual commodities listed under Agridex have remained low. However, for Agridex the only factor that is important for the index is the overall market sentiment for the agricultural sector as it's not just dependent on a single agricultural commodity.

**For example**, if soybean mandi across the country remains closed but other commodity mandis are open, the trading activities for soybean may remain low in futures as a commodity, but trading in the Agridex, which is an overall index, will not be affected as other commodities trade will move it.

The Agridex futures exchange will also help market participants to take advantage of generating returns with less risk and excessive research because they do not have to research individual commodities. For trading on Agridex, one needs to only know specific news or reports about agricultural commodities to get a sense of the price direction.

This is like the equity market wherein participants trade at the NIFTY index as Agridex also has a base value of 1,000. Agridex also provides an opportunity for those already trading in equity markets as well as with farm produce organisations, farmers, retail traders and others. (Source: The Print)

The below is a screen shot of the same -

Last 1211.10 (-12.45 -1.03%)		en 5.50	High 1226.		Low 1209.50		Previous Close 1223.55		
Constituents	Expiry	LTP	Open	High	Low	Prev. Close	Change		
Castor Seed	Dec 18, 2020	4670	4740	4746	4670	4750	-1.68 🕶		
Chana	Dec 18, 2020	5213	5265	5265	5192	5282	-1.31 🗻		
Coriander	Dec 18, 2020	6506	6512	6592	6432	6570	-0.97 🕶		
Cotton Seed Oilcake	Dec 18, 2020	2074	2070	2114	2062	2053	1.02 🔺		
Guar Gum 5 MT	Dec 18, 2020	6015	6135	6135	5970	6147	-2.15 🗻		
Guar Seed 10 MT	Dec 18, 2020	3967	4069	4069	3956	4076	-2.67 🔺		
Jeera	Dec 18, 2020	14125	14225	14240	14110	14210	-0.60 🕶		
Mustardseed	Dec 18, 2020	6151	6180	6193	6147	6191	-0.65 🔺		
Ref Soya Oil	Dec 18, 2020	1077	1073	1080.3	1063.4	1079.1	-0.19 🕶		
Soy Bean	Dec 18, 2020	4458	4525	4525	4425	4487	-0.65 🗻		

#### 3.2 Problems with the Indian Commodity Markets

The Indian markets have been plagued by the 'speculator' and 'fly-by-night' operators. The Chairman of the now defunct NSEL (National Spot Exchange Limited) had to be arrested for having entered futures markets without adequate documentation – many commodities that were traded didn't have any underlying to them. SEBI has passed tough strictures on fresh forward contracts in the commodity markets in Feb 2016, and it has derecognized OTCEI (Over-the-counter exchange of India).

Another big problem is that the commodity markets have not been able to see the 'exponential' growth that is required for platforms to sustain it. The basic problem is 'inclusion' – farmers that form the backbone of agri-based commodities are not able to connect to the market, even though both MCX and NCDEX have created several awareness programs towards the same.

Political ramifications have also added to the woes – price sensitive commodities like sugar have been on and off the futures platform.

# 3.3 Way Forward

The commodity markets in India have a long way to go to become globally competent. There is a persisting need to close the chain between farmers to markets, which is even more challenging given that the hold of intermediaries is too strong in Indian scenario. An impetus from the government is also required to both educate and popularize the adoption of commodity markets in India.

# 3.4 Regulatory scenario in India

In India, the Forward Markets Commission (FMC) was the chief regulator of commodity futures markets in India before it got merged with SEBI. The government, considering it wise to bring the commodity market under a common regulator, repealed the Forward Contracts Regulation Act (FCRA) 1952 and the regulation of commodity derivatives market shifted to Securities and Exchange Board of India (SEBI) under Securities Contracts Regulation Act (SCRA) 1956 with effect from 28th September 2015.



# 4. APPLICATION OF DERIVATIVE IN COMMODITIES

# 4.1 Difference between Commodity Markets and Financial Markets

It should be noted that following are some of the differences between commodity and financial derivatives:

- (i) Storage Cost: Commodities, especially agricultural commodities, are perishable in nature and they require storage. Due to this reason, the buyer must bear the cost of storage and transportation charges. In case if location of goods is not in the same state, then, the buyer also has to borne taxes, octroi etc. However, storage cost is not there in financial derivatives.
- (ii) Complexity: Compared to Financial Market, there are low volumes of transactions and transparency in commodity market, and, thus, often relationship between future and spot get distorted. Further, delivery in the financial market is comparatively less cumbersome.
- (iii) Higher Cost: While in the financial market, only costs in the form of interest cost and exchange rate loss are involved, while in the commodity market a lot of costs are involved such as transportation, delivery, storage etc.

**Physical Delivery:** Since the quality of goods commodities even in two different batches cannot be same, the delivery of commodities becomes a challenging task. Stating otherwise, this is the most distinguishing feature of commodity derivatives.

# 4.2 Pre-requisites for Futures trading on a Commodity Exchange

For a future to be traded on a Commodity Exchange, following are the prerequisites:

- (i) **Durability** Commodity should be storable and durable.
- (ii) Homogeneity The commodity should be homogeneous in nature.
- (iii) Free from Control The trading in commodities should be free from any type of price or regulatory control.
- (iv) Frequent Trading The demand and supply should be large, leading to a daily fluctuation in prices. Practically, it has been seen that even if the same commodities possess the above characteristics, they are still required to be traded successfully.

# 4.3 Trading and Settlement Process

Broadly, commodity trading involves following three mechanisms:

- (i) Order Matching Mechanism Firstly, a trader places his/her order with any registered broker who in turn enter the same into online terminal. In case order matches with opposite order (one party buys and other party sells) the trade is said to be complete.
- (ii) Trade Clearing Mechanism The clearing of the matched order takes place through a Registered Clearing House. The function of these clearing houses is as follows: -
  - (a) Follow up with parties
  - (b) Timely Settlement
  - (c) Delivery versus payment (DVP) of commodity traded.
  - (d) In case of non-delivery, settlement through fund transfer.
- (iii) Processing of Delivery The main issues to be considered in the delivery processes are as follows:
  - (a) Availability of warehouse
  - (b) Location of order
  - (c) Quantity of Commodity deposited and dematerialized.

Further, delivery process involves following steps:

- (i) Buyer request Depository Participant (DP) to deliver the commodity.
- (ii) DP forward this request to the Registrar and then to Transfer Agent.
- (iii) Transfer Agent after verifying authenticity of request passes the details of delivery to the warehouse.
- (iv) After thorough identification checking, a warehouse arranges the delivery of the concerned goods to the designated buyer.

# 4.4 SEBI's Approval for Option in Commodities

SEBI has now allowed option trading in the Commodity Future market. On expiry date, if option ends in "Out the Money" (OTM) position it will be squared off at loss (premium) and the holder of "In the Money" (ITM) position will have a choice either to square it off at profit or get converted into a Future Contract. Once it is converted into a future contract it will be subject to margin requirement as other future contracts.

# 4.5 Important Terms to be understood in the context of the Commodity Market

- (a) Short position in a contract: The party who agrees to deliver (sell) the contracted commodity.
- **Long position in a contract**: The party who agrees to receive (purchase) the contracted commodity.
- (c) Futures Contract: The formal agreement where one party agrees to take a short position and another party assumes the long position on contracted commodity. The contract will specify the quantity and quality of the commodity, the specific price per unit, and the date and method of delivery.
- (d) Settlement: The close out day of the futures contract. The positions get wounded, and the resulting profit / loss of either party gets settled in cash.
- (e) Margin: This is perhaps the most important term in commodity futures the parties entering a contract must furnish a margin equal to a % (usually 5 to 15 percent) of the contract value. Traders are required to keep margin monies usually based on the traded volumes.
- **(f)** Open: This is the opening price of the trade
- **(g) High:** The highest price in the trading session / day
- **(h)** Low: The lowest price in the trading session / day
- (i) Open Interest (Volume): The number of open positions of contracts

- (j) Expiry Date: The closure date of the contract
- (k) LTP: Last traded price
- (I) Unit traded: The unit of measurement (For e.g. Cotton will be measured in 'bales')

#### 4.6 The Role of Derivatives

- (i) Forward Contract: This is the simplest of all contracts, which states that there would be an exchange of an agreed quantity of a given commodity at a particular price (the forward price).
- (ii) Futures Contract: These are standardized forward contracts that are done through an exchange, for a particular quantity of commodity at a particular future date and location, the price is left undetermined.
- (iii) ETCs: Exchange traded commodities are the commodities that are traded on a stock exchange, just like a stock. They track the performance of an underlying commodity index including total return indices based on a single commodity.

# 4.7 **How** Hedging works in Commodity Markets

One type of hedger is a farmer. Farmers plant crops, like soybeans in this case, and assume the risk that by the time the crop is harvested, its price will have dropped. By selling soybean futures, which might lock in a price for their crops early in the growing season, farmers can protect themselves against that risk.

Five thousand bushels of soybeans make up a soybean futures contract on the Chicago Board of Trade exchange operated by the CME Group. Growing 500,000 bushels of soybeans annually would require a farmer to sell 100 soybean futures contracts.

Assume for the moment that a bushel of soybeans costs \$13. He suspects the downfall of soybean prices in the future. It could make sense for the farmer to sell (short) the futures contracts at \$13 to lock in the price if he is certain to make a profit at \$10. By doing this, the farmer could save i.e. hedge himself from the loss even if the price drops below \$13 at the time of expiry of the futures contract.

It is always possible that by harvest time, soybean prices will have increased significantly. If the farmer sold the \$13-a-bushel futures contracts, they would lose out on the potential increase in soybean prices to \$16 a bushel. Anyhow, the farmer has not incurred any losses by hedging the soybean price at \$13. And this is the basic purpose of hedging i.e. to protect from losses.



# 5. GLOBAL COMMODITIES EXCHANGES

# 5.1 London Metal Exchange (LME)

The iconic London Metal Exchange, popularly referred to as 'LME,' is one of the world's largest futures exchange market established in 1877, when Great Britain was at the peak of its glory. With half the world under the British Empire, London had become the epicenter of commodity trades of all kinds. Shortly after, the industrial revolution further spurred the growth of markets for metals like copper, tin, and aluminum. The 'three-month contract' which is now considered as the standard period for a future, was borne out of the time frame that took copper to be shipped from Chile to UK. The opening of Suez Canal in 1869 similarly reduced the time for shipment of tin to arrive from Malaya to 3 months, which gave rise to the '3-month contract' now in vogue.

LME was acquired in 2012 by Hong Kong Exchanges & Clearing Limited and a new custom clearing house was designed and introduced to bring technology into the global metal trade platform.

Today, LME sets the standards for operating in the commodity metals market within the framework of corporate governance – LME has an operational committee for each of the metal traded, like an 'aluminum' committee for aluminum, a 'molybdenum' committee for molybdenum, and so on. LME also has an elaborate 'Ring Disciplinary' committee and an appeal mechanism for both traders and members in place.

#### The LME price discovery mechanism works in all the three ways –

- (a) Open out-cry the trading floor on the LME that is also called as the 'Ring', where the prices are determined on the traditional out-cry (verbal) method,
- (b) LME Select the electronic trading platform, and,
- (c) Inter-office telephone market system.

Thus, the LME is active for trading 24 hours a day. There is a common misconception that precious metals like gold are traded on the LME, but they aren't. The LME specializes in ferrous and nonferrous metals, whereas gold and silver are traded on the OTC managed by the London Bullion Market.

# 5.2 Eurex Exchange

Eurex is the largest European futures and options market, established in Germany. One of the foremost exchanges to usher in electronic trading, its trading platform T7 is the best in the world. Eurex is constantly pushing itself to explore new areas and product classes, for example, they have introduced a factor index-based futures that allow investors to trade six individual risk factors in futures format. The six factors are - size, value, carry, momentum, low risk and quality, and is a dynamic attempt to allocate to alternative sources of beta to deliver equity-like returns with low correlation.

# 5.3 Chicago Mercantile Exchange (CME) Group

Chicago Mercantile Exchange & Chicago Board of Trade (CME) is the US based largest futures and options platform for trading. Established in 1898, CME offers the entire bouquet of trades based on ferrous, non-ferrous metals, precious metals, and even on weather and real-estate. The acquisition of New York Mercantile Exchange (NYMEX) by the CME group in 2007 catapulted it to the number one status in US. The platform also allows for agri-based commodity contracts like Class IV milk, Class III milk, Feeder Cattle etc. CME has developed 'SPAN' ('Standard Portfolio Analysis of Risk') which is standardized software to calculate margin requirements for futures, which has been adopted by many agencies as benchmark software across the globe.

### **Contract specifications on MCX**

Following is the illustration of contract specifications of Crude Oil on MCX for the practical and conceptual understanding of the students.

#### **FUTURES CONTRACT SPECIFICATIONS OF CRUDE OIL**

Symbol	CRUDEOIL	
Description	CRUDEOILMMMYY	
Contract Listing	Contracts are available as per the Contract Launch Calendar.	
Contract Start Day	As per the Contract Launch Calendar	
Last Trading Day	As per the Contract Launch Calendar	
Trading		
Trading Period	Mondays through Fridays	
Trading Session	Monday to Friday: 9.00 a.m. to 11.30/ 11.55 p.m.*  * based on US daylight saving time period.	
Trading Unit	100 barrels	
Quotation/Base Value	Rs. Per barrel	
Maximum Order Size	10,000 barrels	
Tick Size (Minimum Price Movement)	Re. 1	
Daily Price Limits	The Exchange has implemented a narrower slab of 4%. Whenever the narrower slab is breached, the relaxation will be allowed up to 6% without any cooling off period in the trade. In case the daily price limit of 6% is also breached, then after a cooling off period of 15 minutes, the daily price limit will be relaxed upto	

	9%.
	In case price movement in international markets is more than the maximum daily price limit (currently 9%), the same may be further relaxed in steps of 3%.
Initial Margin	Minimum 10% or based on Standard Portfolio Analysis of Risk (SPAN) # whichever is higher.
Extreme Loss Margin	Minimum 1 %
Additional and/ or SpecialMargin	In case of additional volatility, an additional margin (on both buy & sell side) and/ or special margin (on either buy or sell side) at such percentage, as deemed fit, will be imposed in respect of all outstanding positions.
Maximum Allowable Open Position	For individual clients: 4,80,000 barrels or 5% of the market wide open position, whichever is higher for all Crude Oil contracts combined.  For a member collectively for all clients: 48,00,000 barrels or 20% of the market wide open position, whichever is higher for all Crude Oil contracts combined.
Quality Specification	Light Sweet Crude Oil confirming to the following quality specification: Sulfur 0.42% by weight or less, API Gravity: Between 37 degree – 42 degrees
Due Date Rate (DDR)	Due date rate shall be the settlement price, in Indianrupees, of the New York Mercantile Exchange's (NYMEX)# Crude Oil (CL) front month contract on the lasttrading day of the MCX Crude Oil contract. The last available RBI USDINR reference rate will be used for the conversion. The price so arrived will be rounded off to the nearest tick.  For example, on the day of expiry, if NYMEX Crude Oil (CL) front month contract settlement price is \$40.54 and the last available RBI USDINR reference rate is 66.1105, then DDR for MCX Crude oil contract would be Rs. 2680 per barrel (i.e. \$40.54 * 66.1105 and rounded off to the nearest tick).  #A market division of Chicago Mercantile Exchange Inc. ("CME Group")
Settlement Mechanism	The contract would be settled in cash

<sup>#</sup> Exchanges use SPAN to figure out margins and risk for F&O portfolios. In addition to several other factors, SPAN analyzes the price and volatility of the underlying investment to calculate the maximum loss that can occur for a portfolio and to provide the proper margin.

### MCX Crude Oil Futures (100 Barrels)

### Contract Launch Calendar for Contracts Expiring During the Calendar Year 2024

Contract Month	Contract Launch Date	Contract Expiry Date
Jan-24	20 <sup>th</sup> July 2023	19 <sup>th</sup> January 2024
Feb-24	22 <sup>nd</sup> August 2023	16 <sup>th</sup> February 2024
Mar-24	20 <sup>th</sup> September 2023	19 <sup>th</sup> March 2024
Apr-24	20 <sup>th</sup> October 2023	19 <sup>th</sup> April 2024
May-24	20 <sup>th</sup> November 2023	20 <sup>th</sup> May 2024
Jun-24	19 <sup>th</sup> December 2023	18 <sup>th</sup> June 2024
Jul-24	22 <sup>nd</sup> January 2024	19 <sup>th</sup> July 2024
Aug-24	19 <sup>th</sup> February 2024	19 <sup>th</sup> August 2024
Sep-24	20 <sup>th</sup> March 2024	19 <sup>th</sup> September 2024
Oct-24	22 <sup>nd</sup> April 2024	21 <sup>st</sup> October 2024
Nov-24	21 <sup>st</sup> May 2024	19 <sup>th</sup> November 2024
Dec-24	19 <sup>th</sup> June 2024	18 <sup>th</sup> December 2024

(Reference Circular No. MCX/TRD/425/2023 dated June 30, 2023)

# **TEST YOUR KNOWLEDGE**

# **Multiple Choice Questions (MCQs)**

- 1. ........ among the following is not a role of commodity markets.
  - (a) Act as a platform for enabling farm produce growers and the end buyers to interact.
  - (b) Enabling intermediaries to engage in representing both the demand and the supply side of the commodity chain.
  - (c) Price discovery.
  - (d) Enabling speculation driven trades and short selling done to gain short-term profits.
- 2. Agridex, launched on 25 May 2020 comprises 10 liquid commodities on .........

- (a) National Commodity and Derivatives Exchange
- (b) Multi Commodity Exchange of India
- (c) Indian Commodity Exchange
- (d) ACE Derivatives & Commodity Exchange Limited
- 3. ...... is not a problem with the Indian Commodity Markets.
  - (a) Commodity markets have not been able to see the 'exponential' growth that is required for platforms to sustain it.
  - (b) Farmers that form the backbone of agriculturally based commodities are not able to connect to the market.
  - (c) MCX and NCDEX have created several awareness programs.
  - (d) Political ramifications have also added to the woes price sensitive commodities like sugar have been on and off the futures platform.
- 4. .....is a prerequisite for futures trading on a commodity exchange.
  - (a) Complexity
  - (b) Higher Cost
  - (c) Homogeneity
  - (d) Physical Delivery
- 5. ..... offers the entire bouquet of trades based on ferrous, non-ferrous metals, precious metals, and even on weather and real-estate.
  - (a) London Metal Exchange
  - (b) Chicago Mercantile Exchange
  - (c) Eurex Exchange
  - (d) National Stock Exchange of India Limited

#### **Theoretical Questions**

- 1. Discuss the role of commodity market and influence of commodity markets on prices.
- 2. Explain the problems with the Indian Commodity Markets and the way forward.
- 3. Explain how Commodity Derivatives are different from Financial Derivatives.
- 4. Discuss the trading and settlement process in commodity trading.

5. What is the standardized software to calculate margin requirements for futures developed by CME and adopted by many agencies as benchmark software across the globe?

#### **Practical Questions**

1. A company is long on 10 MT of copper @ ₹ 474 per kg (spot) and intends to remain so for the ensuing quarter. The standard deviation of changes of its spot and future prices are 4% and 6% respectively, having correlation coefficient of 0.75.

What is its hedge ratio? What is the amount of the copper future it should short to achieve a perfect hedge?

# **ANSWERS/SOLUTIONS**

# **Answers to Multiple choice Questions:**

1.	(d)	2.	(a)	3.	(c)	4.	(c)	5.	(b)	
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#### **Answers to Theoretical Questions**

- 1. Please refer paragraph 2
- 2. Please refer paragraph 3.2 and 3.3
- 3. Please refer paragraph 4.1
- 4. Please refer paragraph 4.3
- 5. Please refer paragraph 5.3

# **Answers to the Practical Questions**

1. The optional hedge ratio to minimize the variance of Hedger's position is given by:

$$H= \rho \frac{\sigma S}{\sigma F}$$

Where

 $\sigma S$  = Standard deviation of  $\Delta S$ 

 $\sigma F$  = Standard deviation of  $\Delta F$ 

 $\rho$  = coefficient of correlation between  $\Delta$ S and  $\Delta$ F

H = Hedge Ratio

 $\Delta S$  = change in Spot price.

 $\Delta F$  = change in Future price.

Accordingly

$$H = 0.75 \times \frac{0.04}{0.06} = 0.5$$

No. of contract to be short =  $10 \times 0.5 = 5$ 

Amount = 5000 x ₹ 474 = ₹ 23,70,000

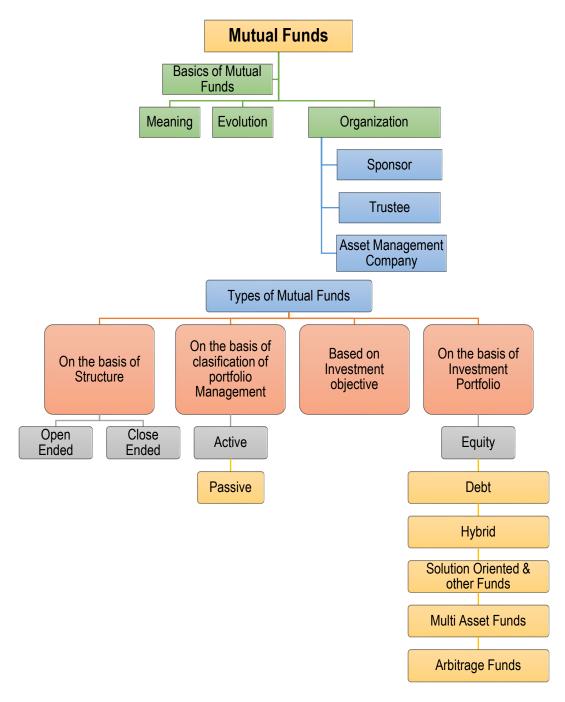
# **MUTUAL FUNDS**

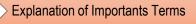


# **LEARNING OUTCOMES**

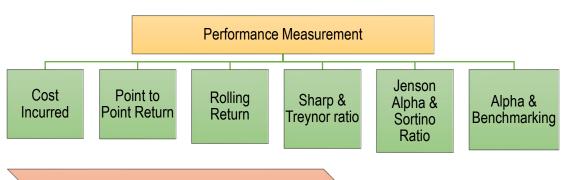
After	going	through the chapter student	shall	be able to understand		
	Basics of Mutual Funds- Including its concepts and benefits etc.					
	Evolution of the Indian Mutual Fund Industry					
	Types	of Mutual Funds				
	(1)	Structural Classification	(2)	Portfolio Classification		
	Evalu	ating performance of Mutual Funds	6			
	(1)	Net Asset Value (NAV)	(2)	Costs incurred by Mutual Fund		
	(3)	Holding Period Return (HPR)				
	The c	riteria for evaluating the performan	се			
	(1)	Sharpe Ratio	(2)	Treynor Ratio		
	(3)	Jensen's Alpha	(4)	Sortino Ratio		
	Advar	ntages and Disadvantages of Mutu	al Fund	d		
	Facto	rs influencing the selection of Mutu	ıal Fun	ds		
	Signa	Is highlighting the exit of the invest	tor fron	n the Mutual Fund Scheme		
	Mone	y Market Mutual Funds (MMMFS)				
	Exchange Traded Funds					
	Side Pocketing					
	Track	ing Error				
	Real I	Estate Investment Trusts (ReITs)				
	Infrastructura Investment Trusts (InvITs)					







Net Assets Value (NAV) and Indicative NAV



Advantages and Disadvantages

Factors Influencing the Selection of Mutual Funds



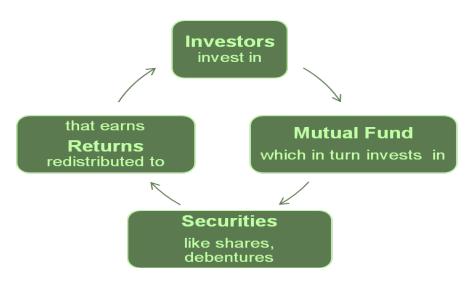
# (3)

# MEANING

A Mutual Fund is a pool of funds from a diverse cross section of society, that imparts the benefits of scale and professional management to the investors, which otherwise would not have been available to them. The rationale for any pooling of service is two-fold: affordability and convenience. Office commuters can go to the office by own vehicle or taxicab, which is the synonym for do-it-yourself in the context of investments. The other way of doing the office commute is by public transport like bus or train, which essentially is the pooling concept, bringing transport within the reach of those people who cannot afford their own vehicle. The synonym here is the Mutual Fund. To be noted, it is not just affordability due to which people may take to public transport; there could be reasons like saving the hassles of maintaining and driving own vehicle. The other benefit in the mutual fund context is professional management and tracking of investments.



The diagram above illustrates that a mutual fund is a common pool of investments of a cross section of investors. To understand the concept better, please look at the following diagram:



A Mutual Fund is a pool of investment funds of several investors who have a common investment objective. The asset management company that manages the day-to-day running of the fund invests the money collected in securities like stocks, bonds etc. The investors, called unit holders as they hold units in the pool proportionate to their investment, earn from the appreciation in the investments and dividend / coupon received in the fund. Thus, a Mutual Fund is the most suitable investment for the common man as well as HNIs since it offers an opportunity to invest in a diversified, professionally managed basket of securities at a relatively low cost.



# 2. EVOLUTION

# **History of Mutual Funds (Global)**

A mutual fund, as the term suggests, is a pooling of resources of many investors and is managed by professionals. The concept of pooling money for investments has been there for a long time. It began in the Netherlands in the 18th century; today it is a growing, international industry with fund holdings accounting for trillions of dollars in the United States alone. The closed-end investment companies launched in the Netherlands in 1822 by King William I is supposedly the first mutual funds. Another theory says a Dutch merchant named Adriaan van Ketwich whose investment trust created in 1774 may have given the king the idea. The concept spread to Great Britain and France, and then to the United States in the 1890s.

# 2.2 Expansion

By the late 1920s, there were quite a few mutual funds in the USA. With the stock market crash of 1929, some funds were wiped out, particularly the leveraged ones. The creation of the Securities and Exchange Commission (SEC), and the Securities Act of 1933 put certain safeguards for investor protection.

Despite the global financial crisis of 2008-2009, the story of the mutual fund is far from over. In fact, the industry is still growing. In the U.S. alone there are more than 10,000 mutual funds and fund holdings are measured in the trillions of dollars.

# 2.3 History of Mutual Funds in India

The evolution of the mutual fund industry in India has been relatively more 'administered' i.e., there have been quite a few administrative interventions. The history, as delineated by Association of Mutual Funds of India (AMFI), is as follows:

The mutual fund industry in India started in 1963 with the formation of Unit Trust of India, at the initiative of the Government of India and Reserve Bank of India. The history of mutual funds in India can be broadly divided into four distinct phases:

#### 2.3.1 First Phase – 1964-87

Unit Trust of India (UTI) was established in 1963 by an Act of Parliament. It was set up by the Reserve Bank of India and functioned under the Regulatory and administrative control of the Reserve Bank of India. In 1978 UTI was de-linked from the RBI and the Industrial Development Bank of India (IDBI) took over the regulatory and administrative control in place of RBI. The first scheme launched by UTI was Unit Scheme 1964. At the end of 1988, UTI had ₹ 6,700 crore of assets under management.

# 2.3.2 Second Phase – 1987-1993 (Entry of Public Sector Funds)

1987 marked the entry of non- UTI, public sector mutual funds set up by public sector banks and Life Insurance Corporation of India (LIC) and General Insurance Corporation of India (GIC). SBI Mutual Fund was the first non- UTI Mutual Fund established in June 1987 followed by Canbank Mutual Fund (Dec 87), Punjab National Bank Mutual Fund (Aug 89), Indian Bank Mutual Fund (Nov 89), Bank of India (Jun 90), Bank of Baroda Mutual Fund (Oct 92). LIC established its mutual fund

in June 1989 while GIC had set up its mutual fund in December 1990. At the end of 1993, the mutual fund industry had assets under management of ₹47,004 crore.

#### 2.3.3 Third Phase – 1993-2003 (Entry of Private Sector Funds)

With the entry of private sector funds in 1993, a new era started in the Indian mutual fund industry, giving the Indian investors a wider choice of fund families. Also, 1993 was the year in which the first Mutual Fund Regulations came into being, under which all mutual funds, except UTI, were to be registered and governed. The erstwhile Kothari Pioneer (now merged with Franklin Templeton) was the first private sector mutual fund registered in July 1993.

The 1993 SEBI (Mutual Fund) Regulations were substituted by a more comprehensive and revised Mutual Fund Regulations in 1996. The industry now functions under the SEBI (Mutual Fund) Regulations, 1996.

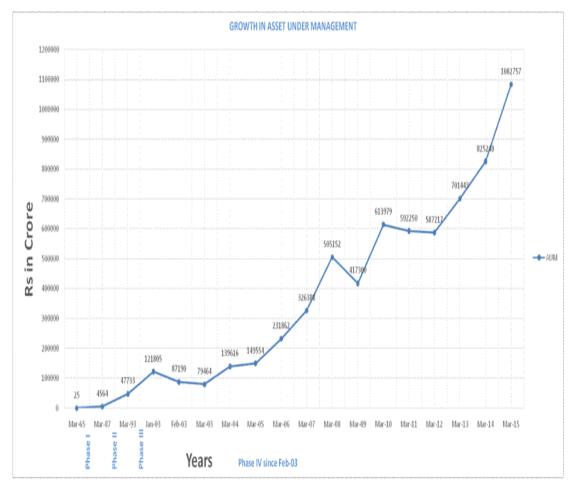
The number of mutual fund houses went on increasing, with many foreign mutual funds setting up funds in India and the industry has witnessed several mergers and acquisitions. As at the end of January 2003, there were 33 mutual funds with total assets of ₹ 1,21,805 crore. The Unit Trust of India with ₹44,541 crore of assets under management was way ahead of other mutual funds.

# 2.3.4 Fourth Phase – since February 2003

In February 2003, following the repeal of the Unit Trust of India Act 1963, UTI was bifurcated into two separate entities. One is the Specified Undertaking of the Unit Trust of India with assets under management of ₹ 29,835 crore as at the end of January 2003, representing broadly, the assets of US 64 scheme, assured return, and certain other schemes. The Specified Undertaking of Unit Trust of India, functioning under an administrator and under the rules framed by Government of India does not come under the purview of the Mutual Fund Regulations.

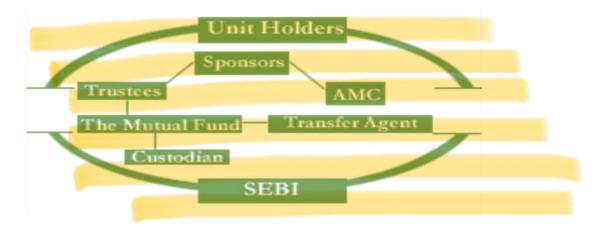
The second is the UTI Mutual Fund, sponsored by SBI, PNB, BOB and LIC. It is registered with SEBI and functions under the Mutual Fund Regulations. With the bifurcation of the erstwhile UTI which had in March 2000 more than ₹76,000 crore of assets under management and with the setting up of a UTI Mutual Fund, conforming to the SEBI Mutual Fund Regulations, and with recent mergers taking place among different private sector funds, the mutual fund industry has entered its current phase of consolidation and growth.

Growth in terms of quantum of funds managed.



[Source: Website of Association of Mutual Funds (AMFI)]

# 2.4 Mutual Fund Organization



There are various entities involved in the overall structure. They are explained as below:

#### Sponsor

Sponsor is the entity that creates a mutual fund. The rules are set by the Securities and Exchange Board of India, in the Mutual Fund Regulations of 1996. Sponsor is defined under the SEBI regulations as any person who, acting alone or in combination with another body corporate, establishes a mutual fund. Sponsor is the promoter of the fund. A Sponsor could be a bank, a corporate or a financial institution. Sponsors then form a Trust and appoint a Board of Trustees. The sponsor also appoints Custodian.

As per SEBI regulations, a sponsor must contribute at least 40% of the net worth of the Asset Management Committee (AMC) and possess a sound financial track record over five years prior to registration. Sponsor signs the trust deed with the trustees. Sponsor creates the AMC and the trustee company and appoints the board of directors of companies, with SEBI approval. Sponsor should have at least a 5-year track record in the financial services business and should have made a profit in at least 3 out of the 5 years. The AMC's capital is contributed by the sponsor. Sponsor should contribute at least 40% of the capital of the AMC.

#### **Trust**

The Mutual Fund is a trust under the Indian Trusts Act, 1882. The trust deed is registered under the Indian Registration Act, 1908. The Trust oversees the safekeeping of the unit holders' investments.

#### **Trustee**

The Board of Trustees i.e., the body of individuals, looks after safeguarding the interest of the unit holders. At least 2/3rd of the Trustees is independent i.e. not associated with the Sponsor. A mutual fund in India is form as Trust under Indian Trust Act, 1882. The trust-mf is managed by the Board of Trustees. The Board of Directors i.e. Trustees do not manage the portfolio of securities directly rather they supervise the work of AMC (Asset Management Company) and ensure that the fund is managed by stated objectives and as per SEBI regulations.

Trusts always work for the interest of unit holders, and it is created through a document called Trust Deed that is executed by sponsors in favor of Trustees. The Trustees being the primary guardians of unit holder's funds and assets, they must ensure that the investor's interests are safeguarded and that the AMC operations are as per regulation laid down by SEBI. SEBI mandates a minimum of 2/3rd independent directors on the board of the trustee company. Trustees are appointed by the sponsor with SEBI approval. The trustees make sure that the funds are managed according to the investor's mandate.

#### Asset Management Company (AMC)

The AMC is that part of the mutual fund system that looks after the operations and investments of the MF. Formation of the AMC requires approval by SEBI. The AMC needs to have a net worth of ₹ 50 crore. The role of AMC is to act as investment manager of trust. The AMC (as appointed by trust/sponsor) requires approval by SEBI.

The AMC is under the supervision of its own board of directors and the directors of trustees and SEBI. The trustees are empowered to terminate the appointment of AMC and appoint a new AMC with prior approval of SEBI and unit holders. The AMC, in the name of the Trust, manages different investment schemes as per the investment management agreement with the trustees. A Director of AMC should have complete professional experience in finance.

The AMC cannot act as a trustee of any other MF. The AMC always acts in the interest of unit holders (investor). The AMC gets a fee for managing the funds, according to the mandate of the investors. At least ½ of the AMC's Board should be of independent members. An AMC cannot engage in any business other than portfolio advisory and management. An AMC of one fund cannot be Trustee of another fund. AMC should be registered with SEBI. Also, AMC signs an investment management agreement with the trustees.



# 3. TYPES OF MUTUAL FUNDS

There are various types of mutual funds, classified primarily based on the underlying portfolio.

#### 3.1 On the basis of Structure

#### 3.1.1 Open Ended Funds

It is a commonly used term in the mutual fund industry; let us understand the term for the investor. Most of the funds (or Schemes, technically) are open ended, ones that are available for purchase from the AMC and redemption with the AMC on an on-going basis, round the year on all working days, till it is wound up.

What it means for the investor is, there is liquidity round the year - can be purchased anytime and can be sold (redeemed, technically) anytime i.e. the investor can enter and exit anytime. AMC issues new units when investor enters/purchase units form AMC and redeem/sells the units back to AMC. Listed open-ended funds can be sold at the Exchange as well, but in case of redemption with the AMC, liquidity is assured. There is no additional cost for this liquidity as AMCs do not charge any premium for redemption.

Sometimes there is an exit load in an open-ended fund. It means if the investor exits within that period, there will be a penalty charged on the exit value, but liquidity is available nonetheless at the cost of the exit load. It is a matter of discipline so that the investor comes in with the requisite horizon in mind and if she exits within that period, she pays adequate compensation to the other investors who are staying back.

The implications of open-ended funds for the AMC are fund (or Scheme) corpus size volatility; fund size increases when investors purchase units from the AMC and fund size comes down when investors redeem units.

An open-ended fund comes into existence through the New Fund Offer (NFO) process and the Fund (or Scheme) parameters are decided by the NFO documents - Scheme Information Document (SID) and Key Information Memorandum (KIM). There is another document called Scheme Additional Information (SAI).

There is no defined maturity date for open-ended funds. If there is a single investor- the Scheme continues to be in existence. There are limitations on maximum holding by a single investor: it is referred to commonly as the 20/25 rule i.e., there must be a minimum 20 investors to float a Scheme and maximum permissible holding per investor is 25%.

#### 3.1.2 Close Ended Funds

Close ended funds are available for subscription only during the New Fund Offer (NFO) period and not beyond that. The initial subscription amount is collected from investors and the fund is 'closed' after the NFO closure date i.e., no further purchase is allowed. There is no redemption possible with the AMC. Hence from the AMC's perspective, the fund (or Scheme) corpus size is stable and there is no need to keep some portion in liquid or easily marketable securities to meet sudden redemption pressure.

Close ended funds may have a defined maturity date e.g., fixed maturity plans (FMPs) that have a maturity date. In an open-ended structure, it is practically not feasible to have a maturity date as it is meant to be available for investment and redemption on an on-going basis. Closed ended funds are listed at the Exchange but are not as liquid as open-ended funds as there is no defined liquidity like redemption with the AMC.

Broadly, open-ended funds are much more popular than closed ended as the mutual fund industry is supposed to provide investment solutions along with liquidity that is available at any point of time. Close Ended Funds are meant to fulfil a particular requirement.

# Difference between Open Ended Funds and Close Ended Funds

Particulars	Open-Ended Mutual Funds	Close-ended Mutual Funds
Lock-In Period	Such funds have no lock-in period. The units of openended funds can be bought and sold at any point in time.	Close-ended mutual funds have a specific lock-in period.
	Sometimes the only exception to this is the Equity Linked Savings Scheme. It is an openended mutual fund that has a 3-year lock-in.	Redemption of the units of such funds is only possible after the expiry of the said lock-in.
Liquidity	Open-ended funds are highly liquid since the units can be bought and sold freely without any restrictions.	Close-ended mutual funds have no liquidity since they can only be redeemed after the expiry of the lock-in period.
		For liquidity they have to be liquidated by selling through Markets where they trade.
Mutual Fund Units and Fund Size	There's no limit on either the number of units in open-ended mutual funds or the fund size.	The number of units and the fund size in close-ended mutual funds is limited.
	New units are created by the fund house as and when individuals invest money into the fund.	Investors cannot invest in such funds once all the listed units have been subscribed.
Investment Method	Open-ended mutual funds support both lump-sum investments as well as Systematic Investment Plans (SIPs).	Since you can only subscribe to the units of a close-ended fund during the New Fund Offer (NFO) period, only lump-sum investments are allowed.
Track Record of Performance	Since open-ended mutual funds are perpetual by nature, track records of past performances are available	Close-ended funds do not have any track record of performance.

# 3.2 On the basis of Classification of Portfolio Management

#### **Active Funds:**

Active Funds are mutual funds where the fund manager plays an active role in deciding whether to buy, sell or hold the investments. Active funds employ a variety of strategies to construct and manage their portfolios. For example, to outperform the entire market and others acting as powerful hedges against unforeseen market declines or corrections. In an Active Fund, the Fund Manager is 'Active' in deciding whether to Buy, Hold, or Sell the underlying securities and in stock selection. Active funds adopt different strategies and styles to create and manage the portfolio.

The investing strategy and style are explicitly available in the Scheme Information document (offer document). Active funds seek to outperform their benchmark index in terms of returns. Furthermore, the fund strategy determines its risk and return characteristics. Active funds are expected to generate better returns (alpha) than the benchmark index. The risk and return in the fund will depend upon the strategy adopted. Active funds implement strategies to 'select' the stocks for the portfolio.

#### **Passive Funds:**

Passive funds are the index funds which track the market index and try to generate returns in line with the index. Fund managers of the passive funds invest in the components of the underlying index in the same proportion as the index. The objective of the passive funds is to generate market like returns. Passive Equity funds are the index funds which follow equity indices like Nifty 50 index or any of the sectoral indices.

If you are a beginner and find it challenging to choose the right equity investment for your portfolio, passive equity funds are the ideal choice for you. These are simple, low cost and easy to track. Passive Funds hold a portfolio that replicates a stated Index or Benchmark, for example, Index Funds and Exchange Traded Funds (ETFs)

In a Passive Fund, the fund manager has a passive role, as the stock selection / Buy, Hold, Sell decision is driven by the Benchmark Index and the fund manager / dealer merely needs to replicate the same with minimal tracking error.

#### Difference Between Active and Passive Funds:

#### (i) Active Funds

- Rely on professional fund managers who manage investments.
- Aim to outperform Benchmark Index.

 Suited for investors who wish to take advantage of fund managers' potential for generating higher income.

#### (ii) Passive Funds

- Investment holdings mirror and closely track a benchmark index, e.g., Index Funds or Exchange Traded Funds (ETFs).
- Suited for investors who want to allocate exactly as per market index.
- Lower Expense ratio hence lower costs to investors and better liquidity.

# 3.3 Investment based on Investment Objective

Mutual funds offer products that cater to the different investment objectives of the investors such as-

- Capital Appreciation (Growth)
- Capital Preservation
- Regular Income
- Liquidity
- Tax-Saving

Mutual funds also offer investment plans, such as Growth and Dividend options, to help tailor the investment to the investors' needs.

(Source: https://www.amfiindia.com/investor-corner/knowledge-center/types-of-mutual-fund-schemes.html)

#### 3.4 On the Basis of Investment Portfolio

The Schemes would be broadly classified in the following groups:

#### a. Equity Schemes

Equity Schemes are those schemes which invest in Equity Shares. The target here is capital appreciation and they are riskier due to equity component. Markets are considered to have cycles thus these funds are considered better from the long-term perspective, as in the short term, markets can be volatile.

#### b. Debt Schemes

Debt Schemes invest in fixed income securities thus target fixed income. The idea here is diversification and they are safer than equity funds. But the quality of debt instrument in which the fund is investing is always to be considered and selected. If the quality, i.e. safety of investment, is more then obviously the returns will be lower and vice versa. Thus, there are different types of debt funds which are differentiated based on safety and returns they offer. "The more the credit risk, the greater the return and less the credit risk lessor the return".

#### c. Hybrid Schemes

Hybrid funds Invest in a mix of equities and debt securities. SEBI has classified Hybrid funds into 7 sub-categories as follows:

- (i) Conservative Hybrid Fund 10% to 25% investment in equity & equity related instruments; and 75% to 90% in Debt instruments.
- (ii) Balanced Hybrid Fund 40% to 60% investment in equity & equity related instruments; and 40% to 60% in Debt instruments.
- (iii) Aggressive Hybrid Fund 65% to 80% investment in equity & equity related instruments; and 20% to 35% in Debt instruments.
- (iv) Dynamic Asset Allocation or Balanced Advantage Fund -Investment in equity/ debt that is managed dynamically (0% to 100% in equity & equity related instruments; and 0% to 100% in Debt instruments).
- (v) Multi Asset Allocation Fund Investment in at least 3 asset classes with a minimum allocation of at least 10% in each asset class.
- (vi) Arbitrage Fund Scheme following arbitrage strategy, with minimum 65% investment in equity & equity related instruments.
- (vii) Equity Savings Fund Equity and equity related instruments (min.65%); debt instruments (min.10% and derivatives (min. for hedging to be specified in the SID).

#### d. Solution-oriented & Other funds

- (i) Retirement Fund Lock-in for at least 5 years or till retirement age whichever is earlier.
- (ii) Children's Fund Lock-in for at least 5 years or till the child attains age of majority whichever is earlier.

- (iii) Index Funds/ ETFs Minimum 95% investment in securities of a particular index.
- (iv) Fund of Funds (Overseas/ Domestic) Minimum 95% investment in the underlying fund(s).
- (v) **Hybrid funds** Invest in a mix of equities and debt securities. They seek to find a 'balance' between growth and income by investing in both equity and debt.

#### e. Multi Asset Funds

A multi-asset fund offers exposure to a broad number of asset classes, often offering a level of diversification typically associated with institutional investing. Multi-asset funds may invest in several traditional equity and fixed income strategies, index-tracking funds, financial derivatives as well as commodities like gold. This diversity allows portfolio managers to potentially balance risk with reward and deliver steady, long-term returns for investors, particularly in volatile markets.

#### f. Arbitrage Funds

"Arbitrage" is the simultaneous purchase and sale of an asset to take advantage of the price differential in the two markets and profit from price difference of the asset on different markets or in different forms. An arbitrage fund buys a stock in the cash market and simultaneously sells it in the Futures market at a higher price to generate returns from the difference in the price of the security in the two markets. The fund takes equal but opposite positions in both the markets, thereby locking in the difference.

The positions must be held until expiry of the derivative cycle and both positions need to be closed at the same price to realize the difference. The cash market price converges with the Futures market price at the end of the contract period. Thus, it delivers risk-free profit for the investor/trader. Price movements do not affect the initial price differential because the profit in one market is set off by the loss in the other market. Since mutual funds invest their own funds, the difference is the return.

Hence, Arbitrage funds are a good choice for cautious investors who want to benefit from a volatile market without taking on too much risk.

(Source:https://www.amfiindia.com/investor-corner/knowledge-center/types-of-mutual-fund-schemes.html)

# A. Equity Schemes:

SI.	Category of	Scheme Characteristics	Type of scheme
No.	Schemes	Scheme Characteristics	(uniform description of
			scheme)
1	Multi Cap Fund	Minimum investment in equity & equity related instruments – 65% of total assets	Multi Cap Fund – An open- ended equity scheme investing across large cap, mid cap, small cap stocks
2	Large Cap Fund	Minimum investment in equity & equity related instruments of large cap companies – 80% of total assets	Large Cap Fund – An open- ended equity scheme predominantly investing in large cap stocks
3	Large & Mid Cap Fund	Minimum investment in equity & equity related instruments of large cap companies – 35% of total assets	Large & Mid Cap Fund – An open-ended equity scheme investing in both large cap and mid cap stocks
		Minimum investment in equity & equity related instruments of mid cap stocks – 35% of total assets	
4	Mid Cap Fund	Minimum investment in equity & equity related instruments of mid cap companies – 65% of total assets	Mid Cap Fund – An open- ended equity scheme predominantly investing in mid cap stocks
5	Small Cap fund	Minimum investment in equity & equity related instruments of small cap companies – 65% of total assets	Small Cap Fund – An open- ended equity scheme predominantly investing in small cap stocks
6	Dividend Yield Fund	The scheme should predominantly invest in dividend yielding stocks.	An open-ended equity scheme predominantly investing in dividend yielding stocks
		Minimum investment in equity – 65% of total assets	
7	Value Fund	Scheme should follow a value investment strategy.  Minimum investment in equity & equity related instruments – 65% of total assets	An open-ended equity scheme following a value investment strategy

8	Contra Fund	The scheme should follow a contrarian investment strategy.  Minimum investment in equity & equity related instruments – 65% of total assets	An open-ended equity scheme following contrarian investment strategy
9	Focused Fund	A scheme focused on the number of stocks (maximum 30)  Minimum investment in equity & equity related instruments – 65% of total assets	An open-ended equity scheme investing in maximum 30 stocks (mention where the scheme intends to focus, viz; multi cap, mid cap, small cap)
10	Sectoral / Thematic	Minimum investment in equity & equity related instruments of a particular sector/ particular theme – 80% of total assets	An open-ended equity scheme investing in - sector (mention the sector)  An open-ended equity scheme following – theme (mention the theme)
11	ELSS	Minimum investment in equity & equity related instruments – 80% of total assets (in accordance with Equity Linked Saving Scheme, 2005 notified by Ministry of Finance)	An open-ended equity linked saving scheme with a statutory lock in of 3 years and tax benefit

For classification of companies as per market capitalization, the definition is as follows:

- Large Cap: 1st -100th company in terms of full market capitalization
- Mid Cap: 101st -250th company in terms of full market capitalization
- Small Cap: 251st company onwards in terms of full market capitalization

#### B. Debt Schemes:

Sr. No.	Category of Schemes	Scheme Characteristics	Type of scheme (uniform description of scheme)
1	Overnight Fund	Investment in overnight securities having maturity of 1 day	An open-ended debt scheme investing in overnight securities

2	Liquid Fund	Investment in Debt and money market securities with maturity of upto 91 days only	An open-ended liquid scheme
3	Ultra-Short Duration Fund	Investment in Debt & Money Market instruments such that the Macaulay duration of the portfolio is between 3 months – 6 months	An open ended ultra – short term debt scheme investing in instruments with Macaulay duration between 3 months and 6 months
4	Low Duration Fund	Investment in Debt & Money Market instruments such that the Macaulay duration of the portfolio is between 6 months – 12 months	An open-ended low duration debt scheme investing in instruments with Macaulay duration between 6 months and 12 months
5	Money market Fund	Investment in Money Market instruments having maturity upto 1 year	An open-ended debt scheme investing in money market instruments
6	Short Duration Fund	Investment in Debt & Money Market instruments such that the Macaulay duration of the portfolio is between 1 year – 3 years	An open-ended short-term debt scheme investing in instruments with Macaulay duration between 1 year and 3 years
7	Medium Duration Fund	Investment in Debt & Money Market instruments such that the Macaulay duration of the portfolio is between 3 years – 4 years	An open-ended medium- term debt scheme investing in instruments with Macaulay duration between 3 years and 4 years
8	Medium to Long Duration Fund	Investment in Debt & Money market instruments such that the Macaulay duration of the portfolio is between 4 - 7 years	An open-ended medium- term debt scheme investing in instruments with Macaulay duration between 4 years and 7 years
9	Long Duration Fund	Investment in Debt & Money Market Instruments such that the Macaulay duration of the portfolio is greater than 7 years	An open-ended debt scheme investing in instruments with Macaulay duration greater than 7 years

10	Dynamic Bond	Investment across duration	An open-ended dynamic debt scheme investing across duration
11	Corporate Bond Fund	Minimum investment in corporate bonds – 80% of total assets (only in highest rated instruments)	An open-ended debt scheme predominantly investing in highest rated corporate bonds
12	Credit Risk Fund	Minimum investment in corporate bonds – 65% of total asset (investment in below highest rated instruments)	An open-ended debt scheme investing in below highest rated corporate bonds
13	Banking and PSU Fund	Minimum investment in Debt instrument of banks, Public Sector Undertakings, Public Financial Institutions – 80% of total assets	An open-ended debt scheme predominantly investing in Debt instruments of banks, Public Sector Undertakings, Public Financial Institutions
14	Gilt Fund	Minimum investment in Gsecs – 80% of total assets (across maturity)	An open-ended debt scheme investing in government securities across maturity
15	Gilt Fund with 10-year constant duration	Minimum investment in G secs – 80% of total assets such that the Macaulay duration of the portfolio is equal to 10 years	An open-ended debt scheme investing in government securities having a constant maturity of 10 years
16	Floater Fund	Minimum investment in floating rate instruments – 65% of total assets	An open-ended debt scheme predominantly investing in floating rate instruments

For debt funds, the classification is based on Macaulay Duration, and not based on Average Maturity of Modified Duration.

The calculation of Macaulay Duration has been dealt with in the Chapter – Security Valuation in the Advanced Financial Management Paper of CA Final Course.

# C. Hybrid Schemes:

Sr. No.	Category of Schemes	Scheme Characteristics	Type of scheme (uniform description of scheme)
1	Conservative Hybrid Fund	Investment in equity & equity related instruments – between 10% and 25 % of total assets	An open-ended hybrid scheme investing predominantly in debt instruments
		Investment in Debt instruments – between 75% and 90% of total assets	
2	Balanced Hybrid Fund	Equity & Equity related instruments — between 40% and 60 % of total assets.	An open-ended balanced scheme investing in equity and debt instruments
		Debt instruments – between 40% and 60% of total assets	
		No arbitrage would be permitted in this scheme	
	Aggressive Hybrid Fund	Equity & Equity related instruments — between 65% and 80% of total assets;	An open-ended hybrid scheme investing predominantly in equity and equity related instruments
		Debt instruments – between 20% and 35% of total assets	
3	Dynamic Asset Allocation or Balanced Advantage	Investment in equity / debt that is managed dynamically	An open-ended dynamic assets allocation fund
4	Multi Assets Allocation	Invests in at least three asset classes with a minimum allocation of at least 10% each in all three asset classes	An open-ended scheme investing in the three different asset classes
5	Arbitrage Fund	Scheme following arbitrage strategy. Minimum investment in	An open-ended scheme investing in arbitrage opportunities

		equity & equity related instruments – 65% of total assets	
6	Equity Savings	Minimum investment in equity & equity related instruments – 65% of total assets and minimum investment in debt – 10% of total assets  Minimum hedged &	An open-ended scheme investing in equity, arbitrage and debt
		unhedged to be stated in the SID	

#### D. Solution Oriented Schemes:

Sr. No.	Category of Schemes	Scheme Characteristics	Type of scheme (Uniform description of scheme)
1	Retirement Fund	Scheme having a lock – in for at least 5 years or till retirement age whichever is earlier	An open ended retirement solution oriented scheme having a lock – in of 5 years or till retirement age (whichever is earlier)
2	Children's Fund	Scheme having a lock – in for at least 5 years or till the child attains age of majority whichever is earlier	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)

#### E. Other Schemes:

Sr. No.	Category of Schemes	Scheme Characteristics	Type of scheme (Uniform description of scheme)
1	Index Funds / ETFs	Minimum investment in securities of a particular index (which is being replicated / tracked) – 95% of total assets	An open-ended scheme replicating / tracking an index
2	FOFs (Overseas / Domestic)	Minimum investment in the underlying fund – 95% of total assets	An open-ended fund of fund scheme investing in a particular fund (mention the underlying fund)

# 3.5 SEBI Allowed Flexicap Plans in Relief to Fund Houses Facing Tight Regulation

The Securities and Exchange Board of India introduced flexicap schemes under the broader equity mutual fund category. The move came as a relief to fund houses which operated multicap schemes after the capital markets regulator tightened investment norms for this category. The majority of the large multicap schemes were shifted to the new flexicap category. Kotak Standard Multicap Fund, the largest scheme in the category was renamed Kotak Standard Flexicap. The fund manager, investment process and fund portfolio remained the same. The new category gave the fund manager flexibility to invest in a mix of large, midcap and smallcap stocks. The scheme needs to invest at least 65% of the corpus to equity, SEBI said in a circular.

The decision to introduce flexicap schemes followed protests from a section of the mutual fund industry after the regulator on September 11, 2020, unexpectedly asked multicap funds to allocate at least 25% of their portfolios to large-, mid- and smallcap stocks each. Till then, there were no investment restrictions for this product, resulting in many of these schemes holding as much as 75% of their portfolios in largecap stocks, resembling large and midcap schemes as per SEBI's classification. Multicap portfolios manage 20% of the industry's equity assets under management.

Motilal Oswal Multicap Fund, another large scheme in the category, was also being shifted to the flexicap category. Most multicap funds got their schemes reclassified into the flexicap category. Fund managers of large multicap funds were opposed to staying in this category under the new investment rules, which would require them to shift a large chunk of their corpus in largecap stocks to small and midcaps. They feared the rush to make obligatory purchases of illiquid smaller stocks to meet the norms that would drive up these stocks and be detrimental to the multicap investor.



# 4. DIRECT PLAN AND REGULAR PLAN

One may invest in mutual funds directly i.e., without involving or routing the investment through any distributor/agent in a 'Direct Plan'. Or one may choose to invest in mutual funds with the help of a Mutual Fund distributor/agent in what is termed as a 'Regular Plan'. 'Direct Plan' and 'Regular Plan' are both part of the same mutual fund scheme, have the same/common portfolio, and are managed by the same fund manager, but have different expense ratios (recurring expenses that are incurred by the mutual fund scheme).

The Direct Plan has a lower expense ratio than the Regular Plan, as there is no distributor/agent involved, and hence there are savings in terms of distribution cost/commissions paid out to the distributor/agent, which is added back to the returns of the scheme. Hence, a Direct Plan has a separate NAV, which is higher than the "Regular" Plan's NAV. In due course, the lower expense

ratio of the Direct Plan translates to higher returns on the investments which keep compounding over the years. Thus, the investment in the Direct Plan would be worth more over a period, in comparison to investment in the Regular Plan of the same scheme. It should be however borne in mind that the difference between NAV of Direct Plan and Regular Plan tends to be marginal.

Direct Plans are for those who prefer to invest DIRECTLY in a mutual fund scheme without the help of any distributor/agent. Investing in a Direct Plan is like buying a product from the manufacturer directly, whereby the cost to the customer would be lower. Except that, investing in a mutual fund scheme directly is not as simple as buying some item from a factory outlet, because choosing a mutual fund scheme requires adequate knowledge and awareness of the mutual fund product, especially the risks that are associated with the potential rewards. Choosing a Direct Plan means making your own decisions about fund/scheme selection (and the related execution work) which not everyone may be capable of.

In short, Direct Plan is suited for those who understand what kind of mutual funds are needed for different kinds of investment needs, can research these independently, and are able to identify/shortlist the funds to invest in, and then go through the process of investing without the help of an intermediary. However, when the markets fall and investment values come under pressure, independent advice from a professional advisor can help one stay the course. Thus, a Direct Plan makes sense only if you have adequate knowledge and capability to select good funds yourself; or are willing to seek professional advice from a registered investment adviser for a fee.

While the Direct Plan makes sense for knowledgeable, Do-it-Yourself (DIY) investors, it may not be suited for all investors, especially new and inexperienced investors. So, if you are a new and inexperienced investor or unsure of which scheme to invest in and need guidance/assistance in investing, you may be better off seeking the help of a mutual fund distributor and investing in a Regular Plan.



# 5. EXPLANATION OF IMPORTANT TERMS USED IN MUTUAL FUNDS

**New Fund Offer (NFO):** A mutual fund house, also known as an asset management company, will issue a New Fund Offer (NFO) when they choose to introduce a new mutual fund scheme. It's a mutual fund scheme's initial offer that gives investors the chance to invest early and earn substantial profits.

A mutual fund house can raise the necessary funds through an NFO to buy stocks or debt instruments. Customers can purchase units at INR 10 per unit NAV for a subscription duration ranging from ten (10) to fifteen (15) days offered by AMCs. Investors receive units from AMCs according to a first-come, first-served policy.

**Expense Ratio:** Under SEBI (Mutual Funds) Regulations, 1996, Mutual Funds are permitted to charge certain operating expenses for managing a mutual fund scheme – such as sales & marketing/advertising expenses, administrative expenses, transaction costs, investment management fees, registrar fees, custodian fees, audit fees – as a percentage of the fund's daily net assets.

All such costs for running and managing a mutual fund scheme are collectively referred to as 'Total Expense Ratio' (TER). The TER is calculated as a percentage of the Scheme's average Net Asset Value (NAV). The daily NAV of a mutual fund is disclosed after deducting the expenses.

(Source: Amfi Website)

#### Scheme Information Document (SID):

Scheme Information Document contains basic information about the scheme which investors should know about before investing. The scheme information document usually runs into several pages and may seem too technical for novice investors. However, it has very useful scheme related information, which can help investors make informed investment decisions. However, some key information which investors should look for and read in the scheme information document are as follows:

- Fund management team details
- Risks factors
- Scheme details
- Other information

#### Statement of Additional Information (SAI):

This document is essentially an addendum to the SID. Information provided in the SAI includes the following: -

- (i) Constitution of the mutual fund i.e. the Asset Management Company of the scheme, scheme sponsors and trustees. The sponsor is the promoter of the Asset Management Company. The sponsor provides capital, creates a board of trustees and sets up the Asset Management Company (AMC). The role of the trustees is to protect the interest of investors, monitoring the AMC and ensuring compliance with regulations.
- (ii) Key information about the AMC i.e. Key personnel of the AMC, key associates of the AMC like Bankers, Custodians, Registrars, Auditors and Legal Counsel, Financial and legal issues etc.

### **Key Information Memorandum (KIM):**

KIM is Key Information Memorandum. As the name suggests, it has key scheme related information. The KIM is essentially a concise version of the SID. The KIM is available with all mutual fund scheme application forms. It is recommended to read the KIM carefully before investing, especially if you have not gone through the SID.

(Source: <a href="https://www.miraeassetmf.co.in/quiz-module-list/topic-2/intermediate-level/investor-rights-obligations/sid-sai-kim-before-investing">https://www.miraeassetmf.co.in/quiz-module-list/topic-2/intermediate-level/investor-rights-obligations/sid-sai-kim-before-investing</a>

### Systematic Investing Plan (SIP):

It is designed to aid you in achieving your financial objectives over time. It offers a straightforward way to regularly invest a predetermined sum in your chosen mutual funds. SIP, with its promise to make investing accessible to everybody, has become a major change in financial planning and asset management. But besides understanding the meaning of SIP, it is also important to understand how it works and how it can play a huge role in the success of your wealth-building journey. Let's discuss SIP in detail.

#### How does SIP work?

SIP offers a convenient method for investing in mutual funds, allowing you to determine your desired regular investment amount easily. This amount is automatically deducted from your bank account to buy mutual fund units. Over time, these investments grow due to compounding. There are two principles on which the SIP works. *They are as follows:* 

### (i) Regular Investing

SIPs offer a strategic shield against the unpredictable tides of the financial markets. By adhering to consistent investments, SIPs ensure that the average purchase cost remains stable over the long term.

In practical terms, when market conditions are buoyant, you acquire fewer units of your chosen investment, and during market downturns, you secure more units for your investment. This key difference between SIP and mutual fund investing can provide investors with a risk-mitigation strategy and potentially higher returns over time.

### (ii) Power of Compounding

The power of compounding in SIP refers to reinvesting the returns generated by your mutual fund investments back into the same fund. Over time, this process leads to exponential growth as your returns earn additional returns.

The longer you stay invested, the more significant the compounding effect becomes, potentially resulting in substantial wealth accumulation, making SIP an effective strategy for long-term financial goals.

Let's consider two friends, Alice and Bob. Alice started investing  $\ref{10,000}$  annually in an SIP at 25, with an expected SIP return rate of 10% per annum. Over 30 years, she has made a total contribution of  $\ref{3,00,000}$ . On the other hand, Bob started his investments at the age of 35 and invested  $\ref{10,000}$  annually, expecting a 10% annual return. Over 20 years, Bob's total investment amounted to  $\ref{2,00,000}$ .

(Source: https://www.kotak.com/en/stories-in-focus/mutual-funds/what-is-sip.html)

### (iii) Law of averages:

If NAV of the units comes down SIP helps in averaging, as investor is investing the same amount of money every month (period) the no. of units he/she can buy with that amount is more as the NAV has come down, which will reduce the overall cost of the portfolio of mutual fund. When the NAV starts recovering again the breakeven point arrives early because of law of averages.

### **Lump Sum Investment:**

In a lump sum, it means a single, bulk amount invested a one-time mutual fund investment. It is just like FD. It is different than SIP where the money was pumped in periodically. In Lump sum money is invested in one shot and without the intention to repeat it periodically.

The Systematic Transfer Plan (STP): It eliminates the additional burden involved in moving or transferring funds between mutual fund schemes. When you have a large quantity of money to invest in one go, this is the option you should pick. It does assist you in distributing your money over time to lessen the effects of dealing with the market at its highest point. It is preferable to go from equity plans to debt schemes and vice versa when you want to be risk-adverse with a plan.

**Systematic Withdrawal Plan (SWP):** One can periodically take out a predetermined amount of money from one's assets by using a systematic withdrawal plan. Retirees benefit most from this plan because they may require a consistent income stream most of the time. But they also use this technique to invest in new schemes or adjust their existing investments.



# NET ASSET VALUE (NAV)

There is a valuation of the fund done at the end of every business day, so that the investor knows the value of his/her investments as on that date. The term 'value' here refers to the market value

i.e., if hypothetically the entire portfolio were to be liquidated, how much would be realized. Since each investor holds units in the pool of funds, the valuation is published in terms of per unit, so that the value of one's holdings can be computed. The formula for computation of NAV is:

Market Value of Investments held by the Fund + Value of Current Assets -

NAV= Value of Current Liabilities and Provisions

No. of Units on the valuation date before redemption

or creation on units

From the above formula, it can be observed that from the market value of the investments as on that day, we must add the cash equivalents or other current assets and need to deduct any expenses that have accrued but not paid out, so that the NAV represents a true and fair picture. That is the reason it is called 'net' asset value i.e., it is net of liabilities, expenses, etc.

### Example

From the following information in respect of a mutual fund, calculate the NAV per unit:

	₹
Cash and Bank Balance	6,00,000
Bonds and Debenture (unlisted)	7,50,000
Equities (current market value)	13,00,000
Quoted Government Securities	10,50,000
Accrued Expenses	1,25,000
Number of outstanding units	2,50,000
Solution	
Cash and Bank Balance	6,00,000
Bonds and Debenture (unlisted)	7,50,000
Equities (current market value)	13,00,000
Quoted Government Securities	10,50,000
Total Assets (Realizable Value)	37,00,000
Less: Accrued Expenses	1,25,000
Net Assets	35,75,000

Number of outstanding units 2,50,000

Net Assets Value (NAV)/unit 14.30

NAV is published on every business day for all funds; for Liquid Funds, NAV is published on Sundays as well. In equity funds, returns come mostly from price movement. Hence the differential in NAV between two dates is mostly the difference in market value of the investments. In debt funds, returns come mostly from interest accrual. Hence the differential in NAV between two dates is mostly the accrual, provided the period is sufficiently long to absorb short term volatilities.



# 7. INDICATIVE NET ASSET VALUE

A measurement of an investment's intraday net asset value (NAV) is called indicative net asset value (iNAV). Approximately every 15 seconds, INAV is reported. It provides investors with a gauge of the investment's worth throughout the day.

### (i) Key characteristics

- Indicative net asset value (iNAV) is a measurement of an investment's intraday net asset value (NAV).
- An agent that calculates indicative net asset value (iNAV)—typically the exchange where the investment is traded—reports it roughly every 15 seconds.
- Both exchange-traded funds and closed-end mutual funds can publish indicative net asset value (iNAV) (ETFs).
- The calculation agent will utilise the established prices of all securities in the portfolio to get the overall asset value, which is then reduced by the fund's liabilities and divided by the number of shares to determine the indicative net asset value (iNAV).

### (ii) Comparing net asset value and indicative net asset value (NAV)

The iNAV is a tool that aids in preserving trading of assets close to par value. It provides a glimpse of a fund's worth that is almost real-time thanks to iNAV reports that are sent out every 15 seconds. A fund may be able to avoid considerable premium and discount trading by reporting an iNAV.

Because they fall under the Investment Company Act of 1940's definition of a mutual fund investment, closed-end funds, and ETFs compute net asset values. The funds trade like stocks on the open market, with transactions taking place at the market price, while they determine a daily net asset value.



### PERFORMANCE MEASUREMENT

It comes as a statutory warning that "mutual fund investments are subject to market risks . . . past performance is not an indication of future performance". Very few people read it or understand the importance of the statement. The implication of the statement is that the performance we are looking at today is the result of certain investment decisions taken by the fund manager in the past. The fund manager is ultimately a human being, and future decisions may or may not be as effective and hence future returns from that fund may or may not be as good.

Even though past performance may not be repeated in future, there is no logic to go for a Fund that has been an underperformer, because that fund manager could not prove himself / herself efficient over the period under consideration. The outperformer has something going for himself / herself. Hence, let us look at past performance also as a hygiene factor.

### What should be avoided is,

- looking at past performance over a short period of time
- looking at returns only till a particular date and comparing the numbers.
- basing a decision on a ranking system, ranked only by returns till a particular date.

### Let us now understand why the above practices should be avoided.

A short period of time is not adequate to judge the performance of a fund manager, just like the runs scored or wickets taken by a cricketer in 5 matches is not enough to judge his class - at best it shows his current form. Similarly, if a bond fund is outperforming the peer group over a period of say 1 or 2 months, it may be that the calls (investment decisions) taken by the fund manager over 1 or 2 months have proved better than other fund managers and that's it. Fund managers who have proven herself over a long period of time should be preferred.

As discussed earlier, a Fund may have done well over say a 1-year period which makes it eligible for '5 stars' (performance ranking done by some agencies / websites) as against another Fund which is say '4 stars' or '3 stars' and you take the decision to invest in the 5-star rated Fund, it may not be an entirely correct decision. Nothing wrong about a fund doing well, more so if the performance-based ranking is over an adequate period and it is done on a 'Risk-Adjusted Basis' i.e., adjusted for volatility in returns.

The point is, there are certain 'hygiene factors' which should be considered. Lay investors would be attracted by the '5 stars' and would not be aware that a 5-star rated Fund may be low on the hygiene factors. For example, a Fund with a corpus of ₹1,000 crore from a leading AMC / sponsor with 4-

star performance should be preferred over a 5-star rated Fund with a corpus of ₹20 crore which is from an AMC that ranks among the bottom 5 in terms of corpus / their sponsor is not so well known or if the credit quality of the Fund is relatively poor.

#### 8.1 Performance Measures

There are various ways of measuring performance; what is most used is looking at point to point returns (i.e., returns from one date to today's date) over various time periods e.g., 1 month, 3 month, 6 months, 1 year, 2 years, etc.

As a matter of regulation, returns from fixed income funds for a period of less than 1 year should be annualized on a simple basis and for a period of more than 1 year, it should be annualized on a compounded basis. There are more refined methods of looking at point to point returns, which are

- looking at risk-adjusted (i.e., adjusted for volatility) returns.
- looking at various statistical ratios e.g., Sharpe Ratio, Alpha Ratio, Treynor Ratio, etc.

### 8.1.1 Costs incurred by Mutual Fund

Costs, when high, reduce the returns of an investor. High Costs are the cause of below par performance of some mutual funds. Costs carry two components: (1) Initial Expenses attributable to establishing a scheme under a Fund and (2) Ongoing recurring expenses (Management Expense Ratio) which is made up of (a) Cost of employing technically sound investment analysts (b) Administrative Costs (c) Advertisement Costs involving promotion and maintenance of Scheme funds. The Management Expense Ratio is measured as a % of average value of assets during the relevant period.

### Expense Ratio = Expense / Average value of Portfolio

If Expenses are expressed per unit, then Expense Ratio = Expenses incurred per unit / Average Net Value of Assets.

For example, a mutual fund has paid annual expenses of Rs. 20 lakhs. The assets under management in the beginning and at the end of year were Rs. 200 lakhs and Rs. 400 lakhs respectively.

Expense Ratio = 
$$\frac{\text{Rs. 20 lakhs}}{(\text{Rs. 200 + Rs. 400 lakhs})/2} \times 100 = 6.67\%$$

The Expense Ratio relates to the extent of assets used to run the Mutual Fund. It is inclusive of travel costs, management consultancy and advisory fees. It, however, excludes brokerage expenses for trading as purchase is recorded with brokerage while sales are recorded without brokerage.

### cagr formula= power me 1/no of year hoga

### 8.1.2 Point to Point Returns

Point to point simply measures returns from a past date to the current date, by taking the NAV at these two dates. For measurement of returns, the growth option NAV should be taken and not the dividend option as there would be complications of adding back dividend. As an example, the return over one year from 31 December 2017 to 31 December 2018 is the increment in the growth option NAV divided by the NAV as on 31 Dec 2017.

Similarly, returns over three months from 30 September 2018 to 31 December 2018 is the increment in the growth option NAV divided by the NAV as on 31 December 2017. The return over three years from 31 December 2015 to 31 December 2018 is the increment in the growth option NAV divided by the NAV as on 31 December 2015. To be noted, returns from equity funds over a period of less than one year is expressed as absolute and for more than one year, it is annualized on a compounded basis. Further, fixed income funds for a period of less than one year should be annualized on a simple basis and for a period of more than one year, it should be annualized on a compounded basis.

### Point to point return explained.

**Example:** Yash Vardhan Large Cap Equity Investment began on January 2, 2015. Initial investment amount is ₹ 10,00,000. NAV at the start of the fund Rs 100.54. Ending on January 2, 2017 - Closing NAV ₹ 172.95. If you were requested to find out the returns, you probably could without much trouble. Let's calculate -

**Solution** – By dividing ₹10,00,000 by ₹100.54, you get 9946.290 units. The final investment value is equal to 9946.290 units  $x \in 172.95$  (or ₹17,20,210.86).

The CAGR method can be used to determine the growth of this lump sum investment over a two-year period: =  $[Ending \ Value/Beginning \ Value] ^ (1/2) - 1 = [17,20,210.86/10,00,000] ^ (1/2) - 1 = 31.16%. It would be considered as a tremendous growth rate.$ 

# 8.1.3 Rolling Returns

The method to iron out the possible skew in point-to-point returns which may result from outperformance / underperformance in the recent past, is to look at rolling returns. Measurement of rolling returns works like this - For a period under consideration, it takes many short periods of fixed frequency, measures the return from the Fund over these shorter time periods and take the average of all the data over the entire period.

### Performance of a Liquid Fund over a 3-month period:

- **Point-to-point:** Simply measure the performance of the growth option NAV from the start date to today's date, annualized.
- Rolling return of daily frequency: Measure the return from the start date to next date, from next date to next-to-next date and so on and take the average of all these observations.
- Rolling return of weekly frequency: Measure the return from the start date to next week, from next week to next-to-next week and so on and take the average of all these observations.

### Performance of an Equity / Bond Fund over a 3-year period:

- **Point-to-point:** Simply measure the performance of the growth option NAV from the start date to today's date, annualized on a compounded basis.
- Rolling return of monthly frequency: Measure the return from the start date to one-monthlater date, from next month to next-to-next month and so on and take the average of all these observations.
- Rolling return of quarterly frequency: Measure the return from the start date to threemonth-later date, from next quarter to next-to-next quarter and so on and take the average of all these observations.

The superiority of rolling return as a performance measurement over simple point-to-point return is that it irons out the various smaller pockets of outperformance and underperformance against the peer group and throws up a more dependable (smoothened out) data.

### Rolling Returns explained

The objective is to find the fund's 2-year rolling return. So, let us start in 2015 to do this.

Firstly, calculate the return between the NAV on January 2, 2015, and the NAV on January 2, 2013, which is two years ago. Secondly, shift the date by one day, i.e., between January 3, 2015, and January 3, 2013, and then compute the return between these dates using the NAV for these two dates. Once again change the date to January 4th, 2013, or 2015, and compute the return.

So, the purpose is to keep on going in this manner until a time series with a 2-year return is arrived at.

### Let's figure out the initial rolling return:

NAV as of January 2nd, 2013, was 100.54.

NAV on January 2nd, 2015, was 172.95.

Since the period is two years, we use CAGR:  $[172.95/100.54]^{(1/2)-1} = 31.16\%$ .

NAV on January 3, 2013, would be the second rolling return in this series, at 101.75.

NAV on January 3, 2015, was 173.65; So, the CAGR in this situation =  $[173.65/101.75] ^ (1/2)-1 = 30.64$ .

Next, it will be calculated from January 4, 2013, to January 4, 2015, and so on.

### 8.2 Statistical Ratios

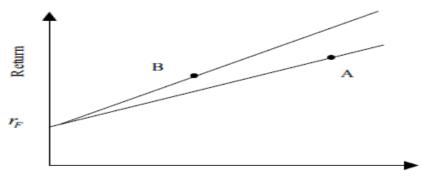
### 8.2.1 Sharpe Ratio (Reward to Variability)

The Sharpe ratio evaluates the relationship between an investment's return and risk. The idea that excess returns over time may indicate greater volatility and risk rather than investment expertise is expressed mathematically in this way.

As a result of his work on the capital asset pricing model (CAPM), economist William F. Sharpe proposed the Sharpe ratio in 1966 under the name reward-to-variability ratio.

The numerator of the Sharpe ratio is the difference over time between realised or predicted returns and a benchmark, such as the performance of a certain investment category or the risk-free rate of return. The standard deviation of returns over the same period, which serves as a gauge of volatility and risk, serves as its denominator.

Furthermore, investors prefer stocks or portfolios with relatively less risk or less volatility. But how do we evaluate portfolios with different returns and different levels of risk? **Let us take an example.** 



Risk (variability)

	Portfolio A	Portfolio B	Benchmark
Annualized return	7.9%	6.9%	7.5%
Annualized risk	5.5%	3.2%	4.5%

Sharpe ratio			
(Risk-free rate = 2%)	<u>7.9% - 2.0%</u>	<u>6.9% - 2.0%</u>	<u>7.5% - 2.0%</u>
$SR = \frac{r_p - r_F}{r_p}$	5.5%	3.2%	4.5%
$\sigma_{P}$	= 1.07	= 1.53	= 1.22

r<sub>P</sub> is the portfolio return

r<sub>F</sub> is the risk-free rate

 $\sigma_{P}$  is the SD of the portfolio

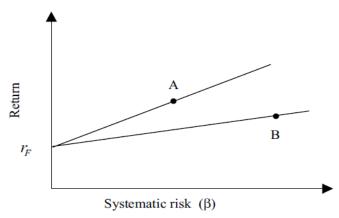
SR = Sharpe Ratio

As we see in the table above, though the return of portfolio A (7.9%) is higher than portfolio B (6.9%) and Benchmark (7.5%), variability also is higher. The Sharpe Ratio of portfolio A (1.07) is much lower than portfolio B (1.53) and lower than benchmark portfolio (1.22).

The higher the Sharpe ratio, the better because the portfolio has given that much higher return to compensate for the higher variability. The Sharpe ratio is a very popular method for measuring risk-adjusted return.

### 8.2.2. Treynor Ratio

The output of Treynor ratio is like Sharpe Ratio, the difference being that in the denominator, instead of taking standard deviation, it takes beta of the portfolio i.e., systematic risk.



Treynor Ratio (TR) = 
$$\frac{r_P - r_F}{\beta_P}$$

 $\beta_P$  = Beta of the portfolio

The Treynor ratio measures excess return generated per unit of risk in the portfolio i.e. excess return

earned above the risk-free investment. Treasury bills are usually taken as the proxy for risk-free return as it is issued by the Government and duration is not very long. Risk refers to the portfolio beta i.e. the extent to which the portfolio performance varies along with the relevant market.

### Let's consider the following example to understand Treynor Ratio:

Portfolio Return: 10%

Risk-Free Rate: 6%

Portfolio Beta: 1.2

Treynor Ratio = (10% - 6%) / 1.2 = 3.33%

In this example, the portfolio generated a Treynor Ratio of 3.33%, which shows its performance in comparison to its exposure to systematic risk.

### 8.2.3 Jensen's Alpha

This is the difference between a fund's actual return and those that could have been made on a benchmark portfolio with the same risk- i.e., beta. It measures the ability of active management to increase returns above those that are purely a reward for bearing market risk. Caveats apply however since it will only produce meaningful results if it is used to compare two portfolios which have similar betas.

#### **Assume Two Portfolios**

	Α	В	Market Return
Return	12	14	12
Beta	0.7	1.2	1.0

Risk Free Rate = 9%

The return expected = Risk Free Return + Beta portfolio (Return of Market - Risk Free Return)

Using Portfolio A, the expected return = 0.09 + 0.7 (0.12 - 0.09) = 0.09 + 0.021 = 0.111

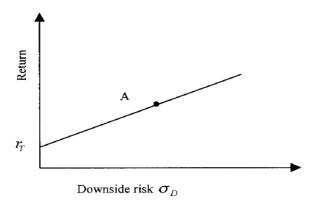
Jensen Alpha = Return of Portfolio- Expected Return= 0.12 - 0.111 = 0.009

If "apples are compared to apples"- in other words a computer sector fund A is compared with computer sector fund B - it is a viable number. But if taken out of context, it loses meaning. Alphas are found in many rating services but are not always developed the same way- so you can't compare

an alpha from one service to another. However, we have usually found that their relative position in the rating service is to be viable. Short-term alphas are not valid. A minimum time frame of one to three years is preferable.

#### 8.2.4 Sortino Ratio

Sortino ratio is a variation of the concept of Sharpe or Treynor ratios; instead of measuring it against any type of risk, Sortino measures it against only downside risk in the portfolio.



$$SR = \frac{r_p - r_F}{\sigma_p}$$

Here,

 $\sigma_D$  is the standard deviation on the downside i.e., not just the entire deviations in the portfolio but the downside deviations only.

Sortino ratio penalizes only returns below a specified rate. Sharpe and Sortino measure risk-adjusted return, but they are different. Sortino ratio differentiates negative volatility from entire volatility by taking the standard deviation of negative returns, called downside, rather than total standard deviation.

**For example**, assume Mutual Fund A has an annualized return of 14% and a downside deviation of 10%. Mutual Fund B has an annualized return of 12% and a downside deviation of 7%. The risk-free rate is 5.5%. The Sortino ratios for both funds would be calculated as:

Mutual Fund A Sortino = 
$$\frac{14\% - 5.5\%}{10\%}$$
 = 0.85  
 $\frac{12\% - 5.5\%}{7\%}$  = 0.93

Even though Mutual Fund A is returning 2% more on an annualized basis, it is not earning that return as efficiently as Mutual Fund B, given their downside deviations. Based on this metric, Mutual Fund B is the better investment choice.

### 8.2.5 Portfolio or Fund Alpha

The Alpha is the excess return over broad market, represented by the benchmark. Beta is the systematic return or return along with the market whereas Alpha is the return over and above the market generated by active fund management and by taking risks i.e., unsystematic risks. To gauge the excess return over the market, the index or benchmark is taken to represent the market return and the excess return over the index / benchmark is the Alpha. Alpha may be positive or negative i.e., active portfolio calls or portfolio churning can go either way.

### 8.2.6 Benchmarking

For any performance evaluation, benchmarking is very important. However, the question is, what is the correct benchmark? In most literature on mutual funds and on communications from AMCs, the standard / official benchmark is mentioned. For example, for a large cap equity fund, the Nifty 50 Index can be used or if it is a Short-Term Bond Fund, the CRISIL index for Short Term Bond Funds (STBex) would be mentioned.

# (G)

# 9. ADVANTAGES AND DISADVANTAGES OF MUTUAL FUND

### 9.1 Advantages

- (i) Professional expertise: Except for some large corporate investors with dedicated treasury departments, it is not possible for an investor to replicate the expertise and professional fund management skills of MFs. The market is dynamic and portfolio reshuffling calls must be taken as and when required. Active tracking of portfolio is not the job of the archetype investor.
- (ii) Risk Diversification Buying shares in a mutual fund is an easy way to diversify your investments across many securities and asset categories such as equity, debt, and gold, which helps in spreading the risk so you won't have all your eggs in one basket. This proves to be beneficial when the underlying security of a given mutual fund scheme experiences market headwinds.

With diversification, the risk associated with one asset class is countered by the others. Even if one investment in the portfolio decreases in value, other investments may not be impacted and may even increase in value. In other words, you don't lose out on the entire value of your investment if a particular component of your portfolio goes through a turbulent period. Thus, risk diversification is one of the most prominent advantages of investing in mutual funds.

- (iii) Operational / Transaction ease: The process of buying and selling an instrument in the secondary market is quite cumbersome as compared to the process of investing / redeeming in MFs. For a similar / comparable return, the investor would rather settle for an easier process.
- **(iv)** Affordability & Convenience (Invest Small Amounts) For many investors, it could be more costly to directly purchase all the individual securities held by a single mutual fund. By contrast, the minimum initial investments for most mutual funds are more affordable.
- (v) Accessibility: Mutual Funds are easy to access, through distributors, online, acceptance centers etc.
- (vi) Ticket Size: All ticket sizes are available, from as small as ₹5000 to multiples of crores.
- (vii) Liquidity: In mutual funds, liquidity is just a redemption away. Nowadays, it can be done online, and the money gets credited to your bank account. The time for getting the credit depends on the nature and terms of the fund; it may be T+1 day to T+3 days.
- (viii) Option of multiple funds: There are multiple categories of funds discussed earlier, there is one to suit your requirement, managed by professionals. That is not the case with direct investment in equity stocks / bonds.
- (ix) Well-Regulated: Mutual Funds are regulated by the capital markets regulator, Securities and Exchange Board of India (SEBI) under SEBI (Mutual Funds) Regulations, 1996. SEBI has laid down stringent rules and regulations keeping investor protection, transparency with appropriate risk mitigation framework and fair valuation principles.
- (x) Tax Benefits: Investment in ELSS upto ₹1,50,000 qualifies for tax benefit under section 80C of the Income Tax Act, 1961. Mutual Fund investments when held for a longer term are tax efficient.

### 9.2 Disadvantages of Mutual Fund

- (i) If you are running your own portfolio, you can run your own strategies. In mutual funds, you are following the fund manager thus, dependent on him.
- (ii) In developed markets like the USA, there is a shift towards passively managed funds i.e., ETFs (discussed below) as there is not much alpha generated over the broad market. ETFs run at a much lower cost than actively managed funds. While ETFs also are mutual funds, the point is, the alpha is missing in developed markets due to better information and efficiency in markets.

# (3)

# 10. FACTORS INFLUENCING THE SELECTION OF MUTUAL FUNDS

(1) Past Performance – The Net Asset Value is the yardstick for evaluating a Mutual Fund. The higher the NAV, the better it is. Performance is based on the growth of NAV during the referral period after taking into consideration Dividend paid.

Growth =  $(NAV_1 - NAV_0) + D_1 / NAV_0$ .

Where,

 $NAV_1 = Closing NAV$ 

NAV<sub>o</sub> = Opening NAV

 $D_1$  = Dividend paid by the Mutual Fund

### Example:

NAV at the beginning ₹ 80

NAV at the end ₹ 100

Dividend per unit ₹ 1.50

Growth =  $(NAV_1 - NAV_0) + D_1 / NAV_0$ =  $(100 - 80) + 1.50/80 \times 100 = 26.875\%$ 

(2) Timing – The timing when the mutual fund is raising money from the market is vital. In a bullish market, investment in mutual funds falls significantly in value whereas in a bearish market, it is the other way round where it registers growth. The turns in the market need to be observed.

- (3) Size of Fund- Managing a small sized fund and managing a large sized fund is not the same as it is not dependent on the product of numbers. Purchasing through large sized fund may by itself push prices up while sale may push prices down, as large funds get squeezed both ways. So, it is better to remain with medium-sized funds.
- (4) Age of Fund– Longevity of the fund in business needs to be determined and its performance in rising, falling and steady markets must be checked. Pedigree does not always matter as also success strategies in foreign markets.
- (5) Largest Holding It is important to note where the largest holdings in mutual fund have been invested.
- (6) Fund Manager One should have an idea of the person handling the fund management. A person of repute gives confidence to the investors.
- (7) Expense Ratio SEBI has laid down the upper ceiling for Expense Ratio. A lower Expense Ratio will give a higher return which is better for an investor.
- (8) PE Ratio The ratio indicates the weighted average PE Ratio of the stocks that constitute the fund portfolio with weights being given to the market value of holdings. It helps to identify the risk levels in which the mutual fund operates.
- (9) Portfolio Turnover The fund manager decides as to when he should enter or quit the market. A very low portfolio turnover indicates that he is neither entering nor quitting the market very frequently. A high ratio, on the other hand, may suggest that excessively frequent moves have led the fund manager to miss out on the next big wave of investments. A simple average of the portfolio turnover ratio of peer group updated by mutual fund tracking agencies may serve as a benchmark.

# 11. SIGNALS HIGHLIGHTING THE EXIT OF THE INVESTOR FROM THE MUTUAL FUND SCHEME

(1) When the mutual fund consistently under performs the broad-based index, it is high time that the investor should get out of the scheme. It would be better to invest in the index itself either by investing in the constituents of the index or by buying into an index fund.

- (2) When the mutual fund consistently under performs its peer group instead of it being at the top. In such a case, the investor would have to pay to get out of the scheme and then invest in the winning schemes.
- (3) When the mutual fund changes its objectives e.g., instead of providing a regular income to the investor, the composition of the portfolio has changed to a growth fund mode which is not in tune with the investor's risk preferences.
- (4) When the investor changes his objective of investing in a mutual fund which no longer is beneficial to him.
- (5) When the fund manager, handling the mutual fund schemes, has been replaced by a new entrant whose image is not known.



# 12. MONEY MARKET MUTUAL FUNDS (MMMFs)

The Government of India thought of introducing Money Market Mutual Funds (MMMFs) on Indian financial canvass in 1992. The aim of the Government was to develop the money market and to enable individual investors to gain from money market instruments since it is practically impossible for individuals to invest in instruments like Commercial Papers (CPs), Certificate of deposits (CDs) and Treasury bills (TBs) which require huge investments. The Government constituted a Task Force on MMMFs under the chairmanship of Shri D. Basu.

Money market funds are generally the safest and most secure of mutual fund investments because the period is short term and the visibility is clear, thus probability of default is not present there. The goal of a money-market fund is to preserve principal while yielding a modest return. Money-market mutual fund is akin to a high-yield bank account but is not entirely risk free. When investing in a money-market fund, attention should be paid to the interest rate that is being offered.



# 13. SEPARATION OF DISTRIBUTION AND ADVISORY FUNCTIONS IN THE MUTUAL FUND INDUSTRY

The industry association of Mutual Funds in India (AMFI) prohibited distributors from using nomenclature that includes references to advisors, therefore some mutual fund (MF) distributors may need to rename themselves. The move follows the decision taken by markets regulator Securities and Exchange Board of India (SEBI) to separate distribution and advisory functions in the MF industry.

"Pursuant to the regulatory amendment, MF distributors whose registered name has terms such as adviser / advisor / financial adviser/ investment adviser/ wealth adviser/wealth manager etc., are required get their registered name changed," AMFI said in a circular.

AMFI issued a non-exhaustive list of names that are permitted and prohibited for distributors.

"The name of an MF distributor should reflect the registration held by the entity and should not in any way create an impression of performing a role for which the entity is not registered. Thus, every MF distributor, while dealing in distribution of securities, should clearly specify that he /she is acting as an MF distributor," AMFI has said.

The industry body also prescribed font size for MF distributors to be used in all forms of communication such as websites, mobile apps, business cards and signboards.



# 14. EXCHANGE TRADED FUNDS (ETFS)

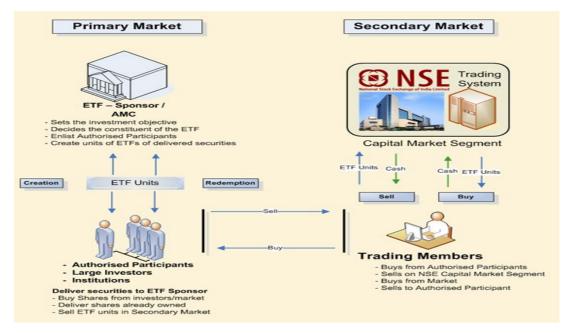
### 14.1 Introduction

An exchange-traded fund (ETF) is a Mutual Fund Scheme that is traded on stock exchanges, much like stocks. If the ETF represents a portfolio, it being listed as an ETF means the entire portfolio is being traded as one unit at the Stock Exchange. ETFs can be diverse; the portfolio may comprise stocks, bonds, commodities, index, etc. It usually trades close to its intrinsic value or market value of the underlying assets, but it is nothing hard and fast.

# 14.2 Advantages of ETFs

Fund management expenses are lower in ETFs than actively managed funds, as these are passively managed funds, investing in assets like gold or equity index.

- ETFs offer intra-day purchase and sale on the Exchange, which suits active traders. This is not possible with conventional funds.
- Close-ended funds have a fixed corpus. ETFs also have a given corpus, but that may change as per demand. Authorized Participants can create new units or redeem existing units with the AMC. This makes the ETF price realistic i.e., it moves with the movement in the underlying market.



# **Equity ETFs listed on NSE**

Issuer Name	Name Underlying		Launch Date
Edelweiss AMC	Edelweiss Exchange Traded Scheme - NIFTY	NIFTY 50 Index	08-May-2015
ICICI Prudential AMC	ICICI Prudential NIFTY ETF	NIFTY 50 Index	20-Mar-2013
Kotak AMC	Kotak NIFTY ETF	NIFTY 50 Index	02-Feb-2010
MotilalOswal AMC	MOSt Shares M50	NIFTY 50 Index	28-Jul-2010
Quantum AMC	uantum AMC Quantum Index Fund - NIFTY 50 Index Growth		10-Jul-2008
Religare AMC	Religare Invesco NIFTY ETF	o NIFTY ETF NIFTY 50 Index	
SBI AMC	SBI ETF NIFTY	NIFTY 50 Index	23-Jul-2015
UTI AMC	UTI NIFTY ETF	NIFTY 50 Index	03-Sep-2015
Birla Sun Life AMC	Birla Sun Life NIFTY ETF	NIFTY 50 Index	21-Jul-2011
ICICI Prudential AMC	ICICI Prudential CNX 100 ETF	NIFTY 100	20-Aug-2013
Kotak AMC	Kotak Banking ETF	NIFTY Bank	04-Dec-2014
SBI AMC	SBI ETF Banking	NIFTY Bank	20-Mar-2015

MotilalOswal AMC	MOSt Shares M100	NIFTY Midcap 100	31-Jan-2011
SBI AMC	SBI ETF NIFTY Junior	NIFTY Next 50	20-Mar-2015
Kotak AMC	Kotak PSU Bank ETF	NIFTY PSU BANK	08-Nov-2007
ICICI Prudential AMC	ICICI Prudential Sensex ETF	S&P BSE Sensex	10-Jan-2003
UTI AMC	UTI Sensex ETF	S&P BSE Sensex	03-Sep-2015
Reliance Nippon Life	Reliance ETF NIFTY BeES	NIFTY 50 Index	28-Dec-2001
Asset Management Limited	Reliance ETF NIFTY 100	NIFTY 100	22-Mar-2013
	Reliance ETF Bank BeES	NIFTY Bank	27-May-04
	CPSE ETF	NIFTY CPSE Index	28-Mar-14
	Reliance ETF Dividend Opportunities	NIFTY Dividend Opportunities 50	15-Apr-14
	Reliance ETF Consumption	NIFTY India Consumption	03-Apr-14
	Reliance ETF Infra BeES	NIFTY Infrastructure	29-Sep-10
	Reliance ETF Junior BeES	NIFTY Next 50	21-Feb-03
	Reliance ETF PSU Bank BeES	NIFTY PSU BANK	25-Oct-07
ICICI Prudential AMC	BHARAT 22 ETF	S&P BSE BHARAT 22 index	28-Nov-17

# 15. SIDE POCKETING

### What Does Mutual Fund Side Pocketing Mean?

A strategy to protect investors in instruments with exposure to risky assets is called side pocketing. It is essentially an accounting technique used to distinguish between liquid and high-quality investments and illiquid investments in a loan portfolio.

#### How does it function?

The fund houses move the illiquid asset into a side pocket whenever a bond owned by the fund has its rating downgraded, and the current holders receive a pro rata allocation in it.

### What Effect Does Side Pocketing Have on NAV?

The fund's NAV only represents the value of liquid assets when side pocketing is used; illiquid assets are placed into a separate pocket and have a different NAV determined by an estimate of the realisable value of investors.

### Does it Protect Investing?

Risky bets can be separated from safer and more liquid investments with the use of side pocketing so that they are not affected by changes in the risky assets' credit profiles. Here, attempts are taken to maintain the scheme's net asset value so that small investors' ability to redeem their investment won't be harmed by any abrupt withdrawals by large investors.

Additionally, side pocketing makes sure that investors who held the investment at the time of the write-off will benefit if the bond is ever recovered. As allotment and redemption are carried out on liquid assets, the side pocketing process assures that investors owning units of the core plan do not experience a liquidity crunch.

### **New Development**

Debt mutual funds are now able to use the "side pocket" idea, thanks to the market regulator Securities and Exchange Board of India (SEBI). In the past, the regulator opposed side-pocketing and prohibited mutual fund companies from segregating their problematic investments.

The Association of Mutual Funds of India (AMFI) approached SEBI in 2016 to request the creation of regulations governing side-pockets when the market experiences a credit event after JP Morgan Asset Management (India investments)'s in Amtek Auto defaulted and the fund house turned to the side pocket. SEBI, however, turned down the suggestion at the time.

The NAV of numerous debt schemes fell precipitously in 2018. Following these schemes, credit ratings were lowered for investments in Infrastructure Leasing & Financial Services Ltd (IL&FS) and certain of its subsidiaries. The rule on debt funds was changed because of this catastrophe.

### Will side-pocketing entice investment firms to take on more credit risk?

Ajay Tyagi, Chairman of SEBI, was quoted as saying, "SEBI would take sufficient measures and implement safeguards to guarantee that this provision is not abused. These protections will be included in the final guidelines. Segregated or hazardous investments will be closed to new subscriptions after the investment segregation process is complete. Investors can still subscribe to the portion made up of liquid assets or safer assets, nevertheless.

Institutional investors typically have the first right of redemption in times of crises. Retail investors become trapped in hazardous or segregated assets because of this process. Because other holdings

are unaffected, side-pocketing is implemented in this situation to help fund companies manage redemption pressures better. Let's use an example to better understand the procedure now:

### Example

Let's say a fund has a corpus of ₹ 5000 crores. Of this, a firm that is in default on its debt holds ₹ 250 crores. An institutional investor wishes to redeem the entire investment in this scenario. To pay substantial investors, this redemption pushes the fund manager to sell good bonds. Toxic assets that are still present at the end of the accounting year account for a significant amount of the corpus.

Thus, the process influences retail investors. Side pocketing will be used to protect each investor; 250 crores will be set aside, and 4750 crores will serve as the safer corpus. Following that, units will be distributed to investors (both institutional and retail).

### Are there drawbacks to side pocketing?

Side pocketing is a technique that needs to be applied with caution. Illiquid investment value is also a sensitive topic. The illiquid asset's NAV will therefore continue to be of concern. Investors will also find it challenging to track two NAVs—one for each of the liquid and illiquid assets. Finally, the availability of side pockets will provide fund houses more leverage. Therefore, it is the fund manager's responsibility to apply the method carefully and logically.



# 16.1 Concept of Tracking Error and its distinction with Tracking Difference

Passive funds don't actively choose their stocks; instead, they invest according to rules. They purchase all equities with the same weight as in the index to copy the performance of an index (such as the Nifty 50 or Nifty 500). The fund may deviate somewhat from the benchmark's return during the replication process due to several practical difficulties.

The tracking difference (TD) and tracking error (TE) are metrics used to describe these variations in the returns. TD represents the discrepancy between benchmark return and fund return. Assume that over the course of a year, the benchmark Nifty 50 Index returned 12% while the Nifty 50 Index Fund generated 11% in returns. The 1% deviation in returns represents the tracking difference.

TD is usually negative because of the total expense ratio (TER) and other costs. Avoid any fund with a greater TD that is either positive or negative. Higher TD may indicate less effective fund management. The fact that TD examines point-to-point data to assess the effectiveness of fund management is one of its shortcomings.

TE is used to observe how the fund is run during the period. Higher TE is brought on by continuous movements in the daily monitoring difference over time. It is the daily tracking difference's variability (or volatility), which can be called as the tracking difference's standard deviation. If an investor wants to compare index funds that track the same index without using technical terms, he can use the following rule of thumb: the lower the TE, the more well a fund tracks the index. When we mix TD and TE, things become fascinating. Both should ideally be lower and considered together when assessing the fund's performance.

Investors should choose the fund with the lowest tracking error and tracking difference after comparing the performance of various schemes tracking the same index. It's crucial to keep in mind, though, that a fund may have a high tracking error and still beat its peers. Investors should evaluate both characteristics to make an informed decision when choosing an efficiently managed fund rather than relying primarily on one when making their decision. A fund with a higher tracking error doesn't necessarily suggest inefficient index tracking, and vice versa, therefore concentrating solely on tracking error or tracking difference can be deceptive.

# 16.2 Reasons for Deviation Between a Scheme's Return and the Benchmark (Index) Return

What causes the fund to depart from benchmark returns, though? The same returns as the index are essentially impossible for a fund manager to attain. A fund manager encounters several real-world obstacles that cause the scheme return to differ from the benchmark return, which are follows:

- (i) Total Expense Ratio (TER): It is charged by passive funds to cover management and operating costs related to running the fund. The returns on the funds are directly impacted by a higher or lower TER.
- (ii) Cash holdings: To honor investor redemptions, passive funds also keep a specific portion of their Assets Under Management (AUM) in cash and cash equivalents, which are often liquid securities. Since this money isn't invested, rising or falling markets may cause it to add to or detract from the fund's returns.
- (iii) Securities lending: In addition to receiving returns from the index, passive funds may also generate income. For a fee, they can lend securities they own to other market players for a short time. The increased income aids in cost-cutting and betters tracking accuracy.
- (iv) Timing of execution: Several stocks are added or withdrawn when the index is rebalanced. Although the index calculates returns using closing day prices, in practice fund managers might not be able to execute trades precisely at the closing prices. Due to this, the execution

price has a minor discrepancy, which results in tracking difference. This also applies to managing the cash flow of investors daily.

- (v) Dividend receipt is delayed, which could increase the tracking difference. When a fund gets dividends from the underlying securities, there is a timing gap between when the payout is made and when the benchmark index takes those payments into account.
- (vi) Other costs: Passive funds also incur other expenses like goods and services tax on management fees, brokerage fees for buy and sell transactions, exit load expenses, etc., which also impact fund returns. Apart from these, several factors such as corporate actions (stock splits, mergers and acquisitions, spinoffs, etc.) also cause tracking differences.

# 16.3 Calculation of Tracking Error

$$TE = \sqrt{\frac{\sum (d - \overline{d})^2}{n-1}}$$

d = Return of Portfolio

 $\overline{d}$  = Return of Benchmark

n = No. of observation

### **Example**

The following data is available for the yearly returns for both Fund PQR and the Nifty:

Year	Fund PQR	Nifty
2022	15.54%	20.73%
2021	13.34%	10.96
2020	3.50%	1.38%
2019	10.00%	12.79%
2018	34.69%	31.49%

Calculate the tracking error. Also suggest the course of action for the investor.

Tracking Error = 
$$\sqrt{\frac{\left(\text{Return of a portfolio} - \text{Return of a benchmark}\right)^2}{(n-1)}}$$

$$=\sqrt{\frac{(15.54\% - 20.73)^2 + (13.34\% - 10.96)^2 + (3.50\% - 1.38\%)^2 + (10.00\% - 12.79\%)^2 + (34.69\% - 31.49\%)^2}{(5-1)}}$$

= 0.037

The small tracking error in the question shows that Fund PQR does not considerably exceed the benchmark. As a result, the investor can think about taking his money out of the fund and investing it in a different, more promising investment options. Alternatively, he can be content with the fact that his portfolio is gaining ground on the market.



# 17. REAL ESTATE INVESTMENT TRUSTS (REITs)

### 17.1 Introduction

A Real Estate Investment Trust (ReIT) is a form of investing in real estate, where the operator, the REIT, owns, and operates the real estate. ReITs may own commercial real estate like warehouses, offices, etc. ReITs can be publicly traded or private. The unitholders of a REIT earn their income from real estate without directly owning it. As a regulation, REITs must pay out at least 90% of their income to unitholders.

Type of ReIT	Holdings
Equity	Own and operate income-producing real estate
Mortgage	Provide mortgages on real property
Hybrid	Own properties and make mortgages

### 17.2 Indian Context

SEBI notified regulations for investment trusts in September 26, 2014: specifically, real estate investment trusts (REITs) and infrastructure investment trusts (InvITs) - which was subsequently amended in September 23, 2016. REITs and InVITs allow sponsors to monetize revenue-generating real estate and infrastructure assets while enabling investors or unit holders to invest in these assets without owning them. REITs and InVITs enjoy favourable tax treatment, including exemption from dividend distribution tax and relaxation of capital gains tax.

### 17.3 Structure of investment trust

Investment trusts to hold assets either directly or through SPV. Investment trusts can invest in twolevel SPV structure through Holding Company (Holdco), subject to sufficient shareholding in the Holdco and the underlying SPV and other safeguards including the following:

- a. Investment trusts to have right to appoint majority directors in the SPV(s),
- b. Holdco to distribute 100% cash flows realized from underlying SPVs and at least 90% of the remaining cash flows.

Mandatory sponsor holding shall not less than 25% of the total units of the REIT after initial offer on a post-issue basis (the minimum sponsor holding specified in this clause shall be held for a period of at least three years from the date of listing of such units). The sponsor shall always hold not less than 15% of the outstanding units of the listed REIT. In the case of InvIT, mandatory sponsor holding is 15%. There is no limit on the number of sponsors both in the case of REIT and InvIT. REITs can invest up to 20% in under-construction assets, while InvITs (through public issue) can invest up to 10% in under-construction assets.

Investment trusts shall hold controlling interest and not less than 50% equity share capital or interest in the SPVs (except in the case of public private partnership projects where such holding is disallowed by the government or regulatory provisions).

Furthur, SPVs shall hold not less than 80% of assets (90% in case of InvITs) directly in properties (infrastructure projects for InvITs) and not invest in other SPVs.

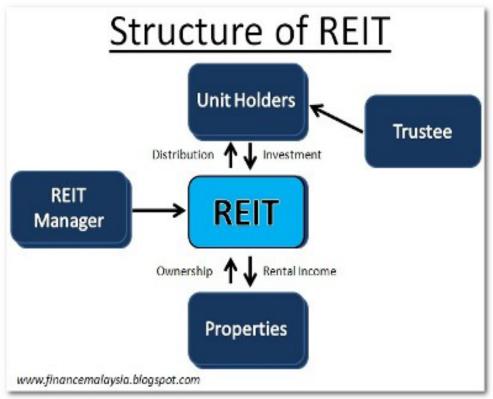
Lastly, SPVs should not engage in any activity other than those pertaining and incidental to the underlying projects.

# 17.4 Stipulations to ensure transparency

Trustee to hold assets for the benefit of unit holders, oversee activities, and ensure compliance with respect to reporting and disclosure requirements.

A full valuation shall be conducted by an independent valuer not less than once in every financial year; a half yearly valuation of the assets shall be conducted by the valuer for the half-year ending September 30 for incorporating any key changes in the previous six months.

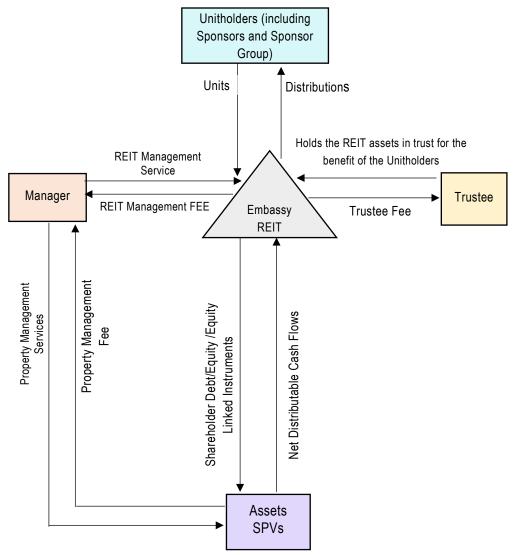
All related-party transactions should be on an arm's-length basis.



Source: Google to https://commercialobserver.com/2013/03/reit-so-sweet-investors-reconsider-real-estate-investment-trusts/

ReITs recently took off in India; the first IPO of REIT has been Embassy Office Parks REIT, backed by Blackstone Group, raised about ₹4,750 crore in India's first real estate investment trust listing. The REIT, which includes Embassy Group properties, offered 158.6 million units at ₹299 to ₹300 a piece. It started taking orders from anchor investors before moving on to a public offering. A successful listing of the REIT has opened a fundraising avenue for India's cash-starved property companies. The nation's real estate developers are struggling with sluggish sales and price declines. The trust's portfolio comprises about 33 million square feet of office space across four Indian cities, Bengaluru, Pune, Mumbai, and Noida, as per Offer Document filed with SEBI. Its Express Towers property, located in Mumbai's central business district, counts Wells Fargo & Co., Warburg Pincus as well as Blackstone as tenants.

The following chart illustrates the relationship between the Embassy REIT, the Trustee, the Manager, and the Unitholders (which include the Sponsors) on the Listing Date.



(Source: Embassy REIT Offer Document)



# 18. INFRASTRUCTURE INVESTMENT TRUSTS (INVITS)

An InvITs is a pool of money for investing in infrastructure projects and distribution of the earnings to the unit holders. An InvIT issues units that are listed on the Stock Exchange. In that sense, InvITs are like Exchange Traded Funds (ETFs) of Mutual Funds. The difference is, in a Mutual Fund, the underlying portfolio of shares or bonds change in value every day and there is an NAV declared every day. An InvIT invests in the projects which are identified as Special Purpose Vehicles (SPVs) that are not valued everyday but once in six months for publicly offered InvITs. Both InvITs and Mutual Funds are regulated by SEBI.

InvITs are set up as a trust and registered with SEBI. An InvIT involves four entities: **Trustee**, **Sponsor**, **Investment Manager and Project Manager**. The trustee, who oversees the role of an InvIT, is a SEBI registered debenture trustee and he cannot be an associate of the Sponsor or Manager. 'Sponsor' means promoters and refers to any company or body corporate with a net worth of ₹ 100 crore which sets up the InvIT and is designated as such while applying to SEBI. Promoters or Sponsors, collectively, must hold at least 15% in the InvIT for a minimum of 3 years. The value of the assets owned/proposed to be owned by InvIT shall be at least ₹500 crore. The minimum issue size for an initial offer is ₹ 250 crore. InvITs are allowed to add projects in the same vehicle in future so that investors can benefit from diversification as well as growth in their portfolio.

Given the challenging phase of infrastructure in the country today, InvITs may provide an alternate source of funds. Several existing infrastructure projects which are under development in India are delayed and 'stressed' on account of varied reasons like increasing debt finance costs, lack of international finance flowing to Indian infrastructure projects, project implementation delays caused by various factors like global economic slowdown, cost overruns, etc. InvITs may offer a source of long-term re-finance for existing infrastructure projects. InvITs may help in attracting international finance into Indian infrastructure sector. These would also enable the investors to hold a diversified portfolio of infrastructure assets. Among Asian markets, Singapore is a success story for listed Trusts. In Singapore, there are 39 listings with a market capitalization of approx \$70 billion, but the bias is on REITs than on InvITs.

There is a debate on whether an InvIT, by nature of investment, is equity or debt as it has features of both. It is somewhere in between; loosely, debt-plus or equity-minus in terms of risk return profile. It has equity-like features such as the units are listed, can change hands like equity stocks, there is periodic valuation of the projects akin to periodic results of companies and economic factors like higher GDP growth or higher inflation would lead to expectation of higher revenue and hence higher price of the units at the Exchange. Its debt-like features are - there is periodic pay-out of the earnings of the InvIT from the underlying SPVs, which is not exactly like contractual coupon pay-out on bonds but somewhat comparable as the valuation gives a perspective on how much to expect. It is a hybrid instrument with a somewhat predictable cash flow yield (akin to debt) and potential appreciation with growth of the economy (akin to equity).

Taxation wise, an InvITs is a pass-through vehicle. There is a mandate to distribute at least 90% of net-distributable cash flows. Interest component of income distributed by trust to the unit holders would attract withholding tax @ 10% for resident unit holders. Interest income is taxable in the hands of the unit holder. Dividend income is exempt in the hands of the unit holder and there is no dividend distribution tax.

At this point of time, InvIT is not a retail product, the minimum primary application amount being ₹ 10 lakh and the minimum secondary transaction amount being ₹ 5 lakh. The restriction is imposed because there is no track record and lack of awareness. There is a liquidity risk as well, in the secondary market, the units may not be traded every day as the investor base is not wide at this point of time. May be over a period, with the development of this market, SEBI would look to ease the threshold amount for REITs and InvITs. As of now, investors should keep it on the radar and participate through the mutual fund route who have a better understanding of the risk factors and can handle secondary market liquidity issues.

### SEBI allows unlisted InvITs to raise funds via right issues

The Securities and Exchange Board of India has allowed unlisted infrastructure investment trusts (InvITs) to raise funds through rights issue of their units.

The regulator has come up with detailed guidelines on conditions for issuance of units, pricing, timelines, and allotments. SEBI said InvITs can make a rights issue of units provided it fulfil the conditions, including none of the respective promoters or partners or directors of the sponsor or investment manager or trustee is a fugitive economic offender, nor are they barred from the accessing the securities market.

If the InvIT wants to have the issue underwritten, it can appoint underwriters, SEBI said.

The regulator said the minimum allotment to any investor will be Rs 1 crore. Besides, the rights issue should open within three months from the record date and kept open for at least three working days but not more than 15 days.

The InvIT shall not make any further issue of units in any manner during the period between the date of filing the letter of offer with the Board and the allotment of the units offered through the letter of offer. The InvIT shall file an allotment report with the Board providing details of the allottees and allotment made within 15 days of the issue closing date," SEBI said in a circular.

### **TEST YOUR KNOWLEDGE**

# **Multiple Choice Questions (MCQs)**

- 1. The funds which allows to issue and redeem units any time during the life of the scheme and new investors can join the scheme any time by directly applying to the mutual fund and can redeem their units any time by surrendering the units to the Mutual Fund are called: -
  - (a) Balanced Funds
  - (b) Liquid Funds
  - (c) Close Ended Funds
  - (d) Open Ended Funds
- 2. Mr. Rahul is 25 years old. He has just started his career by taking a job in a well-known Steel Company. He wants to grow his money and wants to generate wealth in long term by investing in Mutual funds. He should invest in which type of mutual funds: -
  - (a) Debt Fund
  - (b) Liquid fund
  - (c) Equity fund
  - (d) Gold ETF
- 3. Market Value of Total Assets of the Mutual Fund is at ₹ 15 cr. and Total Liabilities is at 3 cr. It has 1 cr. outstanding Units issued. Calculate the N.A.V. per unit of the Mutual Fund: -
  - (a) ₹ 17
  - (b) ₹ 10
  - (c) ₹ 12
  - (d) ₹15
- 4. Which type of fund is more volatile?
  - (a) Large-cap funds
  - (b) Mid-cap funds

	(c)	Small- <mark>cap</mark> funds
	(d)	Hybrid Funds
5.		are an important link between fund managers and investors.
	(a)	Trustees
	(b)	Asset Management Companies
	(c)	Custodians
	(d)	Registrar And Transfer Agents
6.	What	is an open-ended mutual fund?
	(a)	It is the one that has an option to invest in any kind of security
	(b)	It has units always available for sale and repurchase.
	(c)	It has an upper limit on its NAV
	(d)	It has a fixed fund size
7.	fund	is a method of investing in mutual funds wherein an investor chooses a mutual scheme and invests the fixed amount of his choice at fixed intervals.
	(a)	Systematic Transfer Plan
	(b)	Systematic Withdrawal Plan
	(c)	Systematic Investment Plan
	(d)	Systematic Innovative Plan
8.	Whic	h among the following is not one of the ways of measuring performance of mutual funds?
	(a)	Sharpe Ratio
	(b)	Treynor Ratio
	(c)	Liquidity Ratio
	(d)	Sortino Ratio
9.	Whic	h among the following is true in case of rolling returns?
	(a)	It simply measures the performance of the growth option NAV from the start date to today's date, annualized.

- (b) Measure the return from the start date to next date, from next date to next-to-next date and so on and take the average of all these observations.
- (c) measure the return from the start date to next week, from next week to next-to-next week and so on and take the average of all these observations.
- (d) All of the above
- 10. The CEO, Sumesh Kumar Nahta wants to know from the CFO, CA Aakash Mehta that if the equity fund is redeemed at ₹ 20 and the exit load is 2.50%, what will be the NAV of the equity fund?
  - (a) 19.50
  - (b) 20.50
  - (c) 19.975
  - (d) 20.00
- 11. Front end load is also called .....
  - (a) Entry Load
  - (b) Exit Load
  - (c) Both Entry and Exit Load
  - (d) Trail Commission

### **Theoretical Questions**

- 1. Briefly describe the organization of Mutual Funds.
- 2. Explain Mutual Funds based on Classification of Portfolio Management.
- 3. What is a Net Assets Value? Explain with the help of an example.
- 4. As a performance measurement, what is the difference between Point-to-Point Returns and Rolling Returns?
- 5. Explain the significance of Side Pocketing in protecting mutual fund investors. What effect does side pocketing have on NAV? Are there any drawbacks to side pocketing?

### **Practical Questions**

1. Mr. Shreyas wants to invest in Ready Mutual Fund Scheme for which the following information is available:

Asset Value at the beginning of the month

₹ 80

Annualized return

15 %

Distributions made in Income & Capital gain (per unit respectively). ₹ 0.80 and ₹ 0.60

Calculate the month end net asset value of the mutual fund scheme.

2. An investor purchased 400 units of a Mutual Fund at ₹ 12.25 per unit on 31st December 2021. As on 31st December 2022 he has received ₹ 1.50 as dividend and ₹ 1.00 as capital gains distribution per unit.

Required:

- (i) The return on the investment if the NAV as of 31st December 2022 is ₹ 13.25.
- (ii) The return on the investment as on 31st December 2022 if all dividends and capital gains distributions are reinvested into additional units of the fund at ` 12.50 per unit.

### **ANSWERS/SOLUTIONS**

### Answers to the MCQ based Questions.

1.	(d)	2.	(c)	3.	(c)	4.	(c)	5.	(a)
6.	(b)	7.	(c)	8.	(c)	9	(d)	10	(b)
11.	(a)								

# **Explanations to the practical Questions in the MCQs**

- 3. Net Assets Value = Value of Assets Value of Liabilities/Total Number Outstanding Units
  = ₹ 15 crore ₹ 3 crore/₹ 1 crore = ₹ 12 crores
- **10.** Redemption Price = NAV/ (1 + Exit Load)

Or, 20 = NAV/(1 + 0.025) So, NAV = ₹ 20.5

### **Answers to the Theoretical Questions**

1. Please refer to paragraph 2.4

- 2. Please refer to paragraph 3.2
- **3.** Please refer to paragraph 6
- 4. Please refer to paragraph 8.1
- 5. Please refer to paragraph 15

### **Answers to the Practical Questions**

**1.** Calculation of NAV at the end of month:

Given Annual Return = 15%

Hence Monthly Return (r) = 1.25%

$$r \ = \ \frac{(\text{Closing NAV - Opening NAV}) + \text{Dividend + Capital Gain}}{\text{Opening NAV}}$$

$$0.0125 = \frac{\text{(Closing NAV} - ₹ 80) + ₹ 0.80 + ₹ 0.60}{₹ 80}$$

1 = Closing NAV - ₹78.60

Closing NAV = ₹ 79.60

2. (i) Return on Investment =  $\frac{(Closing \, NAV - Opening \, NAV) + Dividend + Capital \, Gain}{Opening \, NAV}$ 

$$= \frac{(13.25 - 12.25) + 1.5 + 1}{12.25} \times 100 = 28.57\%$$

(ii) If all dividends and capital gain are reinvested into additional units ₹ 12.5 per unit, the position would be as follows:

Total amount reinvested = ₹ 2.5 x 40 Units = ₹ 1000

Additional units added = 
$$\frac{1000}{12.5}$$
 = 80 units

Value of now 480 (400 + 80) units as on 31/12/2022 = 480 units x ₹ 13.25 = ₹ 6360

Price paid for 400 units as on 31/12/2021 = 400 units x ₹ 12.25 = ₹ 4900

Return = 
$$\frac{6360 - 4900}{4900} \times 100 = 29.80\%$$

# **PRIVATE EQUITY**

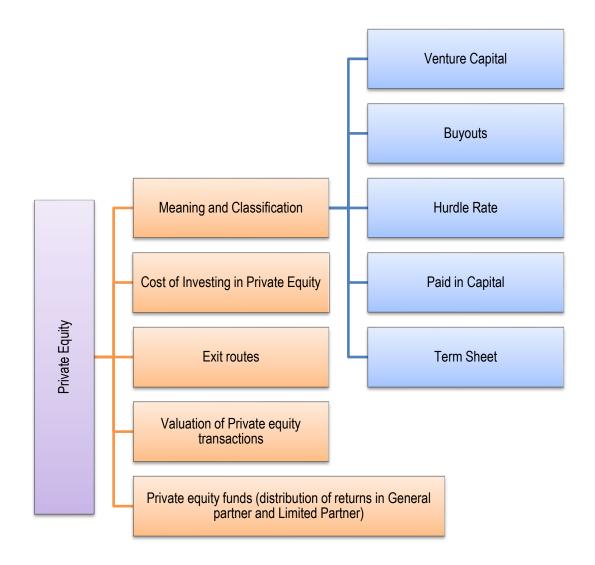


## **LEARNING OUTCOMES**

After going through the chapter student shall be able to understand

- Meaning and Classification
  - (1) Venture Capital
  - (2) Buyouts
  - (3) Hurdle Rate
  - (4) Paid in Capital
  - (5) Term Sheet
- Cost of Investing in Private Equity
- Exit Routes
- □ Valuation of Private Equity Transactions
- Private Equity Funds (Distribution of returns in General Partner and Limited Partners)

# CHAPTER OVERVIEW [





## MEANING OF PRIVATE EQUITY (PE)

Private Equity is the capital brought in by the Private Equity firms (simply called 'PE firms') into the enterprise as part of equity capital. PE firms are the investment fund companies who take a strategic stake in the enterprise. PE is one form of Venture Capital which takes the form of equity capital of the company. PE firms are in a broader sense, the long-term investors into the enterprise and act like 'mentors' to the management.

*Industry Overview:* The capital raised by way of Initial Public offer is referred to as public equity, however capital raised privately is known as private equity.

Private Equity (PE) is the different form of investment, as compared to publicly traded equity markets, where the PE investor (or the PE firm) invests majorly into startups and emerging sectors through strategies like early funding, venture capital, growth capital, etc. The main characteristic is that these investments function on a higher risk to reward model, and to amplify the returns, the PE firms use a leveraged approach of using debt as the funding instrument. The PE firms expect returns through valuation increase of the company in which capital is invested.

The PE industry has grown significantly in the past three decades, and over a period of time PE firms like Bain Capital, Blackstone have grown tremendously entering successfully into Asian markets too. There was a temporary setback in the PE industry during the dotcom bubble seen in 2000-2003, but has staged a comeback, stronger and more resilient. The growth in PE has also seen a marked increase in regulations in both the US and Europe. In the US, the SEC regulates PE industry, and in addition has added FATCA (Foreign Account Tax Compliance Act) and the Alternative Investment Fund Managers Directive to have greater transparency in the workings of PE.



## 2. CLASSIFICATION OF PRIVATE EQUITY

## 2.1 Venture Capital (VC)

#### 2.1.1 Introduction

Fertile brains can generate ideas – Venture capitalists provide the money to fuel these ideas and innovations to reality. Simply put 'venture capital' is the capital provided to especially new startups and entrepreneurship enterprises to stand up and deliver.

A venture capitalist is an institutional investor who has the access to liquid funds and is ever willing to part it with talented startups and innovative enterprises that require that extra bit of hand holding. Note the word used 'ever willing' will essentially be the distilled result of a strict selection criteria-

based evaluation of the startup, its promoters, its vision and of course, the numbers in terms of estimated cash flows, breakeven point, and a whole lot of similar parameters that we would see shortly.

Some of the most successful ideas in the new age world have got the momentum and the trajectory all but thanks to venture funds – WhatsApp, Spotify, Facebook – all had venture capitalists helping them to get the much required capital as well as to get them to get on to the big stage of mergers and takeovers by larger entities.

A venture capital fund, as opposed to a venture capitalist, is a firm that works as an investment fund having pooled resources from various self-styled and serious venture capitalists and is seeking private equity stake in startups and innovative enterprises.

VCs usually invest as either 'early stage' funds or 'late stage' funds. Early stage would mean the VC is taking a riskier approach of investing in startups exhibiting 'raw potential', whereas later stage would mean the less risky way of investing in firms having proven their business viability and are wanting to expand their operations.

Who stands to gain from Venture Capital (VC) funding?

- 1. Startups
- 2. Innovative enterprises who are still in the early stages of their growth
- 3. High risk high reward business lines
- 4. Niche business segments, etc.

In the Indian scenario, the e-commerce segment has seen sustained interest for funding by VCs, for example:

- 1. Online services like Makemytrip, Taxi for Sure etc.
- 2. Online marketing portals like Bookmyshow, Myntra, etc.
- 3. Online health care segments like Practo, etc.

#### 2.1.2 Setting up a VC.

**Step 1:** Large corporate houses, mutual funds, Insurance companies, Banks, High net-worth individuals etc. along with Private Equity firms creates special purpose vehicle (SPV) for identifying and doing the investments. SPV is funded substantially by such corporate houses, mutual funds, insurance companies, banks, High net-worth individuals etc. and a certain portion of investments comes from the Private Equity firms too.

- **Step 2:** Once SPV is funded and in place, General Partners and Limited Partners are also appointed to the SPV alongwith the Investment manager.
  - General Partners are responsible for management, operations, administration, and any kind of decision making in the SPV formed. They are appointed by the Private Equity firm to the SPV created.
  - Limited partners come with very limited control, with the objective of returns of investment. They are appointed by the institutions which fund substantially i.e. large corporate houses, mutual funds, insurance companies, banks, High net-worth individuals etc.
- **Step 3:** Investment manager analyses the different proposals for investments into startups and gives feedback to General Partners.
- **Step 4:** Once the deal is finalized, investment is placed in the form of private equity.
- **Step 5:** An expert is also appointed to the Board of directors of the company to guide and govern the overall performance.
- **Step 6:** Exit from the investment at the right time and right valuation later (generally 5-10 years).

#### 2.1.3 Business Model for a VC

So, what is the business model for a VC? The first and foremost step will be to identify a startup or a diverse idea that can become a revenue generator and hence warrants capital funding. And this is the toughest part of the job. The selection matrix can involve a whole battery of parameters, the critical ones listed as below:

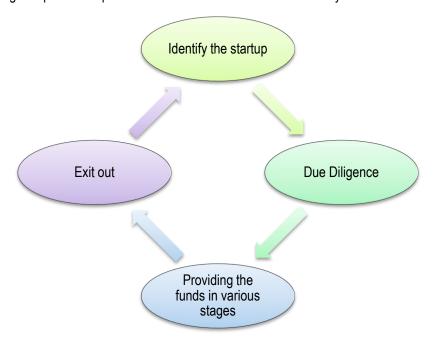
- (i) The fundamental 'idea' or the 'business model' of the company
- (ii) The ability to generate customer interest thereby increasing the possibility of a successful business manifold which explains why e-commerce companies in India can garner a largesse of the VC funds.
- (iii) The breakeven point obviously the shorter the time frame the better
- (iv) The future prospect of the startup to be taken over by a bigger entity.

Apart from the revenue perspective, a smart VC also investigates the possibility of how much a startup can create 'brand recall value' – the higher the possibility the more is the prospect of a valued takeover deal. For example, WhatsApp, in which VCs had strategic stake, had so correctly marketed the concept that it got the attention of Facebook. Its acquisition by Facebook has brought smiles to everyone involved – the VC got a good price, and so did the founders of the company, and Facebook has had its customer connect significantly enhanced.

The next important step would be to measure the exact amount of capital to be provided to the venture. This would entail the need to check the background of the promoters, business culture, current and future growth prospects, cash flow estimates, breakeven point analysis, and the brand value creation. This whole process can also be called as 'due diligence' process, and finally the VC will make an exhaustive report of the same, to justify the decision to finance the venture / enterprise or otherwise.

And the last step would obviously be the exit point of the VC from the enterprise. It's very important to appreciate the fact that the primary objective of any VC is to provide funds with a clear-cut time frame for returns on investment. Once the desired returns are achieved, the VC exits out of the enterprise, either through a stake sell-out, or through an outright merger with an outside enterprise.

The following is a pictorial representation of the basic VC investment cycle:



As stated earlier, once the target returns are achieved, the VC would like to exit out to realize the gains and move on to another investment. This brings us to the concept of 'private equity'.

## 2.1.3 Types of Funding by a VC

A VC will fund typically in the following ways:

- Seed Capital
- 2. Crowdfunding

- 3. Early-stage funding
- 4. Interim funding Bridge financing, mezzanine
- 5. Expansion funding

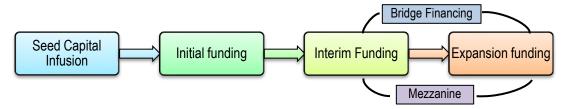
Let's analyze each of these in detail:

- Seed Capital: This is the preliminary source of funds provided to the startup for either acquiring fixed assets of startup like computers, machineries etc; or for leasing out premises and such other operational setups. The seed capital is usually limited, and just enough for the startup to shore up its capital assets. In recent times, there are 'incubators' who have specialized in this type of funding purely for seed capital and seek to exit out once other investors find value.
- 2. Crowdfunding: This involves raising funds through platforms on which a huge number of small investors invest money in the different startups listed on that platform. As the name suggests, investment happens through crowd at large and hence crowdfunding.
- 3. **Early-stage funding**: This is typically the Series A funding where the VC provides the funds for setting up the entire plant / site / services line which may also include the infusion of working capital.
- 4. Interim funding: Once the enterprise breaks even, the immediate focus will be on having stable cash flows. In the meantime, the management may also seek additional capital to ramp up its' operations model to its full capacity. This can be done in different ways
  - a. The management can seek a 'bridge loan' that is essentially a plank provided for stepping up to ramp up / reach the full capacity. A bridge loan, being a short-term financing loan, is an ideal way for enterprises to get a temporary source of funds before it can get replaced with a larger or a longer time frame-based loan.
  - b. The management can seek a 'mezzanine' financing which is typically a hybrid of debt and preferred stock finance. In some cases, the mezzanine is purely a debt form of finance. In both cases, the repayment schedule gets tailored to the enterprise's cash flows thereby exhibiting flexibility to the management. However, the fund comes at a price the VC gets a direct stake in the equity of the enterprise post the conversion of preferred stock, which may make some management uncomfortable for this sort of an arrangement. There are variants of mezzanine funding with some VCs who estimate that if the enterprise has high future potential, it can forego the requirement for a collateral value altogether or atleast keep it to minimal levels, whereas some VCs

would like to have an asset-backed security for the debt component. The equity component also gives the VC a say in the management affairs of the enterprise, which makes this route quite attractive to them. From the borrowers' point of view, this may be the costliest form of funding as the rate of interest would be quite high, to recognize the risks getting carried in the form of uncollateralized debt. This can leave the management with a huge refinance cost; however, as stated earlier the VC would also take care of this in the tailoring of the repayment schedule.

5. Expansion funding: Once the enterprise is running full steam and has managed to create its own space in the market in terms of brand recall value, the VC will surely be interested to provide additional funding in terms of long-term finance for future growth prospects. This may also put the enterprise 'on the block' for potential buyers, especially large sized companies who regularly scout for smaller niche enterprises to add further variety to their developed shelf of products and services.

The following is a pictorial representation of the VC funding stages:



#### 2.1.4 Angel Investor

An angel investor is a multi-millionaire who has funds, usually idle with him or her, and wants to take a share of risk to promote a startup by investing in the same. In return, they usually get an ownership stake or a preferred stocks and board rights. Seldom do they settle for subordinated debt unless the case for investment is too strong to an opportunity to be missed. The biggest pitfall for an angel investor is that they need to bear extremely high risks, and hence their rate of returns is also the highest.

Usually, angel investors are retired fund managers and successful entrepreneurs themselves who have a know-how of the segment that they would like to invest in and rely a bit more on intuition and gut feel about a particular investment. After all it's their own funds, as compared to VC funds who manage other's funds. It is not uncommon to find angel investors having common segment interest to team together, such as two investors having a liking for e-retailing space would approach for an assessment of a particular enterprise together.

## 2.2 Buyouts for a PE

There are two popular ways of buyouts getting executed – Leveraged Buyouts (LBOs) and Management Buyouts (MBOs).

#### 2.2.1 Leveraged Buy Outs (LBOs)

Leveraged buyout is a series of actions that include investment, divestment, and restructuring. In an LBO, the acquirer uses a significant amount of debt to finance the acquisition of a target and then pursues restructuring actions, with the goal of exiting the target with a sale or public listing.

In the process, they leverage the debt and create value (both perceived and real) and then they either spin off the management control to another entity for a price or go for an outright sale.

Some of the examples of a successful LBO deal include the buyout by Tata Steel of UK's Corus, and the acquisition of SLI Sylvania by Havells India.

#### 2.2.2 Management Buy Outs (MBOs)

The classic MBO represents the buyout made by the entity's managers themselves. The logical reasoning is that they are best placed to run the operations efficiently. However, the other side to this is that the managers of the entity may not be the best of the lot to bring in additional clients. Similarly, they may be on the conservative side when it comes to risk taking.

The MBOs are often funded to management by private equity firms i.e., private equity firm contributes capital to the management to initiate MBO.

However, with changing times, MBOs are also getting attention from PEs themselves. In an article published in *The Hindu Business Line* print edition dated July 10, 2008, explaining on the emerging features of MBOs - 'Traditionally, Management Buy Outs (MBOs) involved the management wanting to purchase a controlling interest in the company and working along with financial advisors to fund the change of control. Today, MBO activities involve promoters divesting their stake in a firm by selling out to PE players willing to finance the asking price.

The PE players are flexible enough to enter a partnering relationship with the existing management. This sort of arrangement is basically just a stake buyout and not a classical MBO. It is common in scenarios where owners want to hive off entities with poor results and the management lacks funds to hold on to the entity (and their jobs) and are, in turn, bailed out by the PE firm'. This means that PE brings in finance as well as their clout in the market to attract additional business lines. Once the expected IRR is achieved, or the estimated cash-on-cash multiple is attained, the PE may also choose to exit out. One of the good examples of MBO in India is the purchase of Intelenet Global Services by Blackstone.

#### 2.3 Hurdle rate

The minimum rate of return that is required by the investor before the sharing of profits – for e.g., a hurdle rate of 15% would mean for the PE that this should be the minimum return to be generated before the sharing of profits starts. In other words, the hurdle rate is the minimum guaranteed return for Limited Partners before sharing the gains with the General Partners, as per the carried interest arrangement. Carried interest or simply stated as 'carry' is the share of profits of the General Partner more than the investment made by him in the portfolio.

## 2.4 Paid in Capital

Paid in Capital is the amount of capital contributed by the shareholders. It is the amount of capital "paid in" by investors during the issue of equity shares to the public, including the par value of the shares themselves. Paid in capital represents the funds raised by the business from equity, and not from ongoing operations." "Paid-Up Capital" is shown in the 'equity' section of the balance sheet. It represents the amount of money shareholders have paid into the company by purchasing shares. It basically involves two accounts, the par value of the shares and the excess over par value.

#### 2.5 Term Sheet

The term sheet is the agreement copy that the VC hands over to the management, which contains the terms and conditions, fee structure, payout terms, liquidation rights, anti-dilution provisions, preemptive rights, exit terms etc.

#### Critical Terms that appear in a Term Sheet:

- (i) Fee structure: The standard fee structure of a PE fund is made to balance the financial interests of the fund's investors and the PE firm. The "2 and 20" fee structure in PE describes how a fund's investment manager and general partner (GP), and consequently, its PE professionals, are paid: the "2%" refers to the management fee paid by the LPs annually to a fund's investment manager while the "20" represents the percentage of net fund profits, also known as carried interest or "carry," paid to its GP. Pro rata distribution of a fund's profits, or 80% of them, is made to the LPs. If carried interest is the primary financial incentive for PE experts, their attention will.
- (ii) Harvest year: The year projected to be the exit year for the PE/VC.
- (iii) **Down round:** This would mean that the investors pay a lower per share price than what previous investors paid, which indirectly implies that the investors have valued the VC at a lower value in the current round than the previous round. This decline is called as 'down round'. For example, if the initial round of financing earned INR 1 Crore for an entity, and round two has obtained

a value of INR 0.7 Lacs, then this means that the investors have valued the entity lower in the second round, causing a 'down round'. Down round causes a dilutive effect of original investor rights.

(iv) Methods for computing anti-dilution rights: To avoid a possible dilution to a 'down round' situation, the term sheet will usually contain an anti-dilutive clause. This is achieved either by a 'full ratchet' method or a 'weighted average' method, and the preferred method is mentioned in the term sheet. In a rare case where it is not explicitly stated, the weighted average method is usually adopted.

#### Illustrative example on the application of anti-dilutive clause:

The position of holding in a VC before the second round (Series B) -

	Number of Shares	Per share	Value	% holding
Common Stock	600,000	1.00	600,000	60%
Series A investor	400,000	1.00	400,000	40%
	1,000,000	1.00	1,000,000	100%

Now, in Series B an investor has given a down round value of only INR 6, 00,000 with 50% stake after down round. Without an anti-dilution clause, the revised stake-holding would be as:

Common Stock	300,000	0.60	180,000	30%
Series A investor	200,000	0.60	120,000	20%
Series B investor	500,000	0.60	300,000	50%
	1,000,000		600,000	100%

You would note that the share of Series A investor has gone down, whereas the late entrant Series B investor has an upper hand.

Now, say if there was an anti-dilutive clause which stated to protect Series A investor against a down round – the revised sheet would look as below –

	Number of Shares	СР	Value	% holding
Common Stock	100,000	0.60	60,000	10%
Series A investor	400,000	0.60	240,000	40%
Series B investor	500,000	0.60	300,000	50%
	1,000,000		600,000	

(v) Up round: The opposite of down round where the successive round of investment has valued the venture at a value higher than the earlier round.

- (vi) Break Fee: A fee typically payable to the investor if the company declines the investment described in the Term Sheet or if the company or founders breach exclusivity or other binding provisions in the Term Sheet.
- (vii) Exclusivity Agreement: A kind of non-compete period during which the company cannot negotiate for investments with outsiders for additional investments in the company. This is to protect the holding rights of the PE.



## 3. COST OF INVESTING FOR PRIVATE EQUITY

The cost of investment for a PE will be economically the same as seen for a VC, barring the capital cost in specific cases. The cost of investing in PE would typically be equal to the weighted average cost of capital for the amounts raised by PE for the purpose of investing in the venture. This is based on the expectations of the investor as well as fund management costs including the commission etc. payable as mentioned above.



## 4. EXIT ROUTES FOR A PE

There are four ways to exit out of a PE investment once the horizon period is met, or otherwise by management decision.

- (i) IPO (initial public offer): This represents a highly successful exit strategy, riding on a strong business model. The payback can be instantaneous through selling the own shares immediately on listing on the stock exchange. However as per regulations there are restrictions and regulations for the exit planned through IPO which are notified by Securities and Exchange Board of India.
- (ii) Strategic Acquisition: The share of the PE is acquired by a larger company, usually in the same business segment. Thus, a small IT company into a niche testing technology line may get acquired by a bigger IT company, which is often seen in India. Another example can be the acquisition of Instagram by Facebook. This is perhaps the most commonly used exit route and is usually a win-win situation for both the exiting investor as well as the management of the enterprise.
- (iii) Secondary Sale: The investor PE exits by transferring its share to another PE. Such an exchange is seen either when a larger PE finds value in the venture thereby giving a sweetened deal to the smaller PE, or, where the business may require more money which is not in the capacity of the current equity fund.
- (iv) Repurchase by existing management (founder members): This is an ideal scenario type where the founders get back to owning the majority stake in their entity, and a golden handshake to

the exiting PE. This is also referred to as 'Management Buyout' (MBO). The exiting PE may, in rare cases, also get to earn a trail fee for the next *n* years as may be mutually agreed to by the parties, usually a % of EBIT, or a multiple based terminal value.

(v) Liquidation: This is the least preferred method of exit, where the investor leaves out at a cash loss on capital invested. This usually happens where the investor cannot take further losses, or has made an overestimate of expected returns, or a particular idea behind the venture hasn't really taken off or was well received in the market. The term sheet usually provides financial safeguards to the VC against drastic losses.



## 5. VALUATION OF PRIVATE EQUITY TRANSACTIONS

There are certain terminologies that are intrinsic to valuation exercises performed by VCs / PEs, these includes:

(i) Pre-money and post-money valuation: Simply put, pre-money valuation is the value of the enterprise before the investment; and post-money is the valuation after the investment by the VC. For example – assume a startup has a share capital of ₹ 10,000 represented by 1000 equity shares of ₹ 10 each. X, a VC, has shown interest in doing an initial funding of ₹ 4000 worth represented by 400 equity shares.

In this case the pre-money valuation is INR 10,000 (before investment). The post-money valuation will be the fully diluted impact on the equity which will be computed using the following formula:

New Investment Amount x (Total shares post investment ÷ Shares issued in new investment)
In the example, the post-money valuation will be calculated as follows:

	Number of shares	Face Value	Valuation
Pre-money	1000	10	10,000
Post-money			
Existing	1000	10	10,000
New Investment	400	10	4,000
Post-money shares outstanding	1400	10	14,000
Post-money Valuation			14,000

**Note:** The above illustration is a simplistic representation of how pre and post money valuation works in mathematical terms. In real life, the VC would perform a valuation based on due diligence and the value would either be at a premium or discount.

Assume in the above example the fresh capital is introduced at ₹ 20 per share and the amount invested is 8,000 by purchasing 400 shares.

The post money valuation would be (8000/400) x 1400 = 28,000 (basis formulae above)

- (ii) Ownership dilution: Each additional investment from the VC will end up diluting the ownership control of the management of the enterprise. In the example above, the effective ownership control of management has gone down from 100% to 71.43%. If there is a further round of investment, the management control even will well go below 50%. Anti-dilution clauses are mandated in the term sheet to help overcome this problem. The number of shares to be issued will be adjusted to maintain the ratio of holding.
- (iii) Liquidation Preference: It is an important term associated with Private Equity financing. This term provides preference to receive funds by VC over and above preferred and common stockholders in the event of liquidation or deemed liquidation.
- (iv) Series A and B: Series A will be the initial round of funding, whereas Series B are the subsequent rounds of funding, which are usually after the enterprise achieves certain predetermined milestones.
- (v) ROI: The rate of return that the enterprise would offer to the investor (VC) on the investment.
- (vi) Terminal Value: The value of the enterprise that would be at the end of the time frame of the investment cycle of the VC, used at the time of acquisition / sale to a third party. An Exit Multiple would be used, usually calculated as on Enterprise Value (EV/EBIDTA), that the VC has been expecting to obtain at the exit through selloff.
- (vii) Tranches: The investor (PE or VC etc.) will bring the funds only based on certain agreed 'milestones. The funding is, thus, made in parts or 'tranches.
- (viii) **Deemed Liquidation:** This term implies in addition to liquidation, it includes change of control, acquisition, amalgamation etc., sale of a company or sale of most of its assets. As mentioned above deemed liquidation normally are considered trigger events for liquidity preferences.



# 6. PRIVATE EQUITY FUNDS (DISTRIBUTION OF RETURNS IN GENERAL PARTNER AND LIMITED PARTNERS)

The terms General Partner and Limited Partner are generic to PE world and represent the way the stakeholders and their rights are structured within PE. The PE fund is structured as a liability partnership; and General Partner (GP) is the one who represents the PE firm in terms of raising the

capital from a basket of pension funds, angel investors, HNIs (high- net worth individuals), and the Limited Partners (LPs) are these investors (pension funds, angel investors etc) who have invested with the GP. The GP acts like the investment / fund manager and will formulate the investment portfolios (the enterprises where the PE will invest funds) and determine the 'capital commitment' by the LPs.

For example: a PE looking to fund an enterprise into e-retailing (portfolio) will have its GP approaching its pool of LPs and, say, if a couple of LPs agree to investing the sum required, then this becomes the capital committed from the LPs end. One practical scenario will be that the investments are not required in one go – it will be in tranches –and hence there will be 'calls' raised by the GP for fund requests from the designated LPs (two in our case). Suppose if one of them doesn't honor the call, the GP normally has the right to forfeit the amount invested by the LP to that point of time, unless the agreement specifically states otherwise, or allows for a 'replacement' by another LP who would purchase at a discount the existing share. The GP will usually stand to earn through 'management fee' which will be a % fixed on the deal amount and through 'incentive fees' – called hurdle rates.

Generally, 5% of the entire fund is also contributed by General Partners so that they have a fiduciary relationship with Limited Partners. Limited partners participate in the returns after fund relates expenses, hurdle rate and other admin cost of the fund is reduced. The returns for the fund are calculated by determining the fair value of the underlying investment. This can be realized or unrealized as well.

#### Conclusion

We have seen that venture capital funds and PEs fill in the capital requirement gap of new emerging technologies and innovations. In mature markets like US, PEs does play a significant role in funding such segments. In India, VCs and PEs are still in evolving stages though e-commerce companies have certainly progressed due to their innovative entry and exit strategies. VCs work towards short and medium term goals, whereas PE funds stay put for the long run. However, both have well defined exit strategies, typically through acquisitions or IPO mode. In India, they come within the ambit of SEBI and must follow the established rules and procedures for equity sourcing and funding.

## **TEST YOUR KNOWLEDGE**

## **Multiple Choice Questions (MCQs)**

- 1. Private equity uses funds raised from which sources.
  - (a) Initial Public Offer
  - (b) Mutual funds, HNIs, Insurance etc
  - (c) Taxpayers' money
  - (d) Follow on Public Offer
- 2. Once investment is initiated by private equity then:
  - (a) Exit of investment happens when life cycle or term sheet is completed.
  - (b) Expert is appointed to the board of directors.
  - (c) Next series funding is not allowed.
  - (d) a and b are correct
- 3. A company is floated with authorized shares of 10,000 @ ₹ 10 each as face value. Promoters have invested into 5000 shares as paid-up capital. After 5 years of running the business, they got an offer from Private Equity for a 40% stake at ₹ 80,000 capital. Please calculate the gain to promoters once this valuation is accepted and the deal is executed.
  - (a) ₹ 70,000
  - (b) No gain or loss
  - (c) ₹ 50,000
  - (d) Cannot say.
- 4. The purchase of a stake in a target company by substantially borrowing the funds is regarded as
  - (a) Management Buyout.
  - (b) Leverage Buy out.
  - (c) Management Buy in
  - (d) Leveraged buy in

- 5. Private equity refers to investment in business and issuance of shares under circumstances other than:
  - (a) Initial Public offer
  - (b) Follow on public offer.
  - (c) Private issuance of shares
  - (d) Both a and b
- 6. While doing financial due diligence which among the following a private equity may not consider before investing?
  - (a) Off-balance sheet financial instruments
  - (b) Weakening working capital trends
  - (c) Dependence on powerful suppliers or a concentrated customer base
  - (d) Accounting adjustments to obscure actual performance
- 7. Which among the following is not a disadvantage of IPO in the exit strategy of private equity?
  - (a) Risks of going to market
  - (b) Strategics require a majority stake
  - (c) Lock-up
  - (d) Uncertainty of returns

#### **Theoretical Questions**

- 1. Who are venture capitalists? Who stands to gain from venture capital funding?
- 2. Briefly explain the business model for a venture capitalist.
- 3. Discuss the difference between Leveraged Buy Outs and Management Buy Outs.
- 4. Explain the critical terms that appear in a Term Sheet.
- 5. Discuss the various exit routes for a PE.

#### **Practical Questions**

1. PQ Ltd, a PE firm, purchases ₹ 1 crore EBIDTA company having an EBIDTA multiple of 10 times. The purchase is funded by 50% debt. After 5 years EBIDTA is expected to grow by

20% on a constant annual growth basis. However, the EBIDTA multiple is expected to come down to 9 after 5 years. Compute the EBIDTA numbers appearing after 5 years?

- 2. Continuing the facts above, please compute the gain to PE firm after 5 years assuming all the debt is repaid in 3<sup>rd</sup> year?
- 3. A VC firm is looking at an investment of `20 crores in a start-up company today. Exit will be in 5 years at a revenue multiple of 10 times and Year 5 revenue of `150 crores. No debt is required. No additional equity to be raised. Cash flow profile:

Year	0	1	2	3	4	5
Cash Flow	(2)	0	0	0	0	120

IRR is 70%. You are required to calculate the post money valuation and the equity % of the company the VC may ask for.

## **ANSWERS/SOLUTIONS**

### Answers to the MCQ based Questions.

1.	(b)	2.	(d)	3.	(a)*	4.	(b)	5.	(d)
6.	(c)	7.	(b)	8.					

<sup>\*(80,000/40%\*60%-50,000)</sup> 

## **Answers to the Theoretical Questions**

- **1.** Please refer paragraph 2.1.1
- 2. Please refer paragraph 2.1.3
- 3. Please refer paragraph 2.2
- **4.** Please refer paragraph 2.5
- **5.** Please refer paragraph 4

#### **Answers to the Practical Questions**

1. EBIDTA current = ₹ 1 cr

EBIDTA 5 years = ₹ 1 crores \* (1.20)^5 = ₹ 2.48832 crores

- 2. Investment value in current year = 1 cr \* 10 \* 50% = 5 cr
  Investment value after 5 years = 2.48832\*9\*100% = 22.39488 cr
  Gain to PE firm = ₹ 17.39488 cr
- Exit Value = 10 x ₹ 150 crores = ₹ 1500 crores
   Post money valuation = 1500/1.70^5 = ₹ 105.64 crores.
   The equity percentage of the company the VC may ask for = ₹ 20 crores/₹ 105.64 crores = 18.93%

## **INVESTMENT BANKING**

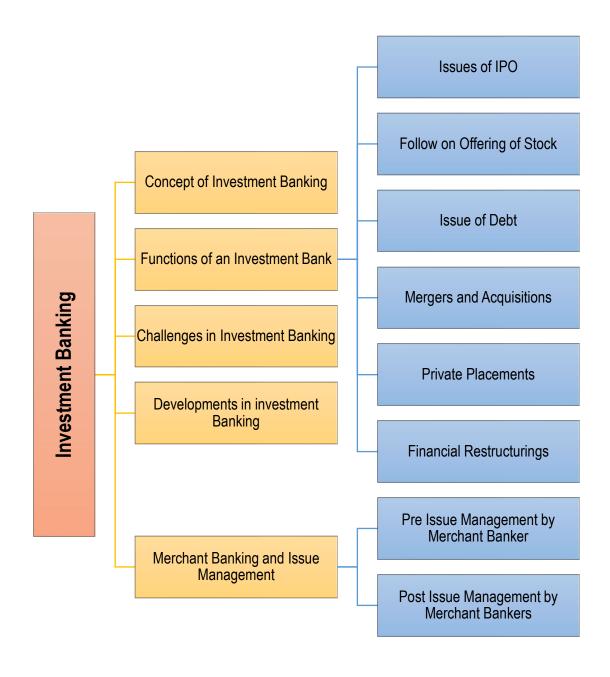


## **LEARNING OUTCOMES**

After o	aoina	through	the	chapter	student	shall	be	able to	und	dersta	and:
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- Concept
- Functions
- Challenges
- Developments in Investment Banking
- Merchant Banking and Issue Management







## CONCEPT OF INVESTMENT BANKING

Traditionally, businesses have been availing banking services for various purposes such as transfer of money, seeking bank guarantees and availing different kinds of loans. However, as the business expanded, they have felt the need for consultancy in various matters. Thus, came the concept of investment banking. The term investment banking is more popularly used in United States, while in other countries it might be referred to as merchant banking. In India, SEBI defines merchant banker as "any person who is engaged in the business of issue management either by making arrangement regarding buying, selling or subscribing to securities or acting as manager, consultant, or rendering corporate advisory services in relation to such issue management".

In order to expand their businesses, companies need money. The company does this by selling their securities to investors. Investment bankers help the corporates in this respect. So, we can say that investment bankers are basically financial intermediaries who help their clients in raising capital either by underwriting their shares or bonds or by acting as an agent in the issuance of securities.

Further, it has to be noted that Investment banking isn't a specific function. It is a term used for a range of activities including underwriting, selling and trading securities; providing financial advisory services, such as mergers and acquisition advice; divestitures, private equity syndication, IPO advisory and managing assets.

## 1.1 The main players in Investment Banking

The biggest investment banks in global scenario include Goldman Sachs, Bank of America Merrill Lynch, Morgan Stanley, Salomon Smith Barney, Donaldson, Lufkin & Jenrette, Credit Suisse, Deutsche Bank, Citi, Barclays Capital, and J.P. Morgan among others.

Bank of America, Citigroup Investment banking, JP Morgan, Barclays capital and Deutsche Bank are some of the popular Investment bankers operating in India.

## 1.2 Main areas of Investment Banking

Generally, the breakdown of an investment bank includes the following areas:

## 1.2.1 Corporate Finance

The corporate finance, generally perform two different functions:

- (i) Mergers and Acquisitions Advisory and
- (ii) Underwriting.

(i) Mergers and Acquisitions Advisory: Under this aspect of corporate finance, investment banking help in negotiating and structuring a merger deal between two companies. For instance, if ABC company wants to buy XYZ company, they may not know the exact valuation of the company. Infact, sometimes the selling company itself does not know what value it is worth off. In such cases, either ABC or XYZ may hire an investment banker to not only find out the valuation but also, to find a prospective buyer/seller and make the deal possible. The Investment banker can contribute by coordinating with the bidders, performing due diligence, structuring the deal, negotiating with the merger target, and generally ensuring a smooth transaction.

Moreover, mergers and acquisition advisory includes buy side and sell side advisory. However, sell side advisory holds the key because Investment Banker helps in placing the stocks and bonds in the public platform and sell these to investors. This selling aspect helps the companies to generate funds and consequently assists in expanding the corporate finance division of investment banking. Besides, this service is the major source of income for the Investment bankers who get commission as a percentage of the valuation.

(ii) Underwriting: Under the underwriting function, underwriters help their client companies in raising the required funds for the company. Whenever, a corporate wants to raise capital, it takes the help of underwriters who purchase the unsubscribed portion not taken by the investors. Underwriting can be done either through negotiations between underwriter and the issuing company (called negotiated underwriting) or by competitive bidding. A negotiated underwriting is a negotiated agreed arrangement between the issuing firm and its investment banker. Most large corporations work with investment bankers with whom they have long-term relationship. In competitive bidding, the firm awards offering to investment banker that bid the highest price.

#### 1.2.2 **Sales**

Sales is an important part of any investment bank. The main task of the sales force of an Investment bank is to enable high net worth individuals and institutions to take orders from them. They make money through commissions received from their clients.

They make buy and sell recommendations. For example, if the share price of ABC Ltd. has a potential on the higher side, the sales guy of the investment bank will recommend buying the shares of that company.

### 1.2.3 Trading

Trading plays an important part for the investment bankers. Clients order is communicated to the trading people by the sales people. Traders help their client in buying and selling of shares, bonds, currencies etc. It also helps them in executing a trade.

Traders tackle all type of transaction, big or small and provide liquidity to the market. They generally make money by purchasing securities at lower price and selling them at a higher price.

Sales force of an Investment bank and traders also delve into propriety trading. Propriety trading is a form of trading in which the traders trades in stocks, bonds, derivatives in its own account using their own money. They do not touch client's account. The main advantage of this form of trading is that the traders can take the entire profit from the investment made. Otherwise, in other forms of trading they have to depend upon commission from their clients. The chances of making excess profits in this form of trading are much higher since the traders have the necessary expertise which an average investor doesn't have.

In case of IPOs and follow-on offers, an investment bank's sales and trading department keeps the communication channel open with the corporate finance department of the company. Generally, it is the responsibility of the sales and trading department of the investment banks to build books for a particular stock. After that, on the date of offering, they fixed the price of the shares and start selling the new shares to their customers.

#### 1.2.4 Research

Research analysts analyses the stock and bonds of various stocks and recommend whether to buy, hold and sell those securities. The job of research analyst is to review the company and wrote a report on the prospects of a company and gives a buy and sells rating. Some research analyst focuses on equity while some give its attention to fixed income securities such as bonds.

Actually, research activity by itself does not generate a lot of income. The recommendation of research workers influences the buying and selling of securities of a company. Because of this, the sales and trading people earns more fees. So, reputable research analyst are a very important part of an investment banking team as they help them in increasing their business and earn a hefty income.

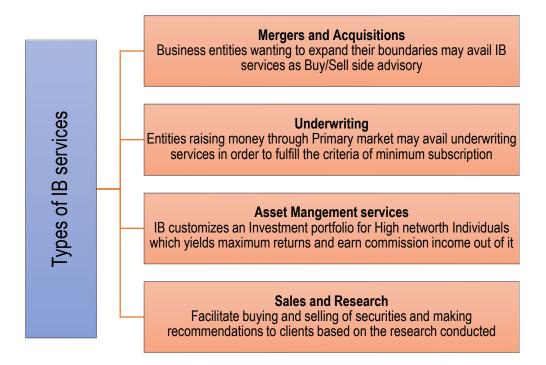
## 1.2.5 Syndicate

The hub of the investment banking wheel, syndicate provides a vital link between salespeople and corporate finance. Syndicate exists to facilitate the placing of securities in a public offering, a knockdown drag-out affair between and among buyers of offerings and the investment banks managing the process. In a corporate or municipal debt deal, syndicate also determines the allocation of bonds.

In certain cases, for large or risky issues a number of investment bankers get together as a group, they are referred to as syndicate. A syndicate is a temporary association of investment bankers brought together for the purpose of selling new securities. One investment banker is selected to manage the syndicate called the originating house, which does underwriting of the major amount of

the issue. There are two types of underwriting syndicates, Divided and Undivided. In a Divided Syndicate, each member group has liability of selling a portion of offerings assigned to them. However, in Undivided Syndicate, each member group is liable for unsold securities up to the amount of its percentage participation irrespective of the number of securities that group has sold.

The breakdown of these fundamental areas differs slightly from firm to firm, but typically an investment bank will have these areas.



## 1.3 Commercial Banking vs. Investment Banking

Inspite of sharing many aspects, commercial banking and investment banking contains some fundamental differences. After a quick overview of commercial banking, we will build up to a full discussion of what investment banking entails.

#### 1.3.1 Commercial Banks

The job of commercial banks is pretty simple. They take deposits from the customers and then lend that deposited amount to consumers. If one wants to borrow money to buy a house, car, or for any of his personal purposes, he will approach a commercial bank. Also, the companies that borrow from commercial banks range from a small shopkeeper to a large multinational company.

If anyone wants to take loans from banks, they contact them and enter into a legal contract. Generally, a negotiation takes place in which the banks pursue their customers individually to determine the terms of the loans, including the time to maturity and the interest rates to be charged.

#### 1.3.2 Investment Banks

The functioning of investment bank is different from a commercial bank. An investment bank does not lend from its cash reserve of deposits accepted from its customers as does a commercial bank. In fact, an investment bank acts as an intermediary and undertakes the matching of buyers and sellers of stocks and bonds.

However, the main purpose of companies to utilize the services of commercial banks and investment banks are the same. Whenever, the companies need funds, they contact the commercial banks for loan or an investment bank to sell their stocks or bonds. However, the investment banks have to comparatively work harder and spent sufficient time to find investors so that it's client company can get the required capital.

Investment banks typically sell public securities as opposed to private loan agreements initiated by commercial banks. Technically, for example, securities such as stock of TCS or Mahindra and Mahindra Financial Services AAA bonds, represent a high degree of safety and are traded either on a public exchange or through an approved dealer. The dealer is the investment bank.

The investment bank makes money by charging the client a small percentage of the transaction upon its completion. This is generally called "underwriting discount." However, a commercial bank making a loan actually receives interest on the money lent by it.

Thus the fundamental differences between an investment bank and a commercial bank can be outlined as follows:

	Investment Banks		Commercial Banks
1.	Investment Banks help their clients in raising capital by acting as an intermediary between the buyers and the sellers of securities.	1.	Commercial Banks accept deposits from customers and lend money to individuals and corporates.
2.	Investment Banks do not take deposits from customers.	2.	Commercial banks can take deposits from customers.
3.	The Investment Banks do not own the securities and only act as an intermediary	3.	Commercial Banks have the ownership of loans granted to their customers.

for smooth transaction of buying and selling securities.

- 4. Investment Banks earn underwriting commission.
- 5. Regulated by market regulator SEBI
- 6. It is a margin business i.e. huge fees from limited customers
- 7. Services provided are more unique/ customized in nature

- 4. Commercial banks earn interest on loans granted to their customers.
- 5. Regulated by the Central Bank of the country i.e. RBI.
- 6. It is a volume business i.e. small fees from many customers.
- 7. Services provided are more routine in nature.

#### 1.3.3 Public Securities

Investment banks typically sell public securities (as opposed to private loan agreements). Technically, securities such as Microsoft stock or Tata Steel AAA bonds, represent a high degree of safety and are traded either on a public exchange or through an approved dealer. The dealer is the investment bank.

Let's look at an **Example** to illustrate the difference between private debt and bonds.

Suppose ITC Ltd, the FMCG conglomerate needs capital, and estimates its need to be ₹ 2000 million. ITC has two choices:

- (a) It could obtain a commercial bank loan from State Bank of India for the entire ₹ 2000 million, and pay interest on that loan.
- (b) It could sell bonds publicly using an investment bank such as Merrill Lynch. The ₹ 2000 million bond issue raised by Merrill would be broken into many bonds and then sold to the public. (For example, the issue could be broken into 20,00,000 bonds, each worth `1,000.) Once sold, the company receives its ₹ 2000 million and investors receive bonds worth a total of the same amount. Over time, the investors in the bond offering receive coupon payments (the interest), and ultimately the principal (the original ₹ 1,000) at the end of the life of the loan, when ITC buys back the bonds (retires or redeems the bonds). Thus, we see that in a bond offering, while the money is still loaned to ITC, it is loaned by numerous investors, rather than a single bank.

As the investment bank involved in the offering does not own the bonds but merely placed them with investors at the outset, it earns no interest - the bondholders earn this interest in the form of regular coupon payments. The investment bank makes money by charging the client (in this case, ITC) a

small percentage of the transaction upon its completion. Investment banks call this upfront fee the "underwriting discount." In contrast, a commercial bank making a loan actually receives the interest and simultaneously owns the debt.



## 2. FUNCTIONS OF AN INVESTMENT BANK

#### 2.1 Issue of IPO

Companies in need of funds resort to Initial Public Offering (IPO). This is the phase when securities are issued to the public for the first time. After the initial public offering, securities are listed on the stock exchange and sale and purchase of those listed securities can take place. The companies going for IPO, may not have an understanding of the compliances, SEBI rules and regulations, etc and it would be in best interest to appoint an agent who can take care of the documentation and legal compliances. With this objective, the companies approach Investment bankers who not only help in compliance but also contribute by underwriting the issue and/or getting good deals for the company. The Investment banker is chosen based on their networking, market reach, experience, and quality of research.

Further, commercial banks have also developed expertise in underwriting public bond deals. So, commercial banks not only lend money by utilizing depositor's money but also they underwrite bonds through their corporate finance department. So, the commercial banks have directly competed with investment banks for this business of bond underwriting. But, in reality, only a handful of big commercial banks are able to compete in this business with the investment banks that generally have a larger share of the pie.

From the perspective of an investment banker, the IPO process consists of two major phases: hiring the managers and due diligence.

(i) Hiring the Managers: Before going for a public issue, the first task that the company does is to hire a merchant banker for the issue which is also called a manager to the issue. The selection process depends upon the investment banker's general goodwill, expertise as well as the quality of its research coverage in the company's specific industry. The selection also depends on whether the issuer would like to see its securities held more by individuals or by institutional investors. Almost all IPO candidates select two or more investment banks to manage the IPO process.

When there is more than one investment bank, one among them is selected as the lead or book-running manager, also referred as BRLM. The lead manager almost always appears on the left cover of the prospectus, and it plays a major role throughout the transaction. The task of the manager is

to make all arrangements with the issuer, make the schedule of the issue and fulfills all the requirements of the due diligence process. He is also responsible for the pricing and distribution of the stock.

(ii) Due Diligence and Drafting: Once managers are selected, the second phase of the process begins. For investment bankers on the deal, this phase involves understanding the company's business as well as possible scenarios (called due diligence), and then filing the legal documents as required by the SEBI.

The merchant banker would be closely associated in preparing the new applicant's prospectus and other related listing documents. The Merchant Banker shall conduct a due diligence on the applicant and provide due diligence certificate as per Form A of Schedule VI of the ICDR including additional confirmations as provided in Form H of Schedule VI along with the offer document to the exchange. The other certifications as mentioned in ICDR, Schedule VI will be provided, if applicable.

[Source: www.nseindia.com]

## 2.2 Follow-on offering of stock

Sometimes an already listed company issue shares to the public again. This is called a Further Public Offer or Follow-on Offering. The main reason for a company to go through this offer is that – it is growing rapidly and it needs funds for that.

#### 2.3 Issue of Debt

Sometimes, the company instead of choosing equity for their funding requirements chooses public debt.

The reasons for issuing bonds rather than stock are explained as follows:

- (a) When the stock price of the company is down, a bond issue is a better alternative.
- (b) The firm does not want to dilute its existing shareholding by issuing more equity.

These are both valid reasons for issuing bonds rather than equity.

Further, in case the economy is not doing well investors generally avoid the share issue and in such cases issuance of bonds may be resorted to satisfy the company's appetite for funds.

In case of a bond issue, the focus of the prospectus is on highlighting the importance of the company's stability and steady cash flow. On the other hand, a share issue prospectus will highlight the company's growth and expansion opportunities.

In case of a debt issue, the importance of a bond's credit rating cannot be undermined. It is necessary to obtain a good credit rating from a reputed credit rating agency like CRISIL, ICRA, CARE etc. So, better credit rating gives an impression that the bond is safe. In order to encourage investors to receive lower rate of interest, the credit rating of debt issue should be high.

## 2.4 Merger and Acquisitions (M&A)

M&A advisors come directly under the corporate finance departments of investment banks. As in the case of public offerings, merger and acquisition transactions do not directly involve salespeople, traders or research analysts. Particularly, M&A advisory comes under the domain of M&A specialists and fits into one of either two: seller representation or buyer representation (also called target representation and acquirer representation). Executing a deal may be a long-term process and may take 6-12 months' time depending upon the amount involved, legal complications, domestic and international laws amongst others.

Representing the target	Representing the acquirer
Sell-side representation is used when a company asks an investment bank to help it to sell a division, plant, or subsidiary operation.  In this respect, the first step is to write a selling memorandum and then contact the future buyers of the client.	Under this approach, the investment bank contacts the parties who wish to purchase. The investment banker also attempts to prepare an offer which can be feasible for all parties and helps to crack the deal.

## 2.4.1 Buy Side Advisory

The Investment Banks provide advisory services to clients who have identified particular companies which are to be acquired and help them in negotiating, due diligence, financing and documentation of the transaction. These are being divided into following four steps for easy understanding:

**Short-listing of companies to be acquired** – In this step, the investment banker helps its client companies to short list the companies to be acquired. To extend this service, it uses its network of relationships with companies, private equity funds and other intermediaries to identify the suitable companies that are to be acquired.

**Preparing and executing Term Sheet** – After the companies are shortlisted, the investment banker prepares term sheet which includes all the terms and conditions of the merger transaction. It then facilitates negotiations with the target company and ensures that the term sheet is entered into by the client with the target company.

**Due Diligence** – The next step is due diligence which means investigating the deal from legal, commercial and financial point of view. It basically includes verifying assets and liabilities, identifying risks, knowing the amount of risk involved and protection against such risks.

**Transaction Closure** – After the completion of the due diligence process, the investment banker negotiates on the final agreement with the target company to close the merger and acquisition deal. It also arranges finance for the deal, if required.

#### 2.4.2 Sell Side Advisory

The Investment Banks helps the client companies in identifying suitable buyers which may include private companies, public companies, private-equity funds, hedge funds and international buyers. These are also being divided into following four steps for clarity of the process involved:

**Preparation of information** – An investment banker helps in the preparation of information on the purchasing companies' business profile which helps to present the deal in a structured manner in front of the potential acquirers.

**Target short-listing** – After going through the client companies extensively and short listing of potential buyers, the investment bankers enables the client company chooses its partner. As in the case of buy side advisory services, it uses its network of relationships with companies, private equity funds and other intermediaries to identify the suitable companies to whom the client company has to be sold.

**Preparing and executing Term Sheet –** In this step, the investment banker helps his client enter into a term sheet with the potential acquirer.

**Due diligence and deal closure** – After entering into a term sheet, the investment banker help the client in the due diligence process and negotiates with the purchaser to close the deal.

#### 2.5 Private Placements

A private placement involves selling of debt or equity to few private parties. A private placement is different from a public offer because in case of a private placement, shares are offered to a few people instead of offering it to the public in general. Sometimes, the investment bankers advice their client to go for a private placement first and then apply for the initial public offer. The reason is that the bankers want to accumulate sufficient funds to justify the IPO.

The investment banker's work involved in a private placement is quite similar to sell-side M&A representation. The bankers attempt to find a buyer by writing the selling memorandum and then contacting potential strategic or financial buyers of the client.

Actually, the task of the investment banker is to convince the private investors to invest in the company and get the deal done. They charge fees for this service which is almost equal as is offered in the case of an IPO.

## 2.6 Financial Restructurings

When a company is not able to meet its obligations, the chances are that it may go bankrupt. In this situation, the company may either shut down its operations or it can restructure and remain in business.

Financial restructuring involves renegotiating payment terms on debt obligations. It also includes issuing new debt and restructuring payables to vendors. Investment bankers in this respect provide guidance to the companies by recommending sale of assets, issuing convertible stocks and bonds, or it even advices for the sale of the whole company.

The investment bankers who are in the restructuring business generally deal with distressed companies i.e. the companies who are either going for bankruptcy or in the middle of a bankruptcy process. In this regard, the investment bankers are hired to provide a best deal for the company in the form of forgiveness of a large part of the debt. The companies are also advised to restructure its debt in the most prudent manner possible and get out of the bankruptcy process. Moreover, the bankers in the restructuring arena are also legally adept. For example "The Insolvency and Bankruptcy Code" has a huge impact on the bankruptcy process.

As a company involved in a bankruptcy process faces enough cash problems, the investment banks often charge minimal monthly retainers. They hope that the company will revive and they then make a substantial profit. They also make good income in case new securities are issued to pay back the old debt.

Because a firm in bankruptcy already has substantial cash flow problems, investment banks often charge minimal monthly retainers, hoping to cash in on the spread from issuing new securities. Like other public offerings, this can be a highly lucrative and steady business.



## 3. CHALLENGES IN INVESTMENT BANKING

Some of the challenges in the Investment Banking business are in existence due to the reason that in 1990s broking firms, credit rating and other financial services firms are owned by the Investment Bankers. Hence, due to reasons of losing the other businesses from the company they may not be so fair in assigning the credit rating to the company concerned. Further in order to keep the favorable perception of new stock in post issue they might sell the shares (holding on behalf of their client) in the market

Pricing in new issue is a big challenge for an investment banker as it should not only result in fair pricing but should be a win-win situation for both the investor as well as the company.

Valuation of shares for the exchange is another big challenge for the investment banker as it should be acceptable to both the companies involved in the process.

In new issue management compliance of various related law is a challenge for investment banker as any lapse at stage can bring the whole effort to a zero level and invite regulatory penalties.

Retention of talented employees is another challenge. Fintech industry, startups have become a big attraction to finance professionals and long hours of job, procedural aspects may appeal lesser.



## 4. DEVELOPMENTS IN INVESTMENT BANKING

Investment banking was a lucrative business till the arrival of the financial crisis in 2008. However, the sub-prime mortgage crisis took a toll in the global investment banks. A major reason for the crisis is that these investment banks were not under the control of either the Federal Reserve Bank or the US Securities Exchange Commission, which made it easier for them to take risks. As a result of the financial crisis worsening in late 2008, some of the biggest investment banks collapsed.

Bear Stearns was acquired by JP Morgan Chase in March 2008. Lehman Brothers filed for Bankruptcy and was declared bankrupt in September 2008. The Asian and European operations of Lehman Brothers were bought by Nomura and the North American Lehman operations by Barclays Capital. Merill Lynch was acquired by Bank of America for \$50 billion. Goldman Sachs and Morgan Stanley converted themselves into commercial banks.

The effect of the collapse of these towering investment banks were felt in the Indian Investment Banks also. There were drop in fat fees and revenue for these banks. However, in the middle of the gloomy environment, there is opportunity for investment banks to go global with properly designed strategies.

Presently, the growth rate of Indian economy is slow but it is resilient after the onslaught of the pandemic and performing better than many developed countries in the world. Capital market is performing better now. Nifty and Sensex were performing at an all-time high level in December 2023.

However, investment banks can enhance their growth by exploring new and alternate markets, developing strong and long term relationship with the existing and new clients, giving quality advice to clients and assisting them in every stage of their growth, hiring qualified staff and promoting ethical behavior. Indian Companies have broken the shackles and are now going global. With India moving at a fast pace towards 5 trillion-dollar economy, global mergers and acquisitions are common to happen and Indian Investment banking companies can be of great help.



## 5. MERCHANT BANKING AND ISSUE MANAGEMENT

#### 5.1 Introduction

SEBI (Merchant Banker) Regulations, 1992, define 'Merchant Banker' as any person who is engaged in the business of issue management, either by making arrangements regarding selling, buying, or subscribing, or acting as a manager, consultant, or advisor, or rendering corporate-advisory services in relation to such issue management.

In case of both the public issues and right issues, it is mandatory to appoint a Merchant Banker. The task of Merchant Banker is basically that of a facilitator or coordinator. It coordinates the process of issue management by helping the underwriters, registrars and bankers, in pricing and marketing the issue and complying with the SEBI guidelines.

Merchant Bankers are prohibited from carrying on certain activities such as acceptance of deposits, leasing and bill discounting. They are not allowed to borrow any money from the market. They are also debarred from engaging in the acquisition and sale of securities on a commercial basis.

# 5.2 Responsibilities of Merchant Bankers as per SEBI (ICDR) Regulations, 2018

#### 5.2.1 Communication

In respect of all public communications, issue advertisements and publicity materials, the issuer shall obtain approval from the lead merchant bankers responsible for marketing the issue and shall also make copies of all issue related materials available with the lead merchant bankers at least till the allotment is completed. SEBI has imposed certain compliances to be observed by the issuing company when they issue any publicity material. Once a merchant banker is appointed, the company can delegate the task of ensuring such compliance with the merchant banker.

#### **5.2.2 Compliance Certificate**

The merchant bankers shall submit a compliance certificate in the format specified in Part E of Schedule X, for the period between the date of filing the draft offer document with the Board and the date of closure of the issue, in respect of news reports appearing in any of the following media:

- (a) newspapers mentioned in sub-regulation (3) of regulation 9;
- (b) major business magazines;
- (c) print and electronic media controlled by a media group where the media group has a private treaty/shareholders' agreement with the issuer or Promoters of the issuer.

#### 5.2.3 Copies of offer documents to be available to public

- (i) The issuer and lead merchant bankers shall ensure that the contents of offer documents hosted on the websites as required in these regulations are the same as that of their printed versions as filed with the Registrar of Companies, Board, and the stock exchanges.
- (ii) The lead merchant bankers and the recognized stock exchange shall provide copies of the draft offer document and final offer document to the public as and when requested.

#### 5.2.4 Redressal of investor grievances

The post-issue lead merchant bankers shall actively associate him with post-issue activities such as allotment, refund, dispatch and giving instructions to syndicate members, Self Certified Syndicate Banks and other intermediaries and shall regularly monitor redressal of investor grievances arising therefrom.

#### 5.2.5 Due diligence

The lead merchant bankers shall exercise due diligence and satisfy himself about all the aspects of the issue including the veracity and adequacy of disclosure in the offer documents.

#### 5.2.6 Audited financial statements in the offer document

The merchant banker shall ensure that the information contained in the offer document and the particulars as per audited financial statements in the offer document are not more than six months old from the issue opening date.

## 5.3 Pre-Issue Management by Merchant Banker

Merchant Bankers play an important role in the issue management process. Besides the above discussions on responsibilities of Merchant Banker, Pre-Issue Management by Merchant Banker has been separately discussed in the following paragraphs to induce more clarity in the minds of the students:

- (i) Entering into an agreement with Merchant Banker: An agreement has to be entered into between a lead merchant banker and the issuer company, specifying their rights, liabilities and obligations. The lead merchant banker has to submit three copies of the draft offer letter along with the copy of the agreement to the Board (SEBI).
- (ii) Filing of the draft offer document and other documents: The lead manager(s) shall submit the following to the Board along with the draft offer document:
- a) a certificate, confirming that an agreement has been entered into between the issuer and the lead manager(s);

- b) a due diligence certificate as per Form A of Schedule V; The Merchant Banker shall exercise

  Due Diligence and submit a due diligence certificate to the Board confirming that all the

  disclosures made in the draft prospectus are true and fair and they are capable of ensuring

  that the investors take a well-informed decision on that basis.
- c) in case of an issue of convertible debt instruments, a due diligence certificate from the debenture trustee as per Form B of Schedule V;

#### (iii) Disclosures in the draft offer document and offer document

- a) The lead manager(s) shall exercise due diligence and satisfy themselves about all aspects of the issue including the veracity and adequacy of disclosure in the draft offer document and the offer document.
- b) The lead manager(s) shall call upon the issuer, its promoters, and its directors or in case of an offer for sale, also the selling shareholders, to fulfill their obligations as disclosed by them in the draft offer document and the offer document and as required in terms of these regulations.
- c) The lead manager(s) shall ensure that the information contained in the draft offer document and offer document and the particulars as per restated audited financial statements in the offer document are not more than six months old from the issue opening date.
- (iv) Submission of Documents: The lead manager(s) shall submit the following documents to the Board after issuance of observations by the Board or after expiry of the period stipulated in sub-regulation (4) of regulation 25 if the Board has not issued observations:
- a) a statement certifying that all changes, suggestions and observations made by the Board have been incorporated in the offer document;
- b) a due diligence certificate as per Form C of Schedule V, at the time of registering of the offer document;
- a copy of the resolution passed by the board of directors of the issuer for allotting specified securities to promoter(s) towards amount received against promoters' contribution, before opening of the issue;
- d) a certificate from a statutory auditor, before opening of the issue, certifying that promoters' contribution has been received in accordance with these regulations, accompanying therewith the names and addresses of the promoters who have contributed to the promoters' contribution and the amount paid and credited to the issuer's bank account by each of them towards such contribution:

- a due diligence certificate as per Form D of Schedule V, in the event the issuer has made a
  disclosure of any material development by issuing a public notice pursuant to para 4 of
  Schedule IX.
- (v) Availability of issue material: The lead manager(s) shall ensure availability of the offer document and other issue material including application forms to stock exchanges, syndicate members, registrar to issue, registrar and share transfer agents, depository participants, stock brokers, underwriters, bankers to the issue, and self-certified syndicate banks before the opening of the issue
- (vi) Undertaking: The merchant banker shall also submit an undertaking that transactions in securities by the promoter between the date of filing of offer documents with Registrar of Companies (ROC) and the date of closure of issue shall be reported to the stock exchange within 24 hours of the transaction.
- (vii) Appointment of Intermediaries: The issuer shall, in consultation with the lead manager(s), appoint other intermediaries which are registered with the Board after the lead manager(s) have independently assessed the capability of other intermediaries to carry out their obligations.
- (viii) Underwriting: The merchant bankers shall satisfy themselves about the ability of the underwriters before their appointment. The lead merchant banker shall include a statement in the offer document stating that in his opinion the underwriter is financially capable of meeting its obligations.

In respect of every underwritten issue, the merchant banker shall undertake a minimum underwriting obligation of 5% of the total underwriting commitment or Rs. 25 lakhs, whichever is less.

In case of a book built issue, the following requirements as to Underwriting shall be undertaken by the merchant banker:

- (a) The lead manager(s) shall compulsorily underwrite the issue and the syndicate member(s) shall sub-underwrite with the lead manager(s).
- (b) The lead manager(s) / syndicate member(s) shall enter underwriting/ sub underwriting agreement on a date prior to filing of the prospectus.
- (c) The details of the final underwriting arrangement indicating actual numbers of shares underwritten shall be disclosed and printed in the prospectus before it is registered with the Registrar of Companies.
- (d) In case of an under-subscription in an issue, the shortfall shall be made good by the lead manager(s) and the same shall be incorporated in the inter-se allocation of responsibility as specified in Schedule I.

#### (ix) Offer document to be made public

- (1) The issuer and the lead manager(s) shall ensure that the offer documents are hosted on the websites as required under these regulations and its contents are the same as the versions as filed with the Registrar of Companies, Board and the SME exchange(s).
- (2) The lead manager(s) and the SME exchange(s) shall provide copies of the offer document to the public as and when requested and may charge a reasonable sum for providing a copy of the same.
- (x) No Complaint certificate: Twenty one days after the draft offer document is made public, the Merchant banker shall file a statement with SEBI specifying list of complaints received from public, a statement if the company plans to revise the draft offer document and highlight the amendments if any.
- (xi) Appointment of Compliance Officer: The issuer shall appoint a compliance officer who shall be responsible for monitoring the compliance of the securities laws and for redressal of investors' grievances.
- (xii) The merchant banker shall also ensure that the issuer company has entered into an agreement with depositories for dematerialization of securities.

### 5.4 Post Issue Management by Merchant Bankers

Post Issue Management by Merchant Bankers has been explained in detail as below to enable the students to have more clarity on the topic:

### 5.4.1 Redressal of Investor grievances

The issuer and lead manager(s) shall ensure that post issue activities such as allotment, issuing refunds, release of money for ASBA applicants in case of non-allotment is timely completed. Any investor complaint received regarding this matter shall not remain unattended and the matter will be resolved at the earliest possible.

#### 5.4.2 Post-Issue Advertisements

The lead manager(s) shall ensure that an advertisement giving details relating to subscription, basis of allotment, number, value and percentage of all applications including ASBA, number, value and percentage of successful allottees for all applications including ASBA, date of completion of despatch of refund orders, as applicable, or instructions to self-certified syndicate banks by the registrar, date of credit of specified securities and date of filing of listing application, etc. is released within ten days from the date of completion of the various activities in at least one English national

daily newspaper with wide circulation, one Hindi national daily newspaper with wide circulation and one regional language daily newspaper with wide circulation at the place where registered office of the issuer is situated.

#### 5.4.3 Post-issue reports

The lead manager(s) shall submit a final post-issue report as specified in Part A of Schedule XVII, along with a due diligence certificate as per the format specified in Form F of Schedule V, within seven days of the date of finalization of basis of allotment or within seven days of refund of money in case of failure of issue.

#### 5.4.4 Coordination with Intermediaries

The post issue lead merchant banker maintains a close coordination with Registrar to the issue, and deputes officers at the offices of various intermediaries to monitor the process of application including ASBA applications till allotment is done. It supervises and ensures that security certificates are properly dispatched, refund orders completed and securities listed. Any negligence on the part of any of the intermediaries should be duly reported by the Merchant banker.

#### 5.4.5 Underwriters

In case of unsubscribed issue, the merchant banker shall ensure that the underwriters shall honour their commitments within 60 days from the date of closure of the issue. The lead merchant banker shall furnish information to SEBI in respect of the underwriters who have failed to meet their underwriting obligations.

### **TEST YOUR KNOWLEDGE**

### Multiple Choice Questions (MCQs)

- 1. Which of the following services are not provided by a Merchant banker?
  - (a) Mergers and Acquisition
  - (b) Trading of shares
  - (c) Custodian
  - (d) Underwriting

2.		ch of the following services are most important for a Merchant banker from the point of earning revenue?
	(a)	Mergers and Acquisition
	(b)	Trading of shares
	(c)	Underwriting
	(d)	Asset management services
3.	State	e the order of steps followed by a merchant banker while conducting Buy side Advisory.
	1.	Short listing of companies
	2.	Conducting due diligence
	3.	Preparing term sheet
	4.	Transaction closure
	(a)	1,2,3,4
	(b)	1,3,2,4
	(c)	1,3,4,2
	(d)	1,2,4,3
4.	Merc	chant banker is responsible for the following services except
	(a)	Documentation
	(b)	Compliances
	(c)	Reporting
	(d)	Allotment of securities
5.	Who	se services will be availed; in case you want to raise money through public?
	(a)	Commercial bank
	(b)	Investment bank
	(c)	Central bank

Payment bank

(d)

#### **Theoretical Questions**

- 1. What are the main areas of Investment Banking?
- 2. Differentiate between Commercial Banking and Investment Banking.
- 3. Discuss the main functions of Investment Banking.
- 4. Briefly describe the buy side advisory and sell side advisory provided by the investment bankers.
- 5. Explain the responsibilities of Merchant Bankers as per the SEBI (ICDR) Regulations, 2018.

### **ANSWERS/SOLUTIONS**

### **Answer to Multiple Choice Questions**

1. (c) 2. (a) 3. (b) 4. (d) 5. (b)
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#### **Answers to the Theoretical Questions**

- **1.** Please refer to paragraph 1.2
- 2. Please refer to paragraph 1.3
- 3. Please refer to paragraph 2
- 4. Please refer to paragraph 2.4
- **5.** Please refer to paragraph 5.2

## **CREDIT RATING**

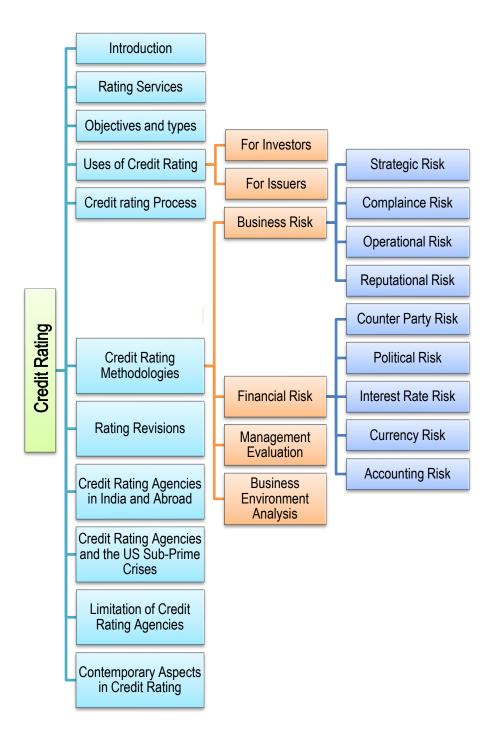


### **LEARNING OUTCOMES**

### After going through the chapter student shall be able to understand:

- Introduction
- Rating Services
- Objectives and types
- Uses of Credit Rating
- Credit Rating Process
- Credit Rating Methodology
- Camel Model of Credit Rating
- Rating Revisions
- Credit Rating Agencies in India and abroad
- Credit Rating Agencies and the US sub-prime crisis
- Limitations of Credit Rating Agencies

# CHAPTER OVERVIEW





## 1. WHAT IS CREDIT RATING?

A credit rating represents the rating agency's opinion on the instrument issued by the issuer company and the likelihood of default on the principal and the interest payment. A simple alphanumeric symbol is normally used to convey a credit rating. However, one should keep in mind that credit ratings do not guarantee the performance of the Company/Instrument. It is only an opinion expressed and may not be taken as any kind of assurance.

#### Thus, Credit rating is:

- Not an Insurance Against Default
- No Judgment on General Performance or Market Value
- Usually assigned to Debt Instruments, Not to Equity
- Important Input, but not the only Basis for Investment Decisions
- Dynamic and Subject to Change
- Different Rating Scales for Different Contexts

Such opinions are relevant to investors due to the increase in the number of issues and in the presence of newer financial products viz. asset backed securities and credit derivatives.

#### Credit Rating does not in any way linked with:

- Performance Evaluation of the rated entity unless called for. (1)
- (2) Investment Recommendation by the rating agency to invest or not in the instrument to be rated.
- (3) Legal Compliance by the issuer-entity through audit.
- (4) Opinion on the holding company, subsidiaries, or associates of the issuer entity.

It should be noted that rating is a continuous process and as new information come, an earlier rating can be revised. While the rating is usually instrument specific, certain credit rating agencies like CARE, undertake credit assessment of borrowers for use by banks and financial institutions.



## 2. RATING SERVICES/ TYPES OF CREDIT RATINGS

Following rating services are generally provided by the credit rating agencies. For this purpose, the example of Credit Rating information Services of India Limited (CRISIL) has been taken:

#### (i) **Corporate sector Ratings**

Companies willing to launch Debt instruments in the market or those wanting to establish a good

public image may undergo for such ratings. CRISIL follows a three-pronged approach to arrive at the standalone credit rating of a firm, comprising evaluation of Business Risk, Management Risk and Financial Risk. Also, the support obtained from a parent, group or joint venture is also considered to arrive at the overall credit rating.

#### (ii) Financial sector Ratings

These services assess financial institutions like Banks, NBFC's, Housing Finance companies, securities firms, etc. that are planning to issue instruments like bonds, bank loan instruments, Certificate of Deposits in the market. CRISIL ratings uses the 'CRAMEL' framework to rate finance companies which entails assessment on six major parameters such as capital, resource raising ability, asset quality, management, earnings, and liquidity.

#### (iii) Structured Finance

Structured Finance is a financial instrument available to companies with complex financing needs, which cannot ordinarily be solved with conventional financing. Collateralized debt obligations (CDO's), synthetic financial instruments, collateralized bond obligations, syndicated loans are a few examples of structured finance instruments. Credit ratings by CRISIL seek to ensure that the ratings assigned factor in all the key risks that the investors are exposed to in these transactions and specifically capture the nuances of the underlying asset class.

### (iv) Credit Quality Ratings

The ratings indicate opinion on the credit quality of the debt securities held by a Debt fund. The ratings express an opinion on the expected default probability of the debt securities that the funds hold. These ratings are assigned only to funds that invest entirely in debt.

### (v) Recovery Risk Rating

Recovery risk ratings indicate the variability in the extent of a recovery from a loan, post default. The ratings give insight into the potential loss in case of default. The key drivers for analysis are collateral coverage, quality of assets and seniority of the instrument.

### (vi) Expected Loss (EL) ratings

CRISIL, in consultation with Ministry of Finance and other stakeholders have developed a credit rating framework for operational infrastructure projects based on 'expected loss methodology'. The ratings assigned are an opinion on the expected loss to be incurred over the life of the debt instrument and consider not only the probability of default, but post default recoveries too. The ratings are assigned on an innovative seven point EL rating scale from EL1 to EL7, with EL1 representing the lowest expected loss.

#### (vii) Insurance Hybrids

The Insurance Regulatory and Development Authority (IRDA) has allowed insurance companies to raise non-equity form of capital such as subordinated debt or preference shares. Rating methodology adopted by CRISIL for such hybrid instruments considers the credit profile of the insurers through corporate credit ratings, and factors in additional risks that these instruments carry on account of restriction on debt servicing. CRISIL uses criteria's such as Industry Risk and Business Risk across segments, Financials, Risk Management Systems, Goals and Strategies, Parental Support.

#### (viii) Independent Credit Evaluation

CRISIL conducts independent evaluations of the residual debt for resolution plans involving restructuring or changes in ownership of large accounts (accounts where the aggregate exposure of the lender is Rs1 billion and above). In fact, RBI notification dated August 6, 2020, has mandated ICE for resolution plans to deal with COVID-19 related stress. For a resolution plan to be considered for implementation without reference to NCLT, RBI guidelines require a minimum credit score.

#### (ix) REITS/INVITS Ratings

Real Estate Investment Trusts (REITs) and Infrastructure Investment Trusts (InvITs) are innovative vehicles that allow developers to monetise revenue generating real estate and infrastructure assets, while allowing investors/unit holders to invest in these assets without owning them. REITs and InvITs enjoy favourable tax treatments and relaxation in capital gains tax. CRISIL has developed specific criteria for rating that focus on quality of the underlying asset portfolio and cash flows, and considers leverage, experience of the investment manager, risk management policies, etc. (Source: www.crisil.com)



### 3. OBJECTIVES OF CREDIT RATING

- (i) Rating debt obligations of companies.
- (ii) Guiding investors regarding the risk of investment in a debt security as to timely repayment of interest obligations and principal amount.
- (iii) Creating awareness of the concept of credit rating amongst corporations, merchant bankers, brokers, and regulatory authorities.
- (iv) It helps in the creation of an environment that facilitates debt rating.
- (v) Inculcating a positive environment regarding investment in debt securities.
- (vi) Helps in creating confidence in the minds of investors.
- (vii) Enable the companies to be quality conscious regarding their securities and create a positive pressure on them to fulfill their debt obligations.



## 4. USES OF CREDIT RATING

#### For Investors -

- (i) Aids in investment decisions.
- (ii) CRA's shall observe a high standard of integrity and provide credible information about the company/instrument.
- (iii) Provides analysts in Mutual Funds to use credit ratings as one of the valuable inputs to their independent evaluation system.
- (iv) Assists investors to compare a wide variety of alternative instruments.
- (v) Saving in time and cost as the investor need not carry out an in-depth analysis.

#### For issuers -

- (i) Requirement of meeting regulatory obligations as per SEBI guidelines.
- (ii) Recognition given by prospective investors of providing value to the ratings which helps them to raise debt / equity capital.
- (iii) A highly rated instrument can raise funds at lower rates of interest.
- (iv) Better credit rating motivates the issuers and encourages them to maintain their image thereby resulting in Goodwill enhancement.
- (v) Most companies use ratings as a marketing tool.

The rating process gives a viable market driven system which helps individuals to invest in financial instruments which are productive assets.



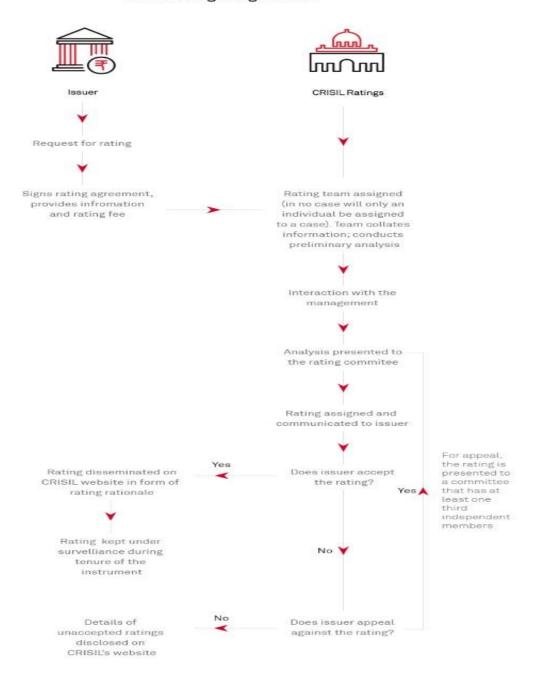
## 5. CREDIT RATING PROCESS

The default-risk assessment and quality rating assigned to an issue are primarily determined by three factors:

- (i) The issuer's ability to pay,
- (ii) The strength of the security owner's claim on the issue, and
- (iii) The economic significance of the industry and marketplace of the issuer.

The steps involved are:

#### CRISIL Ratings' process for credit rating assignments



(Source: www.crisil.com)

- a) Request from issuer and analysis A company approaches a rating agency for rating a specific security. A team of analysts interact with the company's management and gather necessary information. Areas covered are historical performance, competitive position, business risk profile, business strategies, financial policies, and short/long term outlook of performance. Also factors such as the industry in which the issuer operates, its competitors and markets are taken into consideration.
- b) Rating Committee On the basis of information obtained and assessment made, the team of analysts present a report to the Rating Committee. The issuer is not allowed to participate in this process as it is an internal evaluation of the rating agency. The nature of credit evaluation depends on the type of information provided by the issuer.
- c) Communication to management and appeal The Rating decision is communicated to the issuer and then supporting the rating is shared with the issuer. If the issuer disagrees, an opportunity of being heard is given to him. Issuers appealing against a rating decision are asked to submit relevant material information. The Rating Committee reviews the decision although such a review may not alter the rating. The issuer may reject a rating and the rating score need not be disclosed to the public.
- **d)** Pronouncement of the rating If the rating decision is accepted by the issuer, the rating agency makes a public announcement of it.
- e) Monitoring of the assigned rating The rating agencies monitor the on-going performance of the issuer and the economic environment in which it operates. All ratings are placed under constant watch. In cases where no change in rating is required, the rating agencies carry out an annual review with the issuer for updating of the information provided.
- f) Rating Watch Based on the constant scrutiny carried out by the agency, it may place a rated instrument on Rating Watch. The rating may change for the better or for the worse. Rating Watch is followed by a full-scale review for confirming or changing the original rating.
- g) Rating Coverage Ratings are not limited to specific instruments. They also include public utilities; financial institutions; transport; infrastructure and energy projects; Special Purpose Vehicles; domestic subsidiaries of foreign entities. Structured ratings are given to MNCs based on guarantees or Letters of Comfort and Standby Letters of Credit issued by the banks. The rating agencies have also launched Corporate Governance Ratings with emphasis on quality of disclosure standards and the extent to which regulatory obligations have been complied with.

h) Rating Scores – A comparative summary of Rating Score used by four rating agencies in India is given below.

Sam	ple	of	Rating	<b>Scores</b>
-----	-----	----	--------	---------------

Debentures	CRISIL	ICRA	CARE	FITCH
Highest Safety	AAA	LAAA	CARE AAA (L)	AAA (ind)
High Safety	AA	LAA	CARE AA (L)	AA (ind)
Adequate Safety	А	LA	CARE A (L)	A (ind)
Moderate Safety	BBB	LBBB	CARE BBB (L)	BBB (ind)
Inadequate Safety	BB	LBB	CARE BB (L)	BB (ind)
High Risk	В	LB	CARE B (L)	B (ind)
Substantial Risk	С	LC	CARE C (L)	C (ind)
Default	D	LD	CARE D (L)	D (ind)
Fixed Deposits				
Highest Safety	FAAA	MAAA	CARE AAA	TAAA
High Safety	FAA	MAA	CARE AA	TAA
Adequate Safety	FA	MA	CARE A	TA

**Note:** Ratings may apply modifiers ("+" (plus)/ ''- '' (minus)) with the rating symbols. The modifiers reflect the comparative standing within the category.



## 6. CREDIT RATING METHODOLOGIES

The general methodology adopted by credit rating companies is to analyze various aspects of a business. They are briefly discussed as below:

### (i) BUSINESS RISK

Business risk occurs when there is a possibility of a company earning lower profits than anticipated or incurring a loss. Business risk can be segregated into four categories - Strategic risk, compliance risk, operational risk, and reputational risk. We have briefly discussed each one as follows:

(a) Strategic Risk: A successful business always needs a comprehensive and detailed business plan. Everyone knows that a successful business needs a comprehensive, well-thought-out business plan. But it's also a fact of life that, if things change, even the best-laid plans can

become outdated if it cannot keep pace with the latest trends. This is what is called a strategic risk. So, strategic risk is a risk in which a company's strategy becomes less effective and it struggles to achieve its goal. It could be due to technological changes, a new competitor entering the market, shifts in customer demand, an increase in the costs of raw materials, or any number of other large-scale changes.

We can take the example of Kodak which was able to develop a digital camera by 1975. But it considers this innovation as a threat to its core business model and failed to develop it. However, it paid the price because when digital camera was ultimately discovered by other companies, it failed to develop it and left behind. A similar example can be given in the case of Nokia when it failed to upgrade its technology to develop touch screen mobile phones. That delay enabled Samsung to become a market leader in touch screen mobile phones.

However, a positive example can be given in the case of Xerox, which invented the photocopy machine. When laser printing was developed, Xerox was quick to lap up this opportunity and changed its business model to develop laser printing. Therefore, it survived the strategic risk and escalated its profits further.

**(b) Compliance Risk:** Every business needs to comply with rules and regulations. For example, with the advent of Companies Act, 2013, and continuous updating of SEBI guidelines, each business organization must comply with plethora of rules, regulations and guidelines. Noncompliance leads to penalties in the form of fine and imprisonment.

However, when a company ventures into a new business line or a new geographical area, a real problem then occurs. For example, a company pursuing cement business is likely to venture into sugar business in a different state. But the laws applicable to the sugar mills in that state are different. So, that poses a compliance risk. If the company fails to comply with laws related to a new area or industry or sector, it will pose a serious threat to its survival.

(c) Operational Risk: This type of risk relates to internal risk. It also relates to the failure on the part of the company to cope with day-to-day operational problems. Operational risk relates to 'people' as well as 'process'. We will take an example to illustrate this. For example, an employee paying out ₹ 1,00,000 from the account of the company instead of ₹ 10,000.

The operational efficiency of the company can enable it to avail better ratings from the Credit rating agencies. Locational advantages, Relationship with labour, Favorable cost structure or advanced manufacturing technologies compared to competitors may act in the favor of the company and will enable the company to earn better ratings.

(d) Reputational Risk: Reputational impact mostly follows a decision under business risk. For example, closing of project in a country on the ground of viability, (which General Motors has done in India) creates a bad reputation for the company. In the above case, it was observed that employees have reacted negatively to the decision and started feeling insecure.

On the other hand, adding related products down the line adds customer confidence and boost investor's confidence. For example, several Indian banks have embarked on opening e-trading account. This has added to the reputation and market confidence.

#### (ii) FINANCIAL RISK

Financial Risk is referred to as the unexpected changes in financial conditions such as prices, exchange rate, Credit rating, and interest rate etc. Though political risk is not a financial risk in the direct sense, but it actually is as any unexpected political change in any foreign country may lead to country risk which may ultimately result in financial loss.

Accordingly, the Financial Risk can be broadly divided into following categories:

- (a) Counter Party Risk
- (b) Political Risk
- (c) Interest Rate Risk
- (d) Currency Risk
- (e) Accounting Risk

Now, let us discuss each of the above-mentioned risks:

(a) Counter Party Risk: This risk occurs due to non-honoring of obligations by the counter party which can be failure to deliver the goods for the payment already made or vice-versa or repayment of borrowings and interest etc.

Thus, this risk also covers the credit risk i.e. default by the counter party.

- (b) Political Risk: Generally, this type of risk is faced by overseas investors, as the adverse action by the government of the host country may lead to huge losses. This can be on any of the following forms:
- Confiscation or destruction of overseas properties.
- Rationing of remittance to home country.
- Restriction on conversion of local currency of host country into foreign currency.
- Restriction on borrowings.

- Invalidation of Patents
- Price control of products
- (c) Interest Rate Risk: This risk occurs due to a change in interest rate resulting in a change in assets and liabilities. This risk is more important for banking companies as their balance sheets are more interest sensitive and their base of earnings is spread between borrowing and lending rates.

As we know, the interest rates are of two types i.e. fixed and floating. The risk in both types is inherent. If any company has borrowed money at floating rate, then with increase in floating rate, the liability under fixed rate shall remain the same. On the other hand, with falling floating rate, the liability of the company to pay interest under fixed rate shall comparatively be higher.

- (d) Currency Risk: This risk mainly affects the organization dealing with foreign exchange as their cash flows changes with the movement in the currency exchange rates. This risk can affect the cash flow adversely or favorably. For example, if the rupee depreciates vis-à-vis US\$, receivables will stand to gain in comparison to the importer who has the liability to pay bill in US\$. The best case we can quote, Infosys (Exporter) and Indian Oil Corporation Ltd. (Importer).
- **(e)** Accounting Risk: For any evaluator, it is very important that the financial records are written as per the acceptable policies and standards. Any deviations from the standard should be highlighted or may result in evaluators reaching to wrong conclusions. Thus, Overstatement/understatement of profits, auditors' qualifications, methods of income recognition, off balance sheet liabilities, etc. can affect the credit ratings of a company.

#### (iii) MANAGEMENT EVALUATION

To evaluate the management of a company, the best way is to see the company's Management Discussion and Analysis (MD&A) Report which every listed company is compulsory required to provide. In the case of unlisted companies also, the credit rating companies can influence the companies to include MD&A in their Annual Report.

Actually, MD&A is the section of a company's annual report in which management provides a summary of the previous year's operations and how the company performed financially. Management also gives an outline for the next year by highlighting the future and some briefs about the new projects to be launched by the company. Also, track record of managerial planning and control system, depth of managerial talent, succession plans, capacity to overcome adverse situations, philosophy and strategies of the management affects the credit rating.

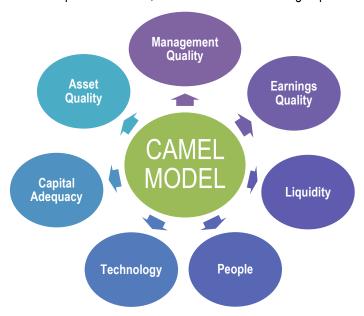
#### **BUSINESS ENVIRONMENT ANALYSIS** (iv)

A business environment analysis includes examining factors which influence from outside of a business. These business environment factors can range from new laws such as Companies Act, 2013; new trends i.e. the latest trends to shop online; and new technology, for instance battery cars which in future can be charged on road itself without the even the need to stop the car. The credit rating agencies would not only consider the factors influencing the specific industry but also consider the macro-economic factors which affect the economy. For e.g.: Likely recession in economy, constant inflation, etc. and would evaluate the impact of the same on the concerned business. After that strategies will be developed to ward off any negative impact that has arisen.



## 7. CAMELS MODEL IN CREDIT RATING

CAMELS is a recognised international rating system that bank supervisory authorities use to rate financial institutions according to six factors represented by its acronym: Capital adequacy, Asset quality, Management, Earnings and Liquidity and Sensitivity. The CAMELS model adopted by the Rating Agencies deserves special attention; it focuses on the following aspects:



1) Capital adequacy - It includes assessing institutions capital adequacy through capital trend analysis. Examiners also check if institutions comply with regulations pertaining to risk-based net-worth requirements. To get a higher rating an institution must comply with interest and dividend rules and practices.

- 2) Asset quality - It covers an institutional loan's quality, which reflects the earnings of the institution. Examiners also check how companies are affected by the fair market value of their investments when compared with bank's book value of investments It also includes size, ageing, and recoverability of monetary assets viz receivables and its linkage with turnover.
- 3) **Management** – It includes the extent of involvement of management personnel, teamwork, authority, timeliness, effectiveness, and appropriateness of decision making along with directing management to achieve corporate goals. Management assessment determines whether an institution can react properly to financial stress.
- 4) Earnings – A bank's ability to produce earnings to be able to sustain its activities, expand and remain competitive. Examiners determine this by assessing the bank's earnings, earnings growth, stability, net margins, net worth level.
- 5) Liquidity - It includes effectiveness of working capital management, corporate policies for stock and creditors, management, and the ability of the corporate to meet their commitment in the short run.
- 6) **Sensitivity** – Sensitivity covers how particular risk exposures can affect institutions. Thus, examiners verify the vulnerability of the institution to internal and external factors.

These six aspects form the core basis for estimating credit worthiness of an issuer which leads to the rating of an instrument. Rating agencies determine the pre-dominance of positive /negative aspects under each of these categories and these are factored in for making the overall rating decision.



## **8. RATING REVISIONS**

Credit Rating is an opinion expressed by a credit rating agency at a given point of time based on the information provided by the company and collected by credit rating agencies. However, the information collected from the company at the time of giving credit rating to it is amenable to change. Therefore, revision of credit rating is required.

To protect the interest of investors, SEBI has mandated that every credit rating agency shall, during the lifetime of the securities rated by it, continuously monitor the rating of such securities, and carry out periodic reviews of all published ratings.

Moreover, India Ratings & Research (A Fitch Group Company) continuously monitors the ratings assigned to a particular instrument. In case of any changes in the ratings so assigned, India Ratings discloses the same through press releases and on its websites.

For instance, CRISIL has updated long term credit rating of Sterlite Technologies Limited to 'CRISIL AA-/Stable from CRISIL A+/Watch Developing' and also its short term credit rating have been upgraded to CRISIL A1+ from CRISIL A1/Watch Developing. Additionally, CRISIL has removed its rating on bank loan facilities and debt instruments of the company from 'Watch with Developing Implications' and it has also withdrawn its rating on 'bonds' at the Company's request, as there is no amount outstanding against the said instrument.

(a) Default rates: Default rates is the number of defaults among rated firms during a specific time period, expressed as percentage of the total number of the firms with outstanding ratings. Default ratings are calculated under each category and over multiple periods. Credit ratings are opinions on the risk of default. Thus, higher the rating, lower should be the probability of the default. An inverse correlation between credit ratings and default probability, called as the test of ordinality, is desirable for credit rating agencies. The following table shows Cumulative Default Rates (CDRs) of CRISIL:

Table: Average CDRs for long-term ratings – monthly static pools

One-two-and three-year CDRs (FY11-21)								
Rating category	Issuer-months	One-year	Two-year	Three-year				
CRISIL AAA	13,149	0.00%	0.00%	0.00%				
CRISIL AA	33,357	0.03%	0.11%	0.22%				
CRISIL A	63,679	0.16%	0.72%	1.39%				
CRISIL BBB	1,95,414	0.75%	2.06%	3.62%				
CRISIL BB	3,18,637	3.50%	7.43%	11.31%				
CRISIL B	2,72,105	8.41%	16.90%	24.03%				
CRISIL C	8,306	20.83%	34.89%	45.24%				
Total	9,04,647							

(Source: CRISIL Ratings)

rated firms have changed over a specified period, expressed as a percentage of the total number of firms with outstanding ratings. It is important that the ratings remain stable over the life of the instrument and thereby enable investors to hold on to instruments invested into for longer periods.

Rating category	Issuer-	CRISIL							
	months	AAA	AA	Α	BBB	BB	В	С	D
CRISIL AAA	13,149	98.60%	1.40%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
CRISIL AA	33,357	1.30%	96.28%	2.26%	0.12%	0.01%	0.00%	0.00%	0.03%
CRISIL A	63,679	0.02%	2.68%	92.56%	4.31%	0.22%	0.03%	0.03%	0.16%
CRISIL BBB	1,95,414	0.00%	0.05%	2.46%	90.90%	5.57%	0.19%	0.07%	0.75%
CRISIL BB	3,18,637	0.00%	0.00%	0.01%	3.73%	88.76%	3.78%	0.23%	3.50%
CRISIL B	2,72,105	0.00%	0.00%	0.00%	0.04%	8.03%	83.07%	0.45%	8.41%
CRISIL C	8,306	0.00%	0.00%	0.01%	0.00%	1.32%	19.40%	58.44%	20.83%
Total	9,04,647								

Table: Average one-year transition rates for long-term ratings (FY11-21) – monthly static pools

Source: CRISIL Ratings

The highlighted diagonals indicate the stability rate under each rating category. Between fiscals 2011 and 2021, 96.28% of 'CRISIL AA' ratings remained in that category, 1.3% were upgraded to 'CRISIL AAA' and 2.4% were downgraded to lower categories.



## 9. CREDIT RATING AGENCIES IN INDIA

Around 1990, Credit Rating Agencies started to be set up in India.



Among them, the most important ones are:

1) Credit Rating Information Services of India Ltd. (CRISIL) – Launched in the pre-reforms era, CRISIL has grown in size and strength over the years to become one of the top five globally rated agencies. It has been India's leading rating agency with over 60% share of the Indian Rating market. It has a tie up with Standard and Poor's (S & P) of USA holding 10% stake in CRISIL. It has also set up CRIS – RISC a subsidiary for providing information and related services over the internet and runs an online news and information service. CRISIL's record of ratings covers 1800 companies and over 3600 specific instruments.

- 2) Investment Information and Credit Rating Agency (ICRA) It began its operations in 1991. Its major shareholders are leading financial institutions and banks. Moody's Investor Services through their Indian subsidiary, Moody's Investment Company India (P) Ltd. is the single largest shareholder. ICRA covers over 2500 instruments.
- Credit Analysis and Research Ltd. (CARE) It was established in 1993. UTI, IDBI and Canara Bank are the major promoters. CARE has over 2500 instruments under its belt and occupies a pivotal position as a rating entity.
- 4) Fitch Ratings India (P) Ltd. The Fitch Group, an internationally recognized statistical rating agency has established its base in India through Fitch Rating India (P) Ltd. as a 100% subsidiary of the parent organization. Its credit rating applies to a variety of corporates / issues and is not limited to governments, structured financial arrangements and debt instruments.
- Onida Individual Credit Rating agency (ONICRA) It is India's first individual credit rating company, established in 1993. There was a dearth of individual credit rating firms in India. ONICRA helps the lending institutions by providing credit ratings for individual customers or loan applicants. Various services offered include Credit rating, employee screening, customer verification, SSI/SME rating, banking information service.

All the agencies as discussed are recognized by SEBI.



### 10. CREDIT RATING AGENCIES ABROAD

### (i) Standard and Poor's (S & P) Ratings

S&P Global Ratings have been in the credit rating business for more than 150 years. They are the world's leading provider of credit ratings. Their credit ratings are important not only for the corporates but also for the government and the financial sector. Their credit rating is basically an expression of opinion about the credit quality of a company, i.e. whether that company can meet its financial obligations in time or not. S & P operates in about 28 countries.

### (ii) Fitch Ratings

Fitch is among the top three credit rating agencies in the world. Fitch Ratings is headquartered in both New York and London. Fitch Ratings' long-term credit ratings are assigned on an alphabetic scale from 'AAA' to 'D'. It was first introduced in 1924 and later adopted and licensed by S&P. It is a global leader in financial information services with operations in more than 30 countries.

### (iii) Moody's Ratings

Moody's is an important contributor to the global financial market providing credit rating services that helps in the building up of a transparent and integrated financial market. The Corporation, which reported revenue of \$3.6 billion in 2016, employs approximately 10,700 people worldwide and maintains a presence in 36 countries.



# 11. CREDIT RATING AGENCIES AND THE US SUB-PRIME CRISIS

Credit rating agencies played a very important role at various stages in the subprime crisis. They have been highly criticized for understating the risk involved with new, complex securities that fueled the United States housing bubble, such as mortgage-backed securities (MBS) and collateralized debt obligations (CDO).

An estimated \$3.2 trillion in loans were made to homeowners with bad credit and undocumented incomes (e.g., subprime, or Alt-A mortgages) between 2002 and 2007. These mortgages could be bundled into MBS and CDO securities that received high ratings and therefore could be sold to global investors. Higher ratings were justified by various credit enhancements including over-collateralization (i.e., pledging collateral in excess of debt issued), credit default insurance, and equity investors willing to bear the first losses.

The critics claim that the rating agencies were the party that performed the alchemy that converted the securities from F-rated to A-rated. The banks could not have done what they did without the complicity of the rating agencies."Without the AAA ratings, demand for these securities would have been considerably less. Bank write downs and losses on these investments totaling \$523 billion as of September 2008.

The ratings of these securities were lucrative business for the rating agencies, accounting for just under half of Moody's total ratings revenue in 2007. Through 2007, ratings companies enjoyed record revenue, profits and share prices. The rating companies earned as much as three times more for grading these complex products than corporate bonds, their traditional business. Rating agencies also competed to rate particular MBS and CDO securities issued by investment banks, which critics argued contributed to lower rating standards.



### 12. LIMITATIONS OF CREDIT RATING

- 1) Rating Changes Ratings given to instruments can change over a period of time. They must be kept under rating watch. Downgrading of an instrument may not be timely enough to keep investors educated over such matters. Ratings do not guarantee any financial strength to the investors.
- 2) Industry Specific rather than Company Specific Downgrades are linked to industry rather than company performance. Agencies give importance to macro aspects and not to microones and over-react to existing conditions which come from optimistic/pessimistic views arising out of up/down turns.
- 3) Cost Benefit Analysis Rating being mandatory, it becomes a must for entities rather than carrying out Cost Benefit Analysis. Rating should be left optional, and the corporate should be free to decide that in the event of self-rating, nothing has been left out.
- 4) Conflict of Interest The rating agency collects fees from the entity it rates leading to a conflict of interest. The rating market being competitive there is a possibility of such conflict entering into the rating system.
- 5) Information provided by Borrower Ratings are always based on the information provided by the borrower or the issuer and this could be subject to inaccuracy.
- **6)** Lack of Accountability The process of credit rating lacks accountability as it is mere expression of opinion. The lack of experienced and skilled staff may not do justice to their task and may lead to inappropriate conclusions.
- 7) Corporate Governance Issues Special attention is paid to:
  - a) Rating agencies get more of its revenues from a single service or group.
  - b) Rating agencies enjoying a dominant market position engaging in aggressive competitive practices by refusing to rate a collateralized/securitized instrument or compelling an issuer to pay for services rendered.
  - c) Greater transparency in the rating process viz. in the disclosure of assumptions leading to a specific public rating.



### 13. CONTEMPORARY ASPECTS IN CREDIT RATING

## 13.1 SEBI telling rating agencies to disclose probability of default for issuers they rate.

According to a SEBI circular, rating companies, in consultation with the regulator, are now creating a uniform probability of default benchmark for each rating category on their website, for one-year, two-year and three-year cumulative default rates, both for the short term and long term.

SEBI also tweaked the methodology to arrive at default rates. It is now based on marginal default methodology. This would ensure that a three-year default rate is greater than the one-year rate.

Tracking the probability of default is a departure from earlier practices and is also a step towards aligning Indian rules with global standards. So far in India, credit decisions have been based only on assigned ratings. Globally, however, credit decisions are based on two more criteria—probability of default and tracking deviation of bond spreads.

Probability of default describes the likelihood of a default over a particular period. It provides the likelihood that a borrower will be unable to meet its debt obligations and is typically used globally in credit analyses and risk management frameworks.

The rating agencies would also be assessed based on probability of default. For an AAA-rated paper, for instance, the probability of default for a 1-year and 2-year paper should be zero; for a three-year paper, a 1% default probability would be accepted.

For AA, it will be zero for a one-year paper; for a two-year paper, the acceptable deviation is 2%. It will be 3% for an A-rated paper.

In line with global standards, the market regulator had also asked rating agencies to track deviation in bond spreads. The idea behind the move was to provide more information to bond subscribers and reduce reliance on assigned ratings.

SEBI has also asked rating agencies to disclose all factors to which ratings are sensitive.

"This is critical for the end-users to understand the factors that would have the potential to impact the creditworthiness of the entity," Sebi said in the circular. (Source: www.livemint.com)

## 13.2 RBI asking credit rating agencies to use artificial intelligence, social media to catch stress signals.

The Reserve Bank of India has asked rating agencies to enhance the quality of monitoring rated entities through means like social media and corporate filings, and not just depend on information

given by companies.

Rating agencies in meeting with RBI top brass, including governor Shaktikanta Das and deputy governors, sought access to Central Repository of Information on Large Credits (CRILC) maintained by central bank.

Banking regulator informed agencies that it would consider plea for access to CRLIC. It advised them to become proactive and not just look at information after critical events have happened. It also emphasized the need to pick up signals and work on them before defaults happen.

There was also nudging from the banking regulator to use intelligent information systems be it machine learning and Artificial Intelligence (AI) that could capture social media alerts and trends useful for rating purposes. This issue may also be discussed at the panel of market regulators comprising SEBI, IRDAI, PFRDA, among others, for improving the quality of oversight.

During the meeting, held through video conference, Credit Rating Agencies (CRAs) presented assessment of the macroeconomic situation and outlook on various sectors including the financial sector. They also shared perspectives on the overall financial health of the entities rated by the CRAs and major factors that affect credit ratings in current context, RBI said in a statement.

RBI also gave feedback on ways to further strengthen the rating processes and engagement with key stakeholders. Another official said rating agencies expressed concerns over rising share of companies in "not cooperating" categories. These entities should be taken off from monitoring after remaining in this category for 6-12 months.

(Source: Business Standard)

### **TEST YOUR KNOWLEDGE**

### **Multiple Choice Questions (MCQs)**

- 1. Which of the following companies is primarily engaged in rating of Individuals
  - (a) ICRA
  - (b) CRISIL
  - (c) ONICRA
  - (d) CARE

2.		ate that measures the changes in the ratings of a company/instrument over a specified and expressed in percentage terms is
	(a)	Transition rate
	(b)	Default rate
	(c)	Recovery rate
	(d)	Negative rate
3.		n out of the following is not a parameter under consideration in the CAMELS model of rating
	(a)	Capital adequacy
	(b)	Financial performance
	(c)	Sensitivity
	(d)	Management
4.	Credi	t rating services might be of least utility to
	(a)	Lender
	(b)	Borrower
	(c)	Customer
	(d)	Government
5.	Credi	t rating is not
	(a)	Important input for investment decisions
	(b)	Dynamic
	(c)	Safeguard against Default
	(d)	Assigned to debt instruments
6.	Which	n among the following is not a problem associated with credit rating agencies in India?
	(a)	Conflict of interest
	(b)	More competition

Poor Rating Quality

Independence of the ratings committee

(c)

(d)

- 7. Which among the following is a solution in addressing the challenges in credit rating agencies?
  - (a) Persistence of conflict of interest
  - (b) Introduction of more players
  - (c) Non rotation of credit rating agencies
  - (d) Unawareness among investors

#### **Theoretical Questions**

- 1. Discuss the various rating services provided by the credit rating agencies.
- 2. Explain the Credit rating process usually practiced in India by Credit Rating Agencies.
- 3. Briefly describe the business risk and the various aspects related to it.
- 4. Explain the CAMELS model of credit rating?
- 5. Write a note on the limitations of credit rating services.

### **ANSWERS/SOLUTIONS**

### **Answer to Multiple Choice Questions**

1.	(c)	2.	(a)	3.	(c)	4.	(c)	5.	(c)
6.	(b)	7.	(b)						

### **Answers to the Theoretical Questions**

- 1. Please refer to paragraph 2
- 2. Please refer to paragraph 5
- **3.** Please refer to paragraph 6
- **4.** Please refer to paragraph 7
- **5.** Please refer to paragraph 12

## **LEASING**

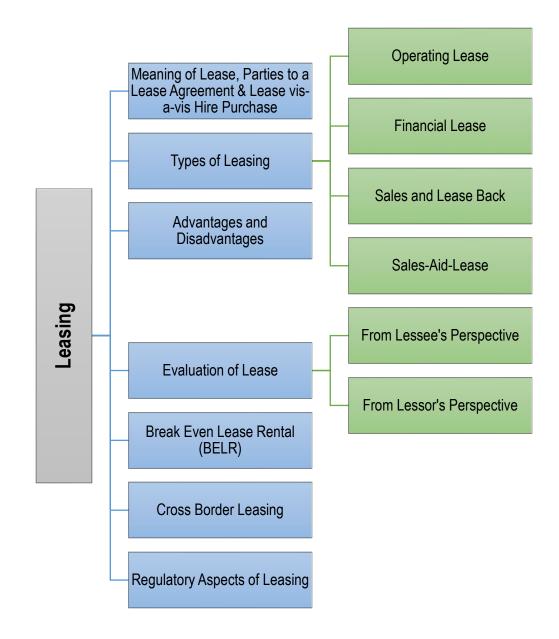


### **LEARNING OUTCOMES**

After going through the chapter student shall be able to understand:

- ☐ Meaning, types, advantages, and disadvantages of Leasing
- Financial evaluation of lease proposal from perspective of Lessee and Lessor
- Break Even Lease Rental (BELR) from Lessee's and Lessor's point of view
- Cross Border Leasing
- Regulatory Aspects of Leasing

# CHAPTER OVERVIEW [



LEASING 14.3



#### 1.1 What is lease

Lease can be defined as a right to control the use of an equipment or capital goods on payment of periodical amount. This may broadly be equated to an instalment credit being extended to the person using the asset by the owner of capital goods with small variation.

### 1.2 Parties to a Lease Agreement

There are two principal parties to any lease transaction as under:

Lessor: Who is actual owner of equipment permitting right to control the use to the other party on payment of periodical amount.

Lessee: Who acquires the right to control the use of equipment on payment of periodical amount.

#### 1.3 Lease vis-à-vis Hire Purchase

Hire-purchase transaction is also almost similar to a lease transaction with the basic difference that the person using the asset on hire-purchase basis is the owner of the asset and full title is transferred to him after he has paid the agreed installments. The asset will be shown in his balance sheet, and he can claim depreciation and other allowances on the asset for computation of tax during the currency of hire-purchase agreement and thereafter.

In a lease transaction, however, the ownership of the equipment always vests with the lessor and lessee only gets the right to control the use of asset. Depreciation and other allowances on the asset will be claimed by the lessor or lessee (this depends on the type of lease) and the asset will also be shown in the balance sheet of the lessor or lessee (this depends on the type of lease).



### 2. TYPES OF LEASING

A lease transaction has many variants relating to the type and nature of leased equipment, amortization period, residual value of equipment, period of leasing, option for termination of lease etc. Various types of leasing transactions are, therefore, operating in the market based on these variants. The different leasing options may, however, be grouped in following categories as under:

(a) Operating Lease: In this type of lease transaction, the right to control the use of an asset is not transferred to the lessee. The primary lease period is short, and the lessor would not be able to realize the full cost of the equipment and other incidental charges thereon during the initial lease

period. Besides the cost of machinery, the lessor also bears insurance, maintenance and repair costs etc. Agreements of operating lease generally provide for an option to the lessee/lessor to terminate the lease after due notice. These agreements may generally be preferred by the lessee in the following circumstances:

- When the long-term suitability of asset is uncertain.
- When the asset is subject to rapid obsolescence.
- When the asset is required for immediate use to tide over a temporary problem.

Computers and other office equipments are the very common assets which form subject matter of many operating lease agreements.

Generally above type of lease is preferred where value of asset is low and can be replaced easily by another asset if the previous asset is not working as desired.

- (b) Financial Lease: As against the temporary nature of an operating lease agreement, financial lease agreement is a long-term arrangement, which is irrevocable during the primary lease period which is generally the full economic life of the leased asset. Under this arrangement, the right to control the use of an asset is transferred to the lessee and lessor is assured to realize the cost of purchasing the leased asset, cost of financing it and other administrative expenses as well as his profit by way of lease rent during the initial (primary) period of leasing itself. Financial lease involves transferring almost all the risks incidental to ownership and benefits arising therefrom except the legal title to the lessee against his irrevocable undertaking to make unconditional payments to the lessor as per agreed schedule. This is a closed end arrangement with no option to lessee to terminate the lease agreement subsequently. In such lease, the lessee must bear insurance, maintenance and other related costs. The choice of asset and its supplier is generally left to the lessee in such transactions. The variants under financial lease are as under:
- Lease with purchase option-where the lessee has the right to purchase the leased assets after the expiry of initial lease period at an agreed price.
- Lease with lessee having residual benefits-where the lessee has the right to share the sale proceeds of the asset after expiry of initial lease period and/or to renew the lease agreement at a lower rental.

In a few cases of financial lease, the lessor may not be a single individual, but a group of equity participants and the group borrows a large amount from financial institutions to purchase the leased asset. Such transaction is called 'Leveraged lease'.

(c) Sales and Lease Back Leasing: Under this arrangement an asset which already exists and is used by the lessee is first sold to the lessor for consideration in cash. The same asset is then

LEASING 14.5

acquired for use under financial lease agreement from the lessor. This is a method of raising funds immediately required by lessee for working capital or other purposes. The lessee continues to make economic use of assets against payment of lease rentals while ownership vests with the lessor.

(d) Sales-Aid-Lease: When the leasing company (lessor) enters an arrangement with the seller, usually manufacturer of equipment, to market the latter's product through its own leasing operations, it is called a 'sales-aid-lease'. The leasing company usually gets a commission on such sales from the manufacturers and increases its profit.

Apart from term loan and other facilities available from financial institutions including banks to a promoter to acquire equipment and other capital goods, the promoter now has an alternative option to acquire economic use of capital assets through leasing. The ultimate decision to either approach a financial institution or a leasing company will, however, depend on the nature of each such transaction.



### 3. ADVANTAGES

- The first and foremost advantage of a lease agreement is its flexibility. The leasing company in most of the cases would be prepared to modify the arrangement to suit the specific requirements of the lessee. The ownership of the leased equipment gives them added confidence to enable them to be more accommodative than the banks and other financial institutions.
- The leasing company may finance 100% cost of the equipment without insisting for any initial disbursement by the lessee, whereas 100% finance is generally never allowed by banks/financial institutions.
- Banks/financial institutions may involve lengthy appraisal and impose stringent terms and conditions to the sanctioned loan. The process is time consuming. In contrast leasing companies may arrange for immediate purchase of equipment on mutually agreeable terms.
- Lengthy and time-consuming documentation procedure is involved for term loans by banks/institutions. The lease agreement is very simple in comparison.
- In short-term lease (operating lease) the lessee is safeguarded against the risk of obsolescence. It is also an ideal method to acquire use of an asset required for a temporary period.
- The use of leased assets does not affect the borrowing capacity of the lessee as lease payment may not require normal lines of credit and are payable from income during the operating period. This neither affects the debt equity ratio or the current ratio of the lessee.

- By employing 'sale and lease back' arrangement, the lessee may overcome a financial crisis
  by immediately arranging cash resources for some emergent application or for working
  capital.
- Piecemeal financing of small equipments is conveniently possible through lease arrangement only as debt financing for such items is impracticable.
- Tax benefits may also sometimes accrue to the lessee depending upon his tax status.
- High value assets can be deployed in the business by taking them on lease rather than arranging for finances for the purchase of such assets.



### 4. DISADVANTAGES

- the lease rentals become payable soon after the acquisition of assets and no moratorium period is permissible as in case of term loans from financial institutions. The lease arrangement may, therefore, not be suitable for setting up of the new projects as it would entail cash outflows even before the project comes into operation.
- The leased assets are purchased by the lessor who is the owner of equipment. The seller's warranties for satisfactory operation of the leased assets may sometimes not be available to lessee.
- Lessor generally obtains credit facilities from banks etc. to purchase the leased equipment
  which are subject to hypothecation charge in favour of the bank. Default in payment by the
  lessor may sometimes result in seizure of assets by banks causing loss to the lessee.
- Lease financing has a very high cost of interest as compared to interest charged on term loans by financial institutions/banks.

Despite all these disadvantages, the flexibility and simplicity offered by lease finance is bound to make it popular. Lease operations will find increasing use in the near future.



### 5. EVALUATION OF LEASE

The most important part in lease financing is its evaluation both from the point of view of Lessee and Lessor.

### 5.1 From Lessee's Perspective

A lease can be evaluated either as an investment decision or as a financing means. If an investment decision has already been made, a firm (lessee) must evaluate whether it will purchase the asset

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equipment or acquire it on lease basis. The lease rentals can be taken as interest on debt. Thus, leasing in essence is alternating source of financing to borrowing. The *lease evaluation thus is debt financing versus lease financing*.

There are three methods of evaluating a leasing proposal viz. Present Value analysis, Internal Rate of Return analysis, and the Bower Herringer Williamson method. These three methods are explained below with the help of an example.

#### Example

A leasing company expects a minimum yield of 10 % on its investment in the leasing business. It proposes to lease a machine costing ₹ 5,00,000 for ten years. Lease payments will be received in advance.

Evaluate the proposal of acquisition of machine from lessee's viewpoint either by borrowing and buying or leasing assuming (a) borrowing rate of 16% (b) the income tax rate 50% (c) the operating costs are the same under lease and 'buy' alternatives (d) depreciation is allowable on straight line basis (e) residual value is 'nil'.

First, we shall determine the Lease Rental to be charged by the Lessor Company:

The lease rental can be determined from the following equation:

₹ 5,00,000 = 
$$x + \frac{x}{(1+0.1)} + \frac{x}{(1+0.1)^2} + \dots \frac{x}{(1+0.1)^9}$$

where x = lease rental per annum

₹ 
$$5.00.000 = x + 5.759x$$

$$x = \frac{\text{₹ } 5,00,000}{6,759} = \text{₹ } 73,976$$

The above solution gives us the present value of one lease rental payment at time 0, plus the present value of nine lease rental payments at the end of each of the next nine years. We can find the present value discount factor for an even stream of cash flows for nine years to the capital recovery factor in D.C.F. analysis, where we recover principal and interest in equal installment during the specified period.

Now we analyze the decision of the Lessee company by following three approaches as follows:

#### 5.1.1 Present Value Analysis (Net Advantage of Leasing)

In this method, the present value of the annual lease payments (tax adjusted) is compared with that

of the annual loan repayments adjusted for tax shield on depreciation and interest, and the alternative which has the lesser cash outflow will be chosen.

Otherwise, we can also define it as Net Advantage of Leasing (NAL) as follows:

NAL = PV of Cost of Owning – PV of Leasing

If NAL is positive, we should opt for leasing otherwise borrowing and buying option.

The discounting rate is the after-tax cost of borrowing i.e. 8% in our example.

Table 1 : Schedule of cash outflows : Leasing alternative

End of year	Lease payment ₹	Tax shield cash outflows ₹	After tax of cash outflows ₹	Present value at 8% ₹
0	73,976	-	73,976	73,976
1-9	73,976	36,988	36,988	2,31,064
10	-	36,988	(36,988)	(17,125)
				<u>2,87,915</u>

#### Table 2 : Schedule of debt repayments

The loan amount is repayable together with the interest at the rate of 16% on loan amount and is repayable in equal installments at the end of each year. The PVAF at the rate of 16% for 0-9\* years is 5.6065, say 5.61 the amount payable will be

Annual Payment = 
$$\frac{₹ 5,00,000}{5.61}$$
 = ₹ 89,127 (rounded)

\* It is assumed that this loan will be repaid with interest in the same period as the term of the lease. This assumption places the loan on an equivalent basis with the lease.

End of year	Interest plus principal payment ₹	Principal amount owing at the end of year	Annual Interest @16% ₹	Principal component ₹
0	89,127	4,10,873	1	89,127
1	89,127	3,87,486	65,740	23,387
2	89,127	3,60,357	61,998	27,129
3	89,127	3,28,887	57,657	31,470
4	89,127	2,92,382	52,622	36,505
5	89,127	2,50,036	46,781	42,346

6	89,127	2,00,915	40,006	49,121
7	89,127	1,43,934	32,146	56,981
8	89,127	77,836	23,029	66,098
9	90,290*	_	<u>12,454</u>	77,836
			<u>3,92,433</u>	<u>5,00,000</u>

<sup>\*</sup>Difference in the last installment is due to rounding off of annuity factor to two decimal points.

Table 3: Schedule of cash outflows in debt financing

End of year	Annual Ioan repayment at 8%	Interest @16%	Depre- ciation	Tax shield	Net cash outflows	Present value of cash flows
	(1)	(2)	(3)	(4)	(5)	(6)
				[(2) + (3) × t]	(1) – (4)	
	₹	₹	₹	₹	₹	₹
0	89,127	-	-	-	89,127	89,127
1	89,127	65,740	50,000	57,870	31,257	28,944
2	89,127	61,998	50,000	55,999	33,128	28,391
3	89,127	57,657	50,000	53,829	35,298	28,027
4	89,127	52,622	50,000	51,311	37,816	27,795
5	89,127	46,781	50,000	48,391	40,736	27,741
6	89,127	40,006	50,000	45,003	44,124	27,798
7	89,127	32,146	50,000	41,073	48,054	28,015
8	89,127	23,029	50,000	36,515	52,612	28,410
9	90,290	12,454	50,000	31,227	59,063	29,532
10	-	_	50,000	25,000	(25,000)	(11,575)
(t = tax rate)						3,32,205

The present value of cash outflows under lease financing is  $\stackrel{?}{_{\sim}}$  2,87,915 while that of debt financing (i.e., owning this asset) is  $\stackrel{?}{_{\sim}}$  3,32,205. Thus, leasing has an advantage over ownership in this case.

Or

NAL = ₹ 3,32,205 - ₹ 2,87,915 = ₹ 44,290

Since NAL is positive leasing is preferable.

#### 5.1.2 Internal rate of return analysis

Under this method there is no need to assume any rate of discount. To this extent, this is different from the former method where the after-tax cost of borrowed capital was used as the rate of discount. The result of this analysis is the after-tax cost of capital explicit in the lease which can be compared with that of the other available sources of finance such as a fresh issue of equity capital, retained earnings or debt. Simply stated, this method seeks to establish the rate at which the lease rentals, net of tax shield on depreciation are equal to the cost of leasing. For the above example, the calculation of this rate i.e., cost of leasing is shown below:

Table 4 : Computation of cash flows for internal rate of return

End of year	Cost of asset	Lease rental	Depreciation	Additional tax shield on lease rental	Net cash outflow
(1)	(2)	(3)	(4)	(5) *	(6) = [(3)–(5)]
	₹	₹	₹	₹	₹
0	5,00,000	73,976	-	-	4,26,024
1	-	73,976	50,000	11,988	(61,988)
2	-	73,976 73,976	50,000	11,988	(61,988)
3	-		50,000	11,988	(61,988)
4	-	73,976	50,000	11,988	(61,988)
5	-	73,976	50,000	11,988	(61,988)
6	-	73,976	50,000	11,988	(61,988)
7	-	73,976	50,000	11,988	(61,988)
8	-	73,976	50,000	11,988	(61,988)
9	-	73,976	50,000	11,988	(61,988)
10	-		50,000	11,988	11,988

t = tax rate at 50%

The reason for taking tax savings on Depreciation and deducting the same from tax savings on lease rentals is to calculate the incremental tax savings if lessee opt for borrowing capital and then investing in machinery.

In the above table, the last column shows the cash flow stream. When we compute the rate of discount that equates the negative cash flows with the positive cash flows, we get, 5.4% (As shown below). This should be compared with the after-tax cost of debt finance i.e., 8%. Since the cost of lease is lower than after tax cost of debt finance, the former should be preferred.

 $<sup>*[(3) - (4)] \</sup>times t$ 

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Let us discount cash flows at 5%, then NPV is

Since the value is negative now, we shall discount at higher rate say at 6%.

Using interpolation formula

= 5% + 
$$\frac{-7226}{-7226-11071}$$
(6% - 5%) = 5% +  $\frac{7226}{18297}$  = 5% + 0.395% = 5.395% say 5.4%

It will be noticed that there is no need to assume any cost of capital for discounting purposes in the IRR method unlike the Present value method. The management understands the IRR better than it does the Present Value. It is, therefore, considered that the IRR method may be preferred to the other methods.

#### 5.1.3 Bower-Herringer-Williamson Method

This method segregates the financial and tax aspects of lease financing. If the operating advantage of a lease is more than its financial disadvantage or vice-versa lease will be preferred.

The procedure of evaluation is briefly as follows:

- 1. Compare the present value of debt with the discounted value of lease payments (gross), the rate of discount being the gross cost of debt capital. The net present value is the financial advantage (or disadvantage).
- 2. Work out the comparative tax benefit during the period and discount it at an appropriate cost of capital. The present value is the operating advantage (or disadvantage) of leasing.
- 3. If the net result is an advantage, select leasing.

For the given example:

	₹
Present value of loan payments	5,00,000
Present value of lease payments discounted at 16%	4,15,005
i.e., ₹ 73,976 × 5.61 (1 + 4.61)	
Financial advantage	84,995

The present value of comparative tax-benefits i.e., the operating advantage (disadvantage) is calculated below:

Table 5 : Operating advantage (disadvantage ) of lease

End of year	Tax shield,on leasing	Tax shield on borrowings	Incremental saving in tax due to leasing	Present value factor at 15%	Present value at 15%
(1)	(2)	(3)	(4) = (2)–(3)	(5)	(6)
	₹	₹	₹		₹
1	36,988	57,870	(20,882)	0.87	(18,167)
2	36,988	55,999	(19,011)	0.76	(14,448)
3	36,988	53,829	(16,841)	0.66	(11,115)
4	36,988	51,311	(14,323)	0.57	(8,164)
5	36,988	48,391	(11,403)	0.50	(5,702)
6	36,988	45,003	(8,015)	0.43	(3,446)
7	36,988	41,073	(4,085)	0.38	(1,552)
8	36,988	36,515	473	0.33	156
9	36,988	31,227	5,761	0.28	1,613
10	36,988	25,000	11,988	0.25	2,997
			Operating disadvantage		(57,828)

**Note:** The rate of 15% is the appropriate cost of capital. Alternatively, 16% can also be taken as an appropriate cost of capital and calculation can be adjusted accordingly.

Since the financial advantage exceeds the operating disadvantage in lease, it is advantageous to go for leasing.

#### 5.1.4 Selection of Discount Rate

While examining the proposals of Lease Vs. Borrowing and Buying the selection of discounting rate for discounting is an issue. Related cash flows can be discounted both at the rate of Post Tax Cost of Debt and Cost of Capital and final decision will be same. However, since leasing is substitute for borrowing option, post-tax cost of debt is a good option for discounting.

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#### 5.2 From Lessor's Perspective

The leasing evaluation from viewpoint of Lessor in fact a Capital Budgeting Decision involving financing of asset out of the funds acquired from various sources involving some costs.

Accordingly, Lessor would like to invest only if it has positive return. In other words, the Lessor would be ready for the financing proposal if the return from it is more than cost of funds involved.

Like traditional capital budgeting decision, the Lessor can accept the proposal of financing on the following methods of evaluation:

- (i) Net Present Value (NPV) Method: The Lessor would accept the proposal of financing the asset if NPV of the same is zero or more. If it is negative, then it would not be accepted as it would not be beneficial to accept the proposal.
- (ii) Internal Rate of Return (IRR) Method: In terms of IRR Method the financing proposal should be accepted only if computed IRR of cash flows is more than the required cut-off rate or Cost of Capital or Weighted Average Cost of Capital (WACC).

Like Capital Budgeting Decision the various types of Cash flows involved in financing decisions are as follows:

- (a) Initial Cash Outflow: Like in Capital Budgeting decision, the initial cash outflow in financing proposal involves the Purchase Price of Machine and incidental expenses thereto.
- **(b)** Annual Cash Flows: The Annual Cash Flow shall be accrued in the form of Annual Lease Rental adjusted considering tax benefits on Depreciation and tax liability. Accordingly, it can be computed as follows:
  - = (Lease Rental Depreciation) X (1 t) + Depreciation
- (c) Terminal Cash Flows: Just like in the terminal year of a project in financing proposal, the terminal cash flow involved is disposal/ salvage value of the asset financed net of Tax Adjustment on Short Term Capital Loss or Gain, if any.

In case of NPV method, the above-mentioned cash flows are discounted at Cost of Capital and in IRR Method, the Cut Off rate is computed from these Cash Flows and compared with Cost of Capital or WACC.



## 6. BREAK EVEN LEASE RENTAL (BELR)

Break-Even Lease Rental can be viewed both from the perspective of lessee as well as the lessor.

## 6.1 Break Even Lease Rental (BELR) from Lessee's point of view

From the point of view of lessee, the BELR is the rental at which the lessee is indifferent between borrowing and buying option and lease financing option. In other words, he can opt for any one option. At this rental the Net Advantage of Leasing (NAL) will be zero. It can also be defined as maximum lease rental the lessee would be willing to pay.

In case if BELR is less than the actual lease rent payable, the lease option would not be viable.

## 6.2 Break Even Lease Rental (BELR) from Lessor's point of View

From the lessor's viewpoint, BELR is the minimum (floor) lease rental, which he should accept. In this case also NAL should be zero. Any lease rent below BELR should not be accepted. It is to be noted that while computing NAL, the over all cost of capital of the firm should be used. The computation of BELR from lessor's point of view can be understood with the help of following illustration.

#### **Illustration**

With the following data available compute, the BELR that ABC Ltd. should charge from lessee.

Cost of Machine	₹ 150 Lakh
Expected Useful Life	5 year
Salvage Value of Machine at the end of 5 years	₹ 10 lakh
Rate of Depreciation (WDV)	25%
$K_{\circ}$	14%
Applicable Tax Rate	35%

Machine will constitute a separate block for depreciation purpose.

#### Solution

Cost of Machine	₹	150,00,000
Less: - PV of Salvage Value (W1)	₹	5,19,400
Less: PV of Tax benefit on Depreciation (W2)	₹	27,34,184
Less: PV of Tax Saving on STCL at the end of 5 year (W3)	₹	6,80,478
	₹	110,65,938

PVIFA for 5 years @14%

3.433

14.15

After tax Break Even Lease Rental = 
$$\frac{1,10,65,938}{3.433}$$
 = 32,23,400

Before Tax BELR = 
$$\frac{32,23,400}{(1-0.35)}$$
 = ₹ 49,59,100

#### **Working Notes**

#### W1

Salvage Value = ₹ 10,00,000

PVF @14% = 0.5194

PV of Salvage Value = ₹5,19,400

#### **W2**

Table showing calculation of PV of Tax Benefit on Depreciation

Year	Opening WDV	Depreciation @ 25%	Closing WDV	PVF @14%	PV
	(₹)	(₹)	(₹)		(₹)
1	150,00,000	37,50,000	11,250,000	0.877	32,88,750
2	112,50,000	28,12,500	84,37,500	0.769	21,62,813
3	84,37,500	21,09,375	63,28,125	0.675	14,23,828
4	63,28,125	15,82,031	47,46,094	0.592	9,36,562
					78,11,953

Tax Benefit on Depreciation = `78,11,953 X 0.35 = `27,34,184

#### **W3**

PV of Tax benefit on Short Term Capital Loss (STCL)

WDV at beginning of 5 year as per above table	47,46,094
Less: Salvage Value	10,00,000
STCL	<u>37,46,094</u>
Tax Benefit	13,11,133
PVF at 14%	0.519
PV of Tax Benefit on STCL	6.80.478



## 7. CROSS-BORDER LEASING

Cross-border leasing can be considered as an alternative to equipment loans in some emerging foreign market, where finance leases are treated as conditional sales agreements. The only difference between international leasing and loans will be the documentation, with down payments, payment streams, and lease-end options the same as offered under Equipment Loans to Foreign Buyers. The various kinds of leasing arrangements available in the U.S. market are not yet feasible in most cases for cross-border leasing transactions. There are, however, attempts to develop more flexible international leasing structures for export financing. Operating leases may be feasible for exports of large equipment with a long economic life relative to the lease term.

Cross-border leasing is a leasing arrangement where lessor and lessee are situated in two different countries. This raises significant additional issues relating to tax avoidance and tax shelters.

Cross-border leasing has been widely used in some European countries, to arbitrage the difference in the tax laws of different countries. Typically, this rests on the premise that, for tax purposes, some assign ownership and the attendant depreciation allowances to the entity that has legal title to an asset, while others assign it to the entity that has most of the use (legal title being only one of several factors taken into account). In these cases, with sufficiently long leases (often 99 years), an asset can end up with two effective owners, one each in different countries, this is often referred to as a double-dip lease.

Often the original owner of an asset is not subject to taxation in any country and therefore not able to claim depreciation. The transaction often involves an entity selling an asset (such as sewerage system or power plant) to an investor (who can claim depreciation), and long-term leasing it right back (often referred to as a sale leaseback).

Leasing techniques had been used for financing purposes for several decades throughout the world. The practice was developed as a method of financing aircraft. Several airlines entities in the early 1970s were unprofitable and very capital intensive. These airlines had no need for the depreciation deductions generated by their aircraft and were significantly more interested in reducing their operating expenses. A very prominent bank purchased aircraft and leased them to the airlines and because the bank was able to claim depreciation deductions for those aircraft, the bank was able to offer lease rates that were significantly lower than the interest payments that airlines would have to pay on an aircraft purchase loan (and most commercial aircraft flying today are operated under a lease). In the United States, this spread into leasing the assets of U.S. entities and governmental entities and eventually evolved into cross-border leasing.

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One significant evolution of the leasing industry involved the collateralization of lease obligations in sale leaseback transactions. For example, an entity would sell an asset to a bank, the bank would require lease payment and give an entity an option to repurchase the asset, the lease obligations were low enough (due to the depreciation deductions the banks were now claiming) so that the entity could pay for the lease obligations and fund the repurchase of the asset by depositing most but not all of the sale proceeds in an interest bearing account. This resulted in the entity having pre-funded all its lease obligations as well as its option to repurchase the asset from the bank for less than the amount received in the initial sale of the asset so the entity would be left with additional cash after having pre-funded all of its lease obligations.

This gave the appearance of entities entering leasing transactions with banks for a fee. By the late 1990s many of such leasing transactions were with entities in Europe. However, in 1999 cross border leasing in the United States was "stopped" by the effective shutdown of LILOs (lease-in/lease outs). LILOs were significantly more complicated than the typical lease where an owner (for example) would lease an asset to a bank and then lease it back from the bank for a shorter period of time.

Cross-border leasing has been in practice as a means of financing infrastructure development in emerging nations. Cross-border leasing may have significant applications in financing infrastructure development in emerging nations – such as rail and air transport equipment, telephone and telecommunications equipment and assets incorporated into power generation and distribution systems and other projects that have predictable revenue streams.

A major objective of cross-border leases is to reduce the overall cost of financing through utilization by the lessor of tax depreciation allowances to reduce its taxable income. The tax savings are passed through to the lessee as a lower cost of finance. The basic prerequisites are relatively high tax rates in the lessor's country liberal depreciation rules and either very flexible or very formalistic rules governing tax ownership.

Other important objectives of cross border leasing include the following:

- The lessor is often able to utilize nonrecourse debt to finance a substantial portion of the equipment cost. The debt is secured by among other things, a mortgage on the equipment and by an assignment of the right to receive payments under the lease.
- Also, depending on the structure, in some countries the lessor can utilize very favourable "leveraged lease" financial accounting treatment for the overall transaction.
- In some countries, it is easier for a lessor to repossess the leased equipment following a lessee default because the lessor is an owner and not a mere secured lender.
- Leasing provides the lessee with 100% financing.

While details may differ from one transaction to another, most leasing structures are essentially similar and follow the "sale-leaseback" pattern. The principal players are (i) one or more equity investors; (ii) a special purpose vehicle formed to acquire and own the equipment and act as the lessor; (iii) one or more lenders, and (iv) the lessee. The lease itself is a "triple-net lease" under which the lessee is responsible for all costs of operation, maintenance, and insurance.

In many transactions, the lessee's fixed payment obligations are prefunded or "defeased" through an up-front payment (in an amount equal to the present value of the fixed payment obligations) to a financial entity that assumes such obligations. The benefits of defeasance include (i) the lessee can lock in its financial savings by making the defeasance payment; (ii) by routing the lease payments through the defeasance entity's jurisdiction, withholding taxes applicable to lease payments in the lessee's jurisdiction may possibly be avoided; (iii) defeasance serves to some extent as a credit enhancement technique for the lessor, and (iv) defeasance may eliminate or reduce currency risk exposure.

For the lessor to obtain the tax benefits associated with equipment leasing, most countries require that the lease be treated as a "true lease" for tax purposes, as opposed to a conditional sale or other secured financing arrangement. This objective generally can be satisfied if the lessor has "tax ownership" of the leased equipment.

Each country applies different rules for determining whether the party acting as lessor under a cross-border lease is the "owner" of the leased asset for tax purposes and is thereby entitled to claim tax allowances. In the United States and some other countries, the principal focus is on whether the lessor possesses substantially all attributes of economic ownership of the leased asset. Other countries such as the United Kingdom and Germany apply more formalistic property law concepts and focus primarily on the location of legal title, although these countries usually also require that the lessor have some attributes of economic ownership or, at least, that the lessee have only a minimal economic interest in the equipment. In Japan, ownership of legal title is essential, but the lessor is only required under current law to obtain nominal incidents of economic ownership (all that is required is that the lease will provide a return of the equity investment plus a pre-tax profit of 1% of equipment cost). While Japan does have detailed tax lease guidelines, these guidelines are designed primarily to circumscribe the tax benefits available to the lessor in a cross-border lease to prevent undue tax deferral; they do not require the lessor to have a significant economic interest in the leased equipment.

The non-tax issues associated with cross-border leasing can best be described by reference to the various structural risks that may arise in each transaction and must be addressed in the documentation.

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## REGULATORY ASPECTS OF LEASING

A Leasing Company is a Non-Banking Financial Company as per the FAQs given in the RBI Website <a href="https://www.rbi.org.in">https://www.rbi.org.in</a>. So, in a way, it must get itself registered with RBI. The reason is that in terms of Section 45-IA of the RBI Act, 1934, no non-banking financial company can commence or carry on business of a non-banking financial institution without obtaining a certificate of registration from the RBI.

Further, as per Section 45-IA of the said Act, no non-banking financial company shall commence or carry on the business of a non-banking financial institution without—

- (a) obtaining a certificate of registration issued under this Chapter; and
- (b) having the net owned fund of twenty-five lakh rupees or such other amount, not exceeding two hundred lakh rupees, as the RBI may, by notification in the Official Gazette, specify.

Meaning of "net owned fund"

It means-

- (a) the aggregate of the paid-up equity capital and free reserves as disclosed in the latest balance-sheet of the company after deducting therefrom— (i) accumulated balance of loss; (ii) deferred revenue expenditure; and (iii) other intangible assets; and
- (b) further reduced by the amounts representing investments of such company in shares of (i) its subsidiaries; (ii) companies in the same group; (iii) all other non-banking financial companies;

Further, an Equipment Leasing Company has been an eligible NBFC for the purpose of acceptance of deposits by NBFCs defined in paragraph 2(1) of the <u>Non-Banking Financial Companies Acceptance of Public Deposits (Reserve Bank) Directions, 1998.</u> As per the said directions, Equipment Leasing (EL) means any company which is a financial institution carrying on as its principal business, the activity of leasing of equipment.

#### **TEST YOUR KNOWLEDGE**

#### **Multiple Choice Questions (MCQs)**

- 1. While analyzing any leasing decision from lessee's standpoint what is exactly meant by Net Advantage of lease?
  - (a) PV of cost of owning
  - (b) PV of cost of leasing PV of cost of owning
  - (c) PV of cost of owning PV of cost of leasing
  - (d) None of the above
- 2. Under which of the following cases, lease should be preferred by lessees.
  - (a) When Net advantage of lease is positive
  - (b) When net advantage of lease is negative
  - (c) When internal rate of return under leasing is higher than post tax cost of debt
  - (d) (a) and (c) option
- 3. An arrangement conveys right to control the use of land to a company for 99 years. After 99 years the land would go back to the government of India in the original condition. In consideration government is asking for a consideration which is equal to the fair value of land at present.

Please select correct answer from the following:

- (a) Operating lease
- (b) Finance lease
- (c) Sale and leaseback
- (d) This is not a lease, this is a purchase transaction
- 4. A company took over an aircraft on lease for 20 years. The payment for lease to the aircraft is done upfront at ₹ 100 crores. The arrangement also provides that in case this aircraft is failed, another aircraft would be substituted without any additional cost.

Additionally, the pilot would also be provided by aircraft company along with free maintenance and services of the same.

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#### Please indicate correct option

- (a) Operating lease Expense of ₹ 5 crores per year would be charged
- (b) Finance Lease ROU to be recognized at 100 crores per year and depreciation of ₹ 5 crores to be charged per year.
- (c) Outright aircraft would be recognized
- (d) None of the above
- 5. Lessor would evaluate a leasing decision based on ..........
  - (a) Computed IRR from leasing is more than WACC
  - (b) Lease rentals should be higher than break even lease rentals
  - (c) NPV should be negative
  - (d) Both a and b
- 6. Under ...... method, lessor enters an arrangement with the seller, to market the latter's product through its own leasing operations.
  - (a) Operating Lease
  - (b) Financial Lease
  - (c) Sales and Lease Back
  - (d) Sales-Aid-Lease
- 7. From lessee's perspective...... method of evaluating a leasing proposal segregates the financial and tax aspects of lease financing.
  - (a) Present Value Analysis
  - (b) Internal rate of return analysis
  - (c) Bower-Herringer-Williamson Method
  - (d) None of the above

#### **Theoretical Questions**

- 1. What do you understand by leasing? Who are the parties to the lease agreement? How do you differentiate it from hire purchase?
- 2. Discuss the advantages and disadvantages of leasing.

- 3. Explain the various aspects of cross border leasing.
- 4. Discuss the regulatory aspects of leasing.

## **ANSWERS/SOLUTIONS**

#### Answers to the MCQ based Questions.

1.	(c)	2.	(a)	3.	(b)	4.	(a)	5.	(d)
6.	(d)	7.	(c)						

#### **Answers to the Theoretical Questions.**

- 1. Please refer paragraph 1
- 2. Please refer paragraph 3 and 4
- 3. Please refer paragraph 7
- 4. Please refer paragraph 8

# **FACTORING**

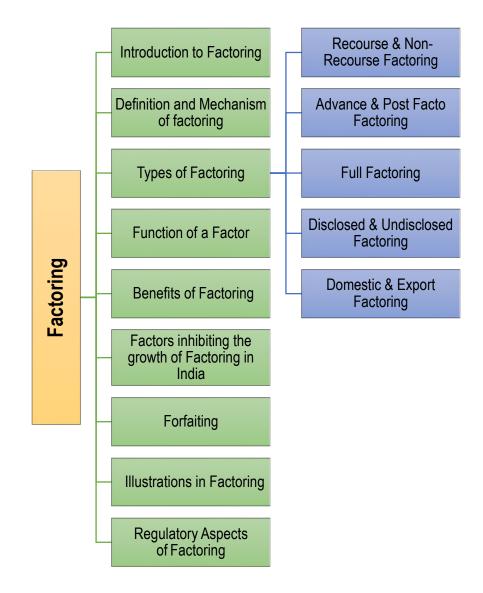


## **LEARNING OUTCOMES**

<b>After</b>	going	through	the	chapter	student	shall	be	able t	o und	derstan	d:
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- Concept, Definition and Mechanism of Factoring
- Types/Forms of Factoring
- Functions of a Factor
- Benefits of Factoring
- ☐ Factors inhibiting the growth of Factoring in India
- Forfaiting
- □ Forfaiting vs Export Factoring
- Regulatory Aspects of Factoring







## 1. INTRODUCTION TO FACTORING

All units' particularly small or medium size units must make considerable efforts to realize the sale proceeds without much success creating functional difficulties for such units.

Many units under small-scale sector have become sick only because of delay/non-realization of their dues from large units. The introduction of factoring services will, therefore, prove very beneficial for such units as it will free the units from the hassles of collecting receivables to enable them to concentrate on product development and marketing.



## 2. DEFINITION AND MECHANISM

#### 2.1 Definition and Concept

Basically, factoring is a kind of financial service in which a business organization sells its Account Receivables to another person, called a factor, at a discount to raise money.

Factoring is different from bill discounting. In bill discounting invoice are discounted at a certain rate to get the funds, whereas the concept of factoring is broader. In the factoring process, the Account Receivables are sold to an outside agency.

**Example -** The seller sold goods on credit and raised the invoice. However, the seller needs immediate money to meet its working capital requirements i.e., meeting day to day expenses of the business. For this purpose, he sold the goods to an outside agency i.e., a factor. The factor pays the required amount to the seller after deducting some amount. So, the entire invoice amount is not paid by the factor. Rather, about 70-80% of the bill amount is paid by the factor. The remaining amount is paid after the factor receives the entire bill amount from the customers (debtors). The factor charges some commission for providing these services.

The study group appointed by the International Institute for the Unification of Private Law (UNIDROIT), Rome, during 1988, recommended, in general terms, the definition of factoring as under:

"Factoring means an arrangement between a factor and his client which includes at least two of the following services to be provided by the factor:

- Finance
- Maintenance of debt
- Collection of debts

- Accounting and reconciliation
- Protection against credit risk".

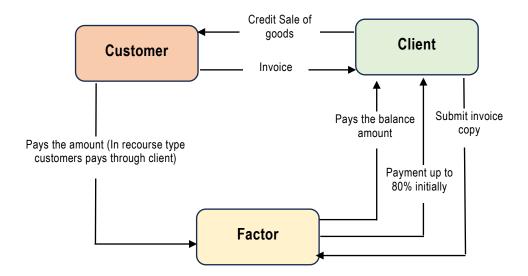
However, the above definition applies only to factoring in relation to supply of goods and services: (i) across national boundaries; (ii) to trade or professional debtors; (iii) when notice of assignment has been given to the debtors. Domestic factoring is not yet a well-defined concept and it has been left to the discretion of legal framework as well as trade usage and convention of the individual country.

In India factoring is undertaken by different bank subsidiaries like SBI Factors and Commercial Services Ltd. Promoted by SBI and Canara Bank Factors Ltd. promoted jointly by Canara Bank, Andhra Bank and SIDBI.

## 2.2 Mechanism of Factoring

In a factoring transaction, there are three parties – the factor, the client, and the customers of the client. The client is the person who is availing the factoring service. The factor provides the factoring services and the customers are the persons who purchases the goods and services on credit.

The mechanism of the factoring process has been depicted in the following diagram.



The following steps are involved in the process of factoring as shown in the above diagram:

- (i) Customer places an order with the client for purchase of goods and/or services on credit.
- (ii) On the basis of agreement, the client delivers the goods and sends the invoice to customers.

- (iii) The client then assigns the invoice to the factor. This is generally called, "Call sale of book debts by the client firm to the factor".
- (iv) The factor, then, makes prepayment up to 80 per cent of the invoice value to the client.
- (v) The client pays interest on advances of amount received until the cash is collected from customer.
- (vi) The factor maintains accounts receivable of the client and sends periodical statements to the customer to accelerate the collection.
- (vii) On the due date, the factor collects the invoice amount from the customer.
- (viii) After that, the factor releases the remaining amount to the client after adjusting his commission/fees.

Aforesaid steps can be explained with the help of an example:

Suppose the Customer/Client has raised an order with an invoice value of ₹ 5,00,000; basis that order business delivered the product on credit basis for 90 days. After this, the business sells the invoice to a factoring company to get at least 80 per cent realized value i.e., ₹ 4,00,000.

This realized value can be used for further business expansion or any product development.

In this Debtor financing process, factoring charges also played a vital role in providing the services. The following factoring charges are levied:

- Finance charges Computed on the prepayment outstanding in the client's a/c at monthly intervals. Finance charges are only for financing that has been availed by the client. These charges are like interest levied on the cash credit facilities in a bank.
- Service fee It is a nominal charge at monthly intervals to cover the cost services namely collection, MIS reports, sales ledger management, other administrative overheads etc. Service fee is determined on the basis of total gross value, no. of customers, degree of credit risk etc.



## 3. TYPES/FORMS OF FACTORING

Depending upon the features built into the factoring arrangement to cater to the varying needs of trade/citizens, there can be different kinds of factoring:

(i) Recourse and Non-recourse Factoring: Under a recourse factoring arrangement, the factor has recourse to the client (firm) if the debt purchased/receivable factored turns out to be irrecoverable. In other words, the factor does not assume credit risks associated with the receivables.

In the case of non-recourse factoring, the factor does not have the right to recourse. The loss arising out of irrecoverable receivables is borne by the factor, as a compensation for which he charges a higher commission after considering the probability of default, credit worthiness etc However administrative support from client is still required by factor to recover the amounts.

(ii) Advance and Post facto Factoring: In advance factoring, the factor paid a pre specified portion, ranging between three-fourths to nine tenths of the factored receivables in advance, the balance being paid upon collection/on the guaranteed payment date. A drawing limit, as a prepayment, is made available by the factor to the client as soon as the factored debts are approved/the invoices are accounted for. The client must pay interest (discount) on the advance/repayment between the date of such payment and the date of actual collection from the customers/or the guaranteed payment date, determined on the basis of the prevailing short-term rate, the financial standing of the client and the volume of the turnover.

In the case of post facto factoring, the amounts are collected by factors from the customer before the original credit period. The same is then passed on to the client as factoring amounts. However, for early payment, customer gets a discount from factor which is later charged back to the client alongwith some spread because of commission.

- (iii) Full Factoring: This is the most comprehensive form of factoring combining the features of all the factoring services, especially those of non-recourse and advance factoring. It is also known as Old Line Factoring.
- **(iv)** Disclosed and Undisclosed Factoring: In Disclosed Factoring, the name of the factor is disclosed in the invoice by the supplier-manufacturer of the goods asking the buyer to make payment to the factor.

However, in Undisclosed Factoring, the name of the factor is not disclosed in the invoice although the factor maintains the sales ledger of the supplier-manufacturer. The entire realization of the business transaction is done in the name of the supplier company but all control remains with the factor.

- (v) Domestic and Export/Cross Border Factoring: If the three parties involved, namely, customer (buyer), client, (seller-supplier) and factor (financial intermediary) are domiciled in the same country then it is known as domestic factoring. There are usually four parties involved in a cross-border factoring transaction. They are:
- a) Exporter (client)
- b) Importer (customer)
- c) Export factor
- d) Import Factor

It is also known as a two-factor system.



## 4. FUNCTIONS OF A FACTOR

The main functions of a factor could be classified into five categories:

- Maintenance/administration of sales ledger: The factor maintains the clients' sales ledgers. On transacting a sales deal, an invoice is sent to the customer and a copy of the same is sent to the factor. The factor also gives periodic reports to the client.
- Collection facility: The factor undertakes to collect the receivables on behalf of the client
  relieving him of the problems involved in collection and enables him to concentrate on other
  important functional areas of the business. It also enables the client to reduce the cost of
  collection by way of savings in manpower, time, and efforts.
- Financing Trade Debts: The unique feature of factoring is that a factor purchases the book debts of its clients at a price and the debts are assigned in favour of factor who is usually willing to grant advances to the extent of 80% of the assigned debts.
- **Credit Control and Credit Protection:** Assumptions of credit risk is one of the most important functions of the factor. This service is provided where debts are factored without recourse. The factor in consultation with the client fixes credit limits for approved customers.
- Advisory Services: By virtue of their specialized knowledge and experience in finance and credit dealings and access to extensive credit information; factors can provide the following information services to the clients:
  - (i) Customer's perception of the client's products, change in marketing strategies, emerging trends etc.

- (ii) Audit of the procedures followed for invoicing, delivery and dealing with sales returns.
- (iii) Introduction to the credit department of bank/subsidiaries of banks engaged in leasing, hire-purchase, merchant banking.



### 5. BENEFITS OF FACTORING

The benefits of factoring have been discussed as follows:

- Factoring provides immediate cash flow in the form of 80% of the invoice value, which helps
  in building the liquidity position of the client. Also, this proportion of finance is higher than
  bank finance against credit sales.
- It also plays an important role in a client's working capital finance.
- The cash realized by receiving an advance amount from the factor can be used to accelerate the production cycle.
- The client need not have to spend time on sales ledger maintenance, follow-up and collection
  of receivables as this can be done by factoring company who buys such receivables. This
  helps in saving the precious time of the client as it can concentrate on its core activities such
  as production, marketing etc.
- This provides a comprehensive credit control system which helps in assessing the quality of debtors and monitoring their financial health.

The factoring process helps in reducing the average receivables collection period. As a result, the total operating cycle time of the client is also reduced. This will ultimately lead to efficient working capital management.



# 6. FACTORS INHIBITING THE GROWTH OF FACTORING IN INDIA

The factoring industry has grown rapidly around the world. More than one lakh businesses are currently using factoring to settle their trade transactions. However, the factoring market in India is minuscule.

There are various factors which inhibits the overall growth of factoring markets in India which are described as below:

- (i) Lack of credit appraisal system and authentic client database have restricted the growth model of factoring and its arrangements.
- (ii) Higher stamp duty while assigning the invoice to the factor will increase the cost of the client which leads to reduction in factoring arrangements.

To remove the above limitations and expand the factoring market in India, the following can be suggested:

- (i) Do away with stamp duty or at least reduce it.
- (ii) Incorporate a separate company which will give a true and fair credit appraisal report, and which will cover all aspect of client's information and their accounts.
- (iii) Factoring companies should expand their network and branches especially to those localities where small scale units are located.
- (iv) Workshop and seminars should be organized by factoring companies to enhance awareness and usefulness of the factoring process.



## 7. FORFAITING

Forfaiting is a form of financing of receivables pertaining to international trade. It denotes the purchase of trade bills/promissory notes by a bank/financial institution without recourse to the seller. The purchase is in the form of discounting the documents covering the entire risk of non-payment in collection. All risk and collection problems are fully the responsibility of the purchaser (forfaiter) who pays cash to the seller after discounting the bills/notes.

#### Difference between Forfaiting vs Export Factoring

- (a) A forfaiter discounts the entire value of the note/bill. In a factoring arrangement the extent of financing available is 75-80%.
- (b) The forfaiter's decision to provide financing depends upon the financing standing of the availing bank. On the other hand, in a factoring deal the export factor bases his credit decision on the credit standards of the exporter.
- (c) Forfaiting is a pure financial agreement while factoring includes ledger administration as well as collection.
- (d) Factoring is a short-term financial deal. Forfaiting spreads over 3-5 years.



## 8. SOME ILLUSTRATIONS IN FACTORING

#### Illustration 1

A Ltd. has annual credit sales of ₹ 219 lakh and its average collection period is 50 days. The experience indicates that bad debt losses are around 2% of credit sales. The factoring is expected to save ₹ 2 lakh in administration costs and to eliminate all bad debt losses. The factor has agreed to advance 80% of the receivables at 15% p.a. Compute the net factoring cost if factoring commission is 2%.

#### Solution

Average receivable = (₹ 219lakh/365) X 50 = ₹ 30 lakh

Factoring Commission = 2% on ₹ 30 lakh = ₹ 0.6 lakh

Amount available for advance = 80% of ₹ 30 lakh – Factoring commission (₹ 0.6 lakh) = ₹ 23.4 lakh.

The factor will actually remit the advance net of interest for 50 days.

The annual rate of interest is 15% and so rate of interest for 50 days =  $(15/365) \times 50 = 2.05\%$ 

Interest for 50 days on ₹ 23.4 lakh = 2.05% on ₹ 23.4 lakh = ₹ 0.48 lakh

The advance remitted to client = ₹ 23.4 lakh – ₹ 0.48 lakh= ₹ 22.92 lakh

Factoring cost for 50 days = Factoring commission + Interest

= ₹ 0.6 lakh + ₹ 0.48 lakh = ₹ 1.08 lakh

Factoring cost for year = (₹ 1.08 lakh) x (365/50) = ₹ 7.884 lakh

Net Factoring Cost

Particulars		₹ lakh
Factoring cost per year		7.884
Less: Costs saved per year		
Bad Debt = 2% on ₹ 219 lakh	4.38	
Administration cost saved	2.00	6.380
Net Factoring cost per year		1.504
Advance		22.920
Net Factoring cost per year (%) = (1.504/22.92) X 100		6.56%

#### Illustration 2

A Ltd. has total sales of ₹ 3.2 crores and its average collection period is 90 days. The past experience indicates that bad-debt losses are 1.5% on Sales. The expenditure incurred by the firm in administering its receivable collection efforts is ₹ 5,00,000. A factor is prepared to buy the firm's receivables by charging 2% Commission. The factor will pay advance on receivables to the firm at an interest rate of 18% p.a. after withholding 10% as reserve.

Calculate the effective cost of factoring to the Firm.

#### **Solution**

	₹
Average level of Receivables = 3,20,00,000 × 90/360	80,00,000
Factoring commission = $80,00,000 \times 2/100$	1,60,000
Factoring reserve = 80,00,000 × 10/100	8,00,000
Amount available for advance =₹ 80,00,000 - (1,60,000 + 8,00,000)	70,40,000
Factor will deduct his interest @ 18%:-	
Interest = ₹ 70,40,000 × 18 × 90	= ₹ 3,16,800
100 × 360	

∴ Advance to be paid = ₹ 70,40,000 - ₹ 3,16,800 = ₹ 67,23,200

Annual Cost of Factoring to the Firm:	₹
Factoring commission (₹ 1,60,000 × 360/90)	6,40,000
Interest charges (₹ 3,16,800 × 360/90)	12,67,200
Total	<u>19,07,200</u>

Firm's Savings on taking Factoring Service:	₹
Cost of credit administration saved	5,00,000
Cost of Bad Debts (₹ 3,20,00,000 × 1.5/100) avoided	<u>4,80,000</u>
Total	<u>9,80,000</u>
Net cost to the Firm (₹ 19,07,200 – ₹ 9,80,000)	<u>9,27,200</u>
Effective rate of interest to the firm = ₹9,27,200×100	
67,23,200	13.79%

**Note:** The number of days in a year has been assumed to be 360 days.

#### Illustration 3

A Ltd is in the factoring business and is currently evaluating a proposal for entering a factoring decision with FMCG company as a client. FMCG company operates at 30 days' standard credit with an average delay of 5 days in the first half of the year and 10 days in second half of the year. The business size is 40% in the first half versus 60% in the second half.

There is a probability of default @ 2% of the average receivables outstanding. The annual turnover is around 1000 crores.

The weighted average cost of capital for arranging the funds by A ltd. is around 12% p.a. A ltd. expects around 10% markup on the cost of factoring proposal to cover for profits and other overheads.

Please compute all in one quote to be shared by A ltd. to FMCG company considering above facts?

Solution

Average Credit period = 30 days + (5x40% + 10x60%) = 38 days

Average Credit outstanding = (1000 cr /365 days) x 38 days = Rs 104.1096 crores

Default receivables = 2%x104.1096 = 2.082192

Cost of capital basis the capital structure of A ltd = 12%x104.1096 = Rs 12.49315 crores

Overall cost of factoring = Rs 14.57534 crores (2.082192 + 12.49315)

After markup = 14.57534\*1.1 = Rs 16.03288 crores

All in one quote = 16.03288/104.1096 = 15.4%

Hence A ltd can quote a minimum of 15.4% for factoring.



## 9. REGULATORY ASPECTS OF FACTORING

In India, Regulatory Aspects of Factoring can be referred from Factoring Regulation Act, 2011 and Non-Banking Financial Company - Factors (Reserve Bank) Directions, 2012.

## 9.1 Provisions in brief from the Factoring Regulation Act, 2011

(i) No factor shall commence or carry on the factoring business unless it obtains a certificate of registration from the Reserve Bank to commence or carry on the factoring business under this Act.

For the removal of doubts, it is hereby clarified that a non-banking financial company engaged in factoring business shall be treated as engaged in factoring business as its "principal business" if it

fulfils the following conditions, namely: —

- (a) If its financial assets in the factoring business are more than fifty per cent. of its total assets or such per cent. as may be stipulated by the Reserve Bank; and
- (b) If its income from the factoring business is more than fifty per cent. of the gross income or such per cent. as may be stipulated by the Reserve Bank.
- (ii) The Reserve Bank may, if it considers necessary in the interest of business enterprises availing factoring services or in the interest of factors or interest of other stake holders give directions to the factors either generally or to any factor or group of factors in respect of any matters relating to or connected with the factoring business undertaken by such factors. If any factor fails to comply with any direction given by the Reserve Bank, the Reserve Bank may prohibit such factor from undertaking the factoring business.

The person who must receive any amount from the debtors or who is owner of any receivable shall, at the time of entering an agreement with the factor disclose to the factor any defences and right of set off that may be available to the debtor. Upon entering the agreement, any security created to secure the payment of receivable shall vest in the factor and he is eligible to exercise all the rights and remedies whether by way of damages or otherwise which would otherwise be available to the owner of receivable.

Before demanding any payment from the debtors, the factor shall give proper notice to him. After receiving the notice, the debtors shall make the required payment to the factor, and this will fully discharge the liability of the debtor.

In case no notice for payment is received by the debtor, and he makes the required payment to the owner of receivable, such amount shall be paid forthwith by him to the factor. So, the owner of the receivable acts as a trustee in this situation and he holds the amount received from the debtor in trust for the factor.

If any modification in the original contract takes place between the owner of receivable and the factor, will not be binding against the factor unless he consents to it. If the owner of receivable commits any breach of original contract with debtor, the debtor can claim any loss or damage caused to him in consequence of that.

Every factor shall for the purpose of registration, file the particulars of every transaction of assignment of receivables to the Central Registry to be set up under Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002 within 30 days from the date of such assignment or from the date of establishment of such registry.

# 9.2 As per the Non-Banking Financial Company - Factors (Reserve Bank) Directions, 2012

Following additional points may be noted with relation to factoring in this regard:

- (i) An entity not registered with the Reserve Bank of India (RBI) may conduct the business of factoring if it is an entity mentioned in Section 5 of the Act i.e., a bank or any corporation established under an Act of Parliament or State Legislature, or a Government Company as defined under section 617 of the Companies Act, 1956.
- (ii) Every company seeking registration as NBFC-Factor shall have a minimum Net Owned Fund (NOF) of ₹ 5 crore. Existing companies seeking registration as NBFC-Factor but do not fulfil the NOF criterion of ₹ 5 crore may approach the Bank for time to comply with the requirement.
- (iii) A new company that is granted Certificate of Registration (CoR) by the RBI as NBFC-Factor shall commence business within six months from the date of grant of CoR by the RBI.
- (iv) An NBFC-Factor shall ensure that its financial assets in the factoring business constitute at least 50 per cent of its total assets and the income derived from the factoring business is not less than 50 per cent of its gross income.

## **TEST YOUR KNOWLEDGE**

## **Multiple Choice Questions (MCQs)**

- (1) Which of the following is not referred to as factoring:
  - (a) Bill discounting
  - (b) Selling of a trade receivable on recourse basis
  - (c) Selling of a trade receivable on non-recourse basis
  - (d) Arranging working capital through selling of trade receivables
- (2) State which of the following statement is false?
  - (a) The factor purchases entire trade receivable and pays 100% of the invoice amount upfront
  - (b) The factor purchases trade receivables from client
  - (c) The client has trade receivable from customer
  - (d) The factor pays amounts to client after purchase of trade receivables

- (3) In the case of non-recourse factoring, the credit risk in terms of non-recoverability is borne by which party?
  - (a) Client
  - (b) Factor
  - (c) Customer
  - (d) Bank
- (4) Which of the following characteristics does not create a distinction in forfaiting from factoring?
  - (a) Financing
  - (b) Credit worthiness
  - (c) Legal administration of the dues
  - (d) Financing of receivables
- (5) Which are certain factors specific to Indian context which are currently challenges to the factoring market?
  - (a) Lack of credit appraisal system
  - (b) Stamp duty payable on factoring
  - (c) Both a and b
  - (d) Short term financing deal.
- (6) Which form of factoring is known as "Old Line Factoring"?
  - (a) Recourse Factoring
  - (b) Non-Recourse Factoring
  - (c) Full Factoring
  - (d) Cross Border Factoring
- (7) Identify the incorrect statement.
  - (a) A forfaiter discounts the entire value of the note/bill. In a factoring arrangement, the extent of financing available is 75%-80%.
  - (b) The forfaiter's decision to provide financing depends upon the financing standing of the availing bank. On the other hand, in a factoring deal the export factor bases his credit decision on the credit standard of the exporter.

- (c) Factoring is a pure financial arrangement while forfaiting includes ledger administration as well as collections.
- (d) Factoring is a short-term financial deal. Forfaiting spreads over 3-5 years.
- (8) Which form of factoring is known as "Two Factor System"?
  - (a) Recourse Factoring
  - (b) Non-Recourse Factoring
  - (c) Full Factoring
  - (d) Cross Border Factoring

#### **Theoretical Questions**

- 1. Briefly explain the mechanism of factoring.
- 2. Discuss the various types of factoring.
- 3. What are the functions of factoring?
- 4. Explain the primary reasons inhibiting the growth of factoring in India.
- 5. What is forfaiting? How can you differentiate it from export factoring?

### **ANSWERS/SOLUTIONS**

## Answers to the MCQ based Questions.

1.	(a)	2.	(a)	3.	(b)	4.	(d)	5.	(c)
6.	(d)	7.	(c)	8	(c)				

#### **Answers to the Theoretical Questions**

- **1.** Refer to the paragraph 2.2
- **2.** Refer to the paragraph 3
- 3. Refer to the paragraph 4
- 4. Refer to the paragraph 6
- **5.** Refer to the paragraph 7

# SEBI REGULATIONS – COMPLIANCES IN CAPITAL MARKETS



## **LEARNING OUTCOMES**

## After going through the chapter student shall be able to understand:

- SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2018
- SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015
- SEBI (Substantial Acquisition of Shares and Takeover) Regulations, 2011
- SEBI (Buy-back of Securities) Regulations, 2018
- SEBI (Prohibition of Insider Trading) Regulations, 2015

# CHAPTER OVERVIEW [

SEBI (Issue of Capital and Disclosure Requirements)
Regulations, 2018

SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 SEBI (Substantial Acquistion of Shares and Takeover) Regulations, 2011

SEBI (Buy-back of Securities) Regulations, 2018

SEBI (Prohibition of Insider Trading) Regulations, 2015

# (G

# 1. SEBI (ISSUE OF CAPITAL AND DISCLOSURE REQUIREMENTS) REGULATIONS, 2018

#### 1.1 Introduction

The Securities and Exchange Board of India (SEBI), as the apex regulatory authority for the securities market in the country, has consistently played a pivotal role in formulating and implementing regulations that govern various aspects of capital markets. Among these, the "Issue of Capital and Disclosure Requirements" (ICDR) Regulations of 2018 hold special significance. These regulations serve as a comprehensive framework, providing guidelines and standards for companies when issuing capital and ensuring full disclosure to investors, fostering transparency and investor protection in the Indian capital market.

## 1.2 Key Objectives

**(i) Ensuring Investor Protection**: One of the primary objectives of the SEBI (ICDR) Regulations, 2018, is to safeguard the interests of investors by establishing a robust framework that governs the issuance of capital. This involves setting clear norms to protect investors from unfair practices and inadequate disclosures.

- (ii) **Promoting Market Integrity**: The regulations aim to uphold the integrity of the securities market by setting standards for the issuance of capital, ensuring that the process is fair, transparent, and in compliance with regulatory norms.
- (iii) Facilitating Capital Raising: By providing a structured framework, the regulations facilitate capital raising by companies through various instruments such as Initial Public Offerings (IPOs), rights issues, and preferential allotments, thereby contributing to the development and growth of the capital market.

# 1.3 Major compliances under SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2018

- I. Appointment of Lead Managers, Other Intermediaries and Compliance Officer
  - 1. The issuer shall appoint one or more merchant bankers, which are registered with the Board, as lead manager(s) to the issue.
  - Where the issue is managed by more than one lead manager, the rights, obligations, and responsibilities, relating interalia to disclosures, allotment, refund, and underwriting obligations, if any, of each lead manager shall be predetermined and be disclosed in the draft offer document and the offer document as specified in Schedule I.
  - 3. At least one lead manager to the issue shall not be an associate (as defined under the Securities and Exchange Board of India (Merchant Bankers) Regulations, 1992) of the issuer and if any of the lead manager is an associate of the issuer, it shall disclose itself as an associate of the issuer and its role shall be limited to marketing of the issue.
  - 4. The issuer shall, in consultation with the lead manager(s), appoint other intermediaries which are registered with the Board after the lead manager(s) have independently assessed the capability of other intermediaries to carry out their obligations.
  - 5. The issuer shall enter into an agreement with the lead manager(s) in the format specified in Schedule II and enter into agreements with other intermediaries as required under the respective regulations applicable to the intermediary concerned.
    - Provided that such agreements may include such other clauses as the issuer and the intermediaries may deem fit without diminishing or limiting in any way the liabilities and obligations of the lead manager(s), other intermediaries and the issuer under the Act, the Companies Act, 2013, the Securities Contracts (Regulation) Act, 1956, the

Depositories Act, 1996 and the rules and regulations made thereunder or any statutory modification or statutory enactment thereof.

Provided further that in case of Application supported by Blocked Amount (ASBA) process, the issuer shall take cognizance of the deemed agreement of the issuer with the self-certified syndicate banks.

- 6. The issuer shall, in case of an issue made through the book building process, appoint syndicate member(s) and in the case of any other issue, appoint bankers to issue, at centres in the manner specified in Schedule XII.
- 7. The issuer shall appoint a registrar to the issue, registered with the Board, which has connectivity with all the depositories.
  - Provided that if the issuer itself is a registrar, it shall not appoint itself as registrar to the issue. Provided further that the lead manager shall not act as a registrar to the issue in which it is also handling the post-issue responsibilities.
- 8. The issuer shall appoint a compliance officer who shall be responsible for monitoring the compliance of the securities laws and for redressal of investors' grievances.

#### II. Disclosures in and Filing of Offer Documents

#### A. Disclosures in the draft offer document and offer document.

- 1. The draft offer document and offer document shall contain all material disclosures which are true and adequate to enable the applicants to take an informed investment decision.
- 2. Without prejudice to the generality of sub-regulation (1), the red-herring prospectus, and prospectus shall contain:
  - (a) disclosures specified in the Companies Act, 2013 and;
  - (b) disclosures specified in Part A of Schedule VI.
- 3. The lead manager(s) shall exercise due diligence and satisfy themselves about all aspects of the issue including the veracity and adequacy of disclosure in the draft offer document and the offer document.
- 4. The lead manager(s) shall call upon the issuer, its promoters, and its directors or in case of an offer for sale, also the selling shareholders, to fulfil their obligations as disclosed by them in the draft offer document and the offer document and as required in terms of these regulations.

5. The lead manager(s)shall ensure that the information contained in the draft offer document and offer document and the particulars as per restated audited financial statements in the offer document are not more than six months old from the issue opening date.

#### B. Filing of the Draft Offer Document and Offer Document

- 1. Prior to making an initial public offer, the issuer shall file three copies of the draft offer document with the Board, in accordance with Schedule IV, along with fees as specified in Schedule III, through the lead manager(s).
- 2. The lead manager(s) shall submit the following to the Board along with the draft offer document:
  - a certificate, confirming that an agreement has been entered into between the issuer and the lead manager(s);
  - ❖ a due diligence certificate as per Form A of Schedule V;
  - in case of an issue of convertible debt instrument, a due diligence certificate from the debenture trustee as per Form B of Schedule V.
- 3. The issuer shall also file the draft offer document with the stock exchange(s)where the specified securities are proposed to be listed, and submit to the stock exchange(s), the following;
  - Permanent Account Number.
  - Bank account number and
  - Passport number of its promoters where they are individuals, and
  - Permanent Account Number,
  - bank account number,
  - company registration number or equivalent and the address of the Registrar of Companies with which the promoter is registered, where the promoter is a body corporate.
- 4. The Board may specify changes or issue observations, if any, on the draft offer document within thirty days from the later of the following dates:
  - the date of receipt of the draft offer document under sub-regulation (1); or

- the date of receipt of satisfactory reply from the lead manager(s), where the Board has sought any clarification or additional information from them; or
- the date of receipt of clarification or information from any regulator or agency, where the Board has sought any clarification or information from such regulator or agency; or
- the date of receipt of a copy of in-principle approval letter issued by the stock exchange(s).
- 5. If the Board specifies any changes or issues observations on the draft offer document, the issuer and lead manager(s) shall carry out such changes in the draft offer document and shall submit to the Board an updated draft offer document complying with the observations issued by the Board and highlighting all changes made in the draft offer document and before filing the offer documents with the Registrar of Companies or an appropriate authority, as applicable.
- 6. If there are any changes in the draft offer document in relation to the matters specified in Schedule XVI, an updated offer document or a fresh draft offer document, as the case may be, shall be filed with the Board along with fees specified in Schedule III.
- 7. Copy of the offer documents shall also be filed with the Board and the stock exchange(s)through the lead manager(s) promptly after filing the offer documents with Registrar of Companies.
- 8. The draft offer document and the offer document shall also be furnished to the Board in a soft copy.
- 9. The lead manager(s) shall submit the following documents to the Board after issuance of observations by the Board or after expiry of the period stipulated in sub-regulation (4) of Regulation 25 if the Board has not issued observations:
  - a statement certifying that all changes, suggestions and observations made by the Board have been incorporated in the offer document;
  - a due diligence certificate as per Form C of Schedule Vat the time of filing of the offer document;

- a copy of the resolution passed by the board of directors of the issuer for allotting specified securities to promoter(s) towards amount received against promoters' contribution, before opening of the issue;
- a certificate from a statutory auditor, before opening of the issue, certifying that promoters' contribution has been received in accordance with these regulations, accompanying therewith the names and addresses of the promoters who have contributed to the promoters' contribution and the amount paid and credited to the issuer's bank account by each of them towards such contribution;
- a due diligence certificate as per Form D of Schedule Vin the event the issuer has made a disclosure of any material development by issuing a public notice pursuant to para 4 of Schedule IX.

#### C. Draft Offer Document and Offer Document to be available to the Public

- The draft offer document filed with the Board shall be made public for comments, if any, for a period of at least twenty-one days from the date of filing, by hosting it on the websites of
  - Issuer;
  - the Board;
  - Stock Exchanges where specified securities are proposed to be listed and lead manager(s) associated with the issue.
- 2. The issuer shall, within two days of filing the draft offer document with the Board, make a public announcement in;
  - one English national daily newspaper with wide circulation,
  - one Hindi national daily newspaper with wide circulation and
  - one Regional language newspaper with wide circulation at the place where the Registered Office of the issuer is situated;

disclosing the fact of filing of the draft offer document with the Board and inviting the public to provide their comments to the Board, the issuer or the lead manager(s) in respect of the disclosures made in the draft offer document.

3. The lead manager(s) shall, after expiry of the period stipulated in sub-regulation (1), file with the Board, details of the comments received by them or the issuer

from the public, on the draft offer document, during that period and the consequential changes, if any, that are required to be made in the draft offer document.

#### III. Issuance Conditions and Procedures

- Minimum offer to public: The minimum offer to the public shall be subject to the provisions of clause (b) of sub-rule (2) of rule 19 of Securities Contracts (Regulations) Rules, 1957.
- 2. Prohibition on payment of incentives: Any person connected with the issue shall not offer any incentive, whether direct or indirect, in any manner, whether in cash or kind or services or otherwise to any person for making an application in the initial public offer, except for fees or commission for services rendered in relation to the issue.
- 3. Security Deposit: The issuer shall, before the opening of the subscription list, deposit with the designated stock exchange, an amount calculated at the rate of one percent of the issue size available for subscription to the public in the manner specified by Board and/or stock exchange(s). The amount shall be refundable or forfeitable in the manner specified by the Board.
- **4. Monitoring Agency:** If the issue size, excluding the size of offer for sale selling shareholders, exceeds one hundred crore rupees, the issuer shall make arrangements for the use of proceeds of the issue to be monitored by a credit rating agency registered with the Board:

The appointment of a Monitoring Agency shall not apply to an issue of specified securities made by a bank or public financial institution or an insurance company.

The monitoring agency shall submit its report to the issuer in the format specified in Schedule XI on a quarterly basis, till 100% of the proceeds of the issue have been utilized.

The board of directors and the management of the issuer shall provide their comments on the findings of the monitoring agency as specified in Schedule XI.

The issuer shall, within forty five days from the end of each quarter, publicly disseminate the report of the monitoring agency by uploading the same on its website as well as submitting the same to the stock exchange(s) on which its equity shares are listed.

#### 5. Issue related Advertisements

- (i) Subject to the provisions of the Companies Act, 2013, the issuer shall, after filing the red herring prospectus (in case of a book built issue) or prospectus (in case of fixed price issue) with the Registrar of Companies, make a preissue advertisement in one English national daily newspaper with wide circulation, Hindi national daily newspaper with wide circulation and one regional language newspaper with wide circulation at the place where the registered office of the issuer is situated.
- (ii) The pre-issue advertisement shall be in the format and shall contain the disclosures specified in Part A of Schedule X.
  - Provided that the disclosures in relation to price band or floor price and financial ratios contained therein shall only be applicable where the issuer opts to announce the price band or floor price along with the pre-issue advertisement pursuant to sub-regulation (4) of regulation 29.
- (iii) The issuer may release advertisements for issue opening and issue closing, which shall be in the formats specified in Parts B and C of Schedule X.
- (iv) During the period the issue is open for subscription, no advertisement shall be released giving an impression that the issue has been fully subscribed or oversubscribed or indicating investors' response to the issue.

# 6. Post issue Advertisements:

- (i) The lead manager(s)shall ensure that an advertisement giving details relating to subscription, basis of allotment, number, value and percentage of all applications including ASBA, number, value and percentage of successful allottees for all applications including ASBA, date of completion of dispatch of refund orders, as applicable, or instructions to self-certified syndicate banks by the registrar, date of credit of specified securities and date of filing of listing application, etc. is released within ten days from the date of completion of the various activities in;
  - at least one English national daily newspaper with wide circulation,
  - one Hindi national daily newspaper with wide circulation and
  - one regional language daily newspaper with wide circulation at the place where registered office of the issuer is situated.

(ii) Details specified in sub regulation (1) shall also be placed on the websites of the stock exchange(s).

# 7. Post-issue responsibilities of the Lead Manager

- 1. The responsibility of the lead manager(s) shall continue until completion of the issue process and for any issue related matter thereafter.
- 2. The lead manager(s) shall regularly monitor redressal of investor grievances arising from any issue related activities.
- 3. The lead manager(s) shall continue to be responsible for post-issue activities till the applicants have received the securities certificates, credit to their demat account or refund of application monies and the listing agreement is entered into by the issuer with the stock exchange and listing or trading permission is obtained.
- 4. The lead manager(s)shall be responsible for and co-ordinate with the registrars to the issue and with various intermediaries at regular intervals after the closure of the issue to monitor the flow of applications from syndicate member(s) or collecting bank branches and/ or self-certified syndicate banks, processing of the applications including application form for ASBA and other matters till the basis of allotment is finalized, credit of the specified securities to the demat accounts of the allottees and unblocking of ASBA accounts/ dispatch of refund orders are completed and securities are listed, as applicable.
- 5. Any act of omission or commission on the part of any of the intermediaries noticed by the lead manager(s) shall be duly reported by them to the Board.
- 6. In case there is a devolvement on the underwriters, the lead manager(s)shall ensure that the notice for devolvement containing the obligation of the underwriters is issued within ten days from the date of closure of the issue.
- 7. In the case of undersubscribed issues that are underwritten, the lead manager(s)shall furnish information in respect of underwriters who have failed to meet their underwriting devolvement to the Board, in the format specified in Schedule XVIII.



# 2. SEBI (LISTING OBLIGATIONS AND DISCLOSURE **REQUIREMENTS) REGULATIONS, 2015**

#### 2.1 Introduction

To enhance corporate governance and ensure timely and accurate disclosure of information, SEBI introduced the Listing Obligations and Disclosure Requirements (LODR) Regulations in 2015. These regulations serve as a comprehensive framework aimed at fostering transparency, accountability, and efficient corporate practices among listed entities.

The SEBI (LODR) Regulations, 2015, were implemented with the primary objective of aligning Indian corporate governance standards with global best practices. The regulations mandate stringent disclosure norms and governance principles to enhance the quality and reliability of information available to investors. By doing so, SEBI aims to instill investor confidence, facilitate better decisionmaking, and ultimately contribute to the overall stability and growth of the Indian securities market.

#### **Key Objectives** 2.2

- 1. Disclosure Norms: The regulations lay down specific requirements for listed companies regarding the timely disclosure of material events, financial results, and other crucial information. This ensures that investors receive accurate and up-to-date information to make informed investment decisions.
- 2. Corporate Governance Practices: SEBI (LODR) Regulations, 2015, emphasize the adoption of robust corporate governance practices by listed entities. This includes the composition of boards, roles and responsibilities of key managerial personnel, and the establishment of various Committees, such as the Audit Committee and nomination and remuneration Committee.
- 3. **Related Party Transactions**: The regulations address the issue of related party transactions, ensuring transparency and fairness in such dealings. Listed entities are required to obtain approval from shareholders for material related party transactions to prevent any potential conflicts of interest.
- 4. Code of Conduct: SEBI mandates the formulation and adherence to a code of conduct for Company directors and senior management personnel. This code serves as a guide for ethical business conduct and sets the tone for responsible and accountable leadership.

5. Listing Agreement Consolidation: SEBI (LODR) Regulations, 2015, consolidated and streamlined various listing agreements that were in place earlier. This simplification of the regulatory framework enhances clarity and ease of compliance for listed entities.

# 2.3 Compliances under SEBI (LODR) Regulations, 2015

Let us gain insight on major compliances under SEBI (Listing Obligations and Disclosures Requirements) Regulations, 2018.

# 2.3.1 Compliance Officer and his /her Obligations (Regulation 6)

Pursuant to Regulation 6 of SEBI (LODR) Regulations, 2015, a listed entity shall appoint a qualified Company Secretary as the Compliance Officer.

Any vacancy in the office of the Compliance Officer shall be filled by the listed entity at the earliest and in any case not later than three months from the date of such vacancy.

Provided, that the listed entity shall not fill such vacancy by appointing a person in interim capacity, unless such appointment is made in accordance with the laws applicable in case of a fresh appointment to such office and the obligations under such laws are made applicable to such person.

# The Compliance Officer of the listed entity shall be responsible for -

- (a) Ensuring conformity with the regulatory provisions applicable to the listed entity in letter and spirit.
- (b) Co-ordination with and reporting to the Board, recognized stock exchange(s) and depositories with respect to compliance with rules, regulations, and other directives of these authorities in manner as specified from time to time.
- (c) Ensuring that the correct procedures have been followed that would result in the correctness, authenticity and comprehensiveness of the information, statements and reports filed by the listed entity under these regulations.
- (d) Monitoring email address of grievance redressal division as designated by the listed entity for the purpose of registering complaints by investors.
  - Provided that the requirements of this regulation shall not be applicable in the case of units issued by mutual funds which are listed on recognized stock exchange(s) but shall be governed by the provisions of the Securities and Exchange Board of India (Mutual Funds) Regulations, 1996.

# 2.3.2. Share Transfer Agent (Regulation 7)

Pursuant to Regulation 7 of SEBI (LODR) Regulations, 2015, the listed entity shall.

- ♦ Appoint a share transfer agent or
- Manage the share transfer facility in-house.

In case of in-house share transfer facility, as and when the total number of holders of securities of the listed entity exceeds one lakh, the listed entity shall either register with the Board as a Category II share transfer agent or appoint Registrar to an issue and share transfer agent registered with the Board.

## **Compliance Requirements relating to Share Transfer Agent**

- 1. The listed entity shall submit a compliance certificate to the exchange, duly signed by both the Compliance Officer of the listed entity and the Authorized Representative of the share transfer agent, wherever applicable, within thirty days from the end of the financial year, certifying compliance with the requirements of point (ii) above.
- In case of any change or appointment of a new share transfer agent, the listed entity shall enter into a tripartite agreement between the existing share transfer agent, the new share transfer agent, and the listed entity, in the manner as specified by the Board from time to time. However, in case the existing share transfer facility is managed in-house, the agreement shall be entered into between the listed entity and the new share transfer agent.

# 2.3.3 Preservation of Documents (Regulation 9)

The listed entity shall have a policy for preservation of documents, approved by its Board of Directors, classifying them in at least two categories as follows-

- (a) documents whose preservation shall be permanent in nature;
- (b) documents with preservation period of not less than eight years after completion of the relevant transactions.

The listed entity may keep documents specified in clauses (a) and (b) in electronic mode.

# 2.3.4 Grievance Redressal Mechanism (Regulation 13)

 The listed entity shall redress investor grievances promptly but not later than twenty-one calendar days from the date of receipt of the grievance and in such manner as may be specified by the Board. 2. The listed entity shall ensure that it is registered on the SCORES platform, or such other electronic platform or system of the Board as shall be mandated from time to time, in order to handle investor complaints electronically in the manner specified by the Board.

## Compliance Requirements relating to grievance redressal

- 1. The listed entity shall file with the recognized stock exchange(s) on a quarterly basis, within twenty-one days from the end of each quarter, a statement giving;
  - the number of investor complaints pending at the beginning of the quarter,
  - those received during the quarter,
  - disposed of during the quarter, and
  - those remaining unresolved at the end of the quarter
- 2. The statement shall be placed, on quarterly basis, before the board of directors of the listed entity.

The Board may also recognize a body corporate for handling and monitoring the process of grievance redressal within such time and in such manner as may be specified.

# 2.3.5 Audit Committee (Regulation 18)

- <u>Composition:</u> Every listed entity shall constitute a qualified and independent Audit
   Committee in accordance with the terms of reference, subject to the following;
  - The Audit Committee shall have a minimum of three directors as members.
  - At least two-thirds of the members of Audit Committee shall be independent directors and in case of a listed entity having outstanding Superior Voting Rights equity shares, the Audit Committee shall only comprise of independent directors.
  - All members of Audit Committee shall be financially literate and at least one member shall have accounting or related financial management expertise.
  - ("Financially literate" shall mean the ability to read and understand basic financial statements i.e. balance sheet, profit and loss account, and statement of cash flows)
  - The Chairperson of the Audit Committee shall be an independent director and he/she shall be present at the Annual General Meeting to answer shareholder queries.
  - The Company Secretary shall act as the secretary to the Audit Committee.

 The Audit Committee at its discretion shall invite the finance director or head of the finance function, head of internal Audit and a representative of the statutory Auditor and any other such executives to be present at the meetings of the Committee.

Provided that occasionally the Audit Committee may meet without the presence of any executives of the listed entity.

- Meeting: The Audit Committee shall meet at least four times in a year and not more than one hundred and twenty days shall elapse between two meetings.
- Quorum: The quorum for Audit Committee meeting shall either be two members or one third
  of the members of the Audit Committee, whichever is greater, with at least two independent
  directors.
- Powers: The Audit Committee shall have powers to investigate any activity within its terms of reference, seek information from any employee, obtain outside legal or other professional advice and secure attendance of outsiders with relevant expertise, if it considers necessary.
- Role of Audit Committee: The role of Audit Committee and the information to be reviewed by the Audit Committee shall be as specified in Part C of Schedule II.

# 2.3.6 Nomination And Remuneration Committee (Regulation 19)

- ♦ <u>Composition:</u> The board of directors shall constitute the nomination and remuneration Committee as follows:
  - the Committee shall comprise of at least three directors;
  - all directors of the Committee shall be non-executive directors; and
  - at least two-third of the directors shall be independent directors
  - The Chairperson of the Nomination and Remuneration Committee shall be an independent director.

Provided that the chairperson of the listed entity, whether executive or non-executive, maybe appointed as a member of the Nomination and Remuneration Committee and shall not chair such Committee.

Quorum: The quorum for a meeting of the Nomination And Remuneration Committee shall be either two members or one third of the members of the Committee, whichever is greater, including at least one independent director in attendance. The Chairperson of the Nomination and Remuneration Committee may be present at the Annual General Meeting, to answer the shareholders' queries; however, it shall be up to the chairperson to decide who shall answer the queries.

- Meeting: The Nomination and Remuneration Committee shall meet at least once in a year.
- Role: The role of the nomination and remuneration Committee shall be as specified as in Part D of the Schedule II.

# 2.3.7 Stakeholders Relationship Committee (Regulation 20)

- <u>Composition:</u> The listed entity shall constitute a Stakeholders Relationship Committee to specifically look into various aspects of interest of shareholders, debenture holders and other security holders.
  - The chairperson of this Committee shall be a non-executive director.
  - At least three directors, with at least being an independent director, shall be members
    of the Committee and in case of a listed entity having outstanding Superior Voting
    Rights equity shares, at least two thirds of the Stakeholders Relationship Committee
    shall comprise of independent directors.
  - The Chairperson of the Stakeholders Relationship Committee shall be present at the annual general meetings to answer queries of the security holders.
- Meeting: The Stakeholders Relationship Committee shall meet at least once in a year.
- Role: The role of the Stakeholders Relationship Committee shall be as specified as in Part D of the Schedule II.

# 2.3.8 Risk Management Committee (Regulation 21)

- <u>Composition:</u> The board of directors shall constitute a Risk Management Committee.
  - The Risk Management Committee shall have minimum three members with majority of them being members of the board of directors, including at least one independent director and in case of a listed entity having outstanding Superior Voting Rights Equity shares, at least two third of the Risk Management Committee shall comprise independent directors.
  - The Chairperson of the Risk management Committee shall be a member of the board of directors and senior executives of the listed entity may be members of the Committee.
- Meeting: The risk management Committee shall meet at least twice in a year.

- Quorum: The quorum for a meeting of the Risk Management Committee shall be either two
  members or one third of the members of the Committee, whichever is higher, including at
  least one member of the board of directors in attendance.
- Meeting: The meetings of the risk management Committee shall be conducted in such a manner that on a continuous basis not more than one hundred and eighty days shall elapse between any two consecutive meetings.
- Role: The board of directors shall define the role and responsibility of the Risk Management Committee and may delegate monitoring and reviewing of the risk management plan to the Committee and such other functions as it may deem fit such function shall specifically cover cyber security.

Provided that role and responsibilities of the Risk Management Committee shall mandatorily include the performance of functions specified in Part D of Schedule II.

The provisions of this regulation shall be applicable to top 1000 listed entities, determined on the basis of market capitalization as at the end of the immediate preceding financial year; and, ii. a 'high value debt listed entity'.

The Risk Management Committee shall have powers to seek information from anyemployee, obtain outside legal or other professional advice and secure attendance of outsiders with relevant expertise, if it considers necessary.

# 2.3.9 Vigil Mechanism (Regulation 22)

- 1. The listed entity shall formulate a vigil mechanism /whistle blower policy for directors and employees to report genuine concerns.
- 2. The vigil mechanism shall provide for adequate safeguards against victimization of director(s) or employee(s) or any other person who avail the mechanism and also provide for direct access to the chairperson of the Audit Committee in appropriate or exceptional cases.

# 2.3.10 Secretarial Audit and Secretarial Compliance Report (Regulation 24A)

Every listed entity and its material unlisted subsidiaries incorporated in India shall undertake Secretarial Audit and shall annex a Secretarial Audit Report given by a Company Secretary in practice, in such form as specified, with the Annual Report of the listed entity.

Every listed entity shall submit a Secretarial Compliance Report in such form as specified, to stock exchanges, within sixty days from end of each financial year.

# 2.3.11 Other Corporate Governance Requirements (Regulation 27)

- 1. The listed entity shall submit a quarterly compliance report on corporate governance in the format specified by the Board from time to time to the recognized stock exchange(s) within twenty-one days from the end of each quarter.
- 2. Details of all material transactions with related parties shall be disclosed along with the report.
- 3. Details of cyber security incidents or breaches or loss of data or documents shall be disclosed along with the report.
- 4. The report shall be signed either by the Compliance Officer or the chief executive officer of the listed entity.

# 2.3.12 Prior Intimations (Regulation 29)

The listed entity shall give prior intimation to stock exchange about the meeting of the board of directors in which any of the following proposals is due to be considered at least two working days in advance, excluding the date of the initiation and date of the meeting;

- (a) proposal for buyback of securities;
- (b) proposal for voluntary delisting by the listed entity from the stock exchange(s);
- (c) fund raising by way of further public offer, rights issue, American Depository Receipts/Global Depository Receipts/Foreign Currency Convertible Bonds, qualified institutions placement, debt issue, preferential issue or any other method and for determination of issue price.
- (d) Provided that intimation shall also be given in case of any Annual General Meeting or Extraordinary General Meeting or postal ballot that is proposed to be held for obtaining shareholder approval for further fundraising indicating type of issuance.
- (e) declaration/ recommendation of dividend, issue of convertible securities including convertible debentures or of debentures carrying a right to subscribe to equity shares or the passing over of dividend.
- (f) the proposal for declaration of bonus securities.
  - Intimation regarding Financial results viz. quarterly, half yearly, or annual, as the case may be, to be discussed at the meeting of board of directors shall be given at least five days in advance (excluding the date of the intimation and date of the meeting), and such intimation shall include the date of such meeting of board of directors.
  - The listed entity shall give intimation to the stock exchange(s) at least eleven working days before any of the following proposals are placed before the board of directors.

- (i) any alteration in the form or nature of any of its securities that are listed on the stock exchange or in the rights or privileges of the holders thereof;
- (ii) any alteration in the date on which, the interest on debentures or bonds, or the redemption amount of redeemable shares or of debentures or bonds, shall be payable.



# 3. SEBI (SUBSTANTIAL ACQUISITION OF SHARES AND **TAKEOVER) REGULATIONS, 2011**

# Introduction

The SEBI (Substantial Acquisition of Shares and Takeover) Regulations, 2011, were enacted to address and regulate the acquisition of substantial shares or voting rights in listed companies, bringing transparency, fairness, and protection to shareholders during takeover transactions.

#### **Key Objectives** 3.2

- 1. Protection of Shareholder Interests: The primary objective of these regulations is to safeguard the interests of shareholders by providing them with fair treatment and ensuring they are well-informed during takeover processes.
- 2. Market Integrity: SEBI aims to maintain the integrity and credibility of the securities market by preventing unfair practices and ensuring that changes in control are conducted in a transparent and orderly manner.
- 3. Equal Opportunity: The regulations seek to provide all shareholders with an equal opportunity to participate in the decision-making process during takeovers, thereby promoting a level playing field for investors.

#### 3.3 **Applicability**

These regulations shall apply to direct and indirect acquisition of shares or voting rights in, or control over target Company.

Provided that these regulations shall not apply to direct and indirect acquisition of shares or voting rights in, or control over a Company listed without making a public issue, on the Innovators Growth Platform (IGP) of a recognized stock exchange.

# 3.4 Important Definitions

- 1. Acquirer Acquirer means any person who, directly or indirectly, acquires or agrees to acquire whether by himself, or through, or with persons acting in concert with him, shares or voting rights in, or control over, a target company.
- **2. Acquisition** Acquisition means, directly or indirectly, acquiring or agreeing to acquire shares or voting rights in, or control over, a target company.
- 3. Control- Control includes the right to appoint majority of the directors or to control the management or policy decisions exercisable by a person or persons acting individually or in concert, directly or indirectly, including by virtue of their shareholding or management rights or shareholders agreements or voting agreements or in any other manner.
  - Provides that a director officer of a target company shall not be considered to be in control over such target company, merely by virtue of holding such position.
- 4. Frequently traded shares- Frequently traded shares means shares of a target company, in which the traded turnover on any stock exchange during the twelve calendar months preceding the calendar month in which the public announcement is required to be made under these regulations, is at least ten per cent of the total number of shares of such class of the target company.
  - Provided that where the share capital of a particular class of shares of the target company is not identical throughout such period, the weighted average number of total shares of such class of the target company shall represent the total number of shares.
- 5. Identified Date-Identified date means the date falling on the tenth working day prior to the commencement of the tendering period, for the purposes of determining the shareholders to whom the letter of offer shall be sent.
- **6. Shares -** Share means shares in the equity share capital of a target company carrying voting rights, and includes any security which entitles the holder thereof to exercise voting rights.
  - Explanation—For the purpose of this clause shares will include all depository receipts carrying an entitlement to exercise voting rights in the target company.
- 7. Target Company Target company means a company and includes a body corporate or corporation established under a Central legislation, State legislation or Provincial legislation for the time being in force, whose shares are listed on a stock exchange.

- **8. Volume weighted average market price** Volume weighted average market price means the product of the number of equity shares traded on a stock exchange and the price of each equity share divided by the total number of equity shares traded on the stock exchange.
- **9. Volume weighted average price** Volume weighted average price means the product of the number of equity shares bought and price of each such equity share divided by the total number of equity shares bought.
- 10. Weighted average number of total shares- Weighted average number of total shares means the number of shares at the beginning of a period, adjusted for shares cancelled, bought back or issued during the aforesaid period, multiplied by a time-weighing factor.

# 11. "Persons acting in concert" means:

- persons who, with a common objective or purpose of acquisition of shares or voting rights in, or exercising control over a target company, pursuant an agreement or understanding, formal or informal, directly, or indirectly co-operate for acquisition of shares or voting rights in, or exercise of control over the target company.
- 2. Without prejudice to the generality of the foregoing, the persons falling within the following shall be deemed be persons acting in concert with other persons within the same category, unless the contrary is established—
  - a company, its holding company, subsidiary company and any company under the same management or control;
  - (ii) a company, its directors, and any person entrusted with the management of the company;
  - (iii) directors of companies referred to in item (i) and (ii) of this sub-clause and associates of such directors;
  - (iv) promoters and members of the promoter group;
  - (v) immediate relatives;
  - (vi) a mutual fund, its sponsor, trustees, trustee company, and asset management company;
  - (vii) a collective investment scheme and its collective investment management company, trustees and trustee company;
  - (viii) a venture capital fund and its sponsor, trustees, trustee company and asset management company;

- (ix) an alternative investment fund and its sponsor, trustees, trustee company and manager;
- (x) a merchant banker and its client, who is an acquirer;
- (xi) a portfolio manager and its client, who is an acquirer;
- (xii) banks, financial advisors and stock brokers of the acquirer, or of any company which is holding company or subsidiary of the acquirer, and where the acquirer is an individual, of the immediate relative of such individual.
  - Provided that this sub-clause shall not apply to a bank whose sole role is that of providing normal commercial banking services or activities in relation to an open offer under these regulations;
- (xiii) an investment company or fund and any person who has an interest in such investment company funds shareholder or unitholder having not less than 10 percent of paid-up capital the Company of the fund, and any other investment company or fund in which such person or his associate hold not less than 10 percent of the paid-up capital of that investment company or unit capital of that fund.

Provided that nothing contained in this sub-clause shall apply to holding of units of mutual funds registered with the Board.

Explanation—For the purposes of this clause "associate" of a person means—

- (a) any immediate relative of such person;
- (b) trusts of which such person or his immediate relative is a trustee;
- (c) partnership firm in which such person or his immediate relative is a partner; and
- (d) members of Hindu Undivided families of which such person is a coparcener.

# 3.5 Types of Offer

TYPES OF OFFER				
MANDATORY OPEN OFFER (Regulation 3)	VOLUNTARY OFFER (Regulation 6)	CONDITIONAL OFFER (Regulation 19)	COMPETING OFFER (Regulation 20)	

# Regulation 3: Mandatory Open Offer

No acquirer **shall acquire** shares or voting rights in a target company which taken together with shares or voting rights, if any, held by him and by persons acting in concert with him in such target company, entitle them to exercise twenty-five per cent or more of the voting rights in such target company unless the acquirer makes a public announcement of an open offer for acquiring at least twenty-six percent shares of such target company in accordance with these regulations.

No acquirer, who together with persons acting in concert with him, has acquired and holds in accordance with these regulations shares or voting rights in a target company entitling them to exercise twenty-five percent or more of the voting rights in the target company but less than the maximum permissible non-public shareholding, shall acquire within any financial year additional shares or voting rights in such target company entitling them to exercise more than five percent of the voting rights, unless the acquirer makes a public announcement of an open offer for acquiring at least twenty-six percent shares of such target company in accordance with these regulations.

Provided that acquisition pursuant to a resolution plan approved under Section 31 of Insolvency and Bankruptcy Code, 2016 shall be exempt from the above-mentioned obligation.

#### NOTE:

- Nothing contained in this regulation shall apply to acquisition of shares or voting rights of a company by the promoters or shareholders in control, in terms of the provisions of Chapter VI-A of Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2018.
- ♦ Any reference to "twenty-five percent" in case of listed entity which has listed its specified securities on Innovators Growth Platform shall be read as "forty-nine percent".

# Regulation 6: Voluntary Offer

An acquirer, who together with persons acting in concert with him, holds shares or voting rights in a target company entitling them to exercise twenty-five per cent or more but less than the maximum permissible non-public shareholding, shall be entitled to voluntarily make a public announcement of an open offer for acquiring shares in accordance with these regulations, subject to their aggregate shareholding after completion of the open offer not exceeding the maximum permissible non-public shareholding.

In cases where an acquirer or any person acting in concert with him has acquired shares of the target company in the **preceding fifty-two weeks** without attracting the obligation to make a public announcement of an open offer, he shall **not be eligible to voluntarily make a public announcement of an open offer for acquiring shares.** 

An acquirer and persons acting in concert with him, who have made a public announcement under this regulation to acquire shares of a target company shall not be entitled to acquire any shares of the target company for a period of six months after completion of the open offer except pursuant to another voluntary open offer. However, nothing shall prohibit the acquirer from making a competing offer upon any other person making an open offer for acquiring the shares of a target company.

Further, the acquirer shall be entitled to receive shares in a bonus issue or acquire shares in a share split during this period of 6 months.

# Regulation 19: Conditional Offer

- 1. An acquirer may make an open offer conditional as to the minimum level of acceptance.
- Where the open offer is pursuant to an agreement, such agreement shall contain a condition to the effect that in the event the desired level of acceptance of the open offer is not received the acquirer shall not acquire any shares under the open offer and the agreement attracting the obligation to make the open offer shall stand rescinded.

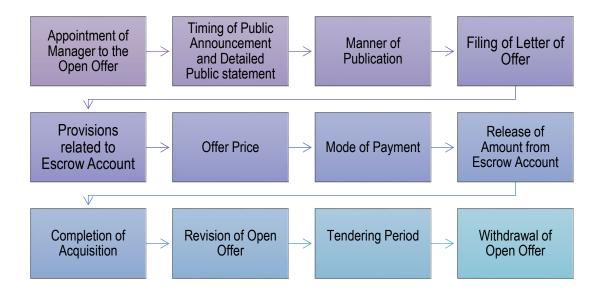
# Regulation 20: Competing Offer

- Upon a public announcement of an open offer for acquiring shares of a target company being made, any person, other than the acquirer who has made such public announcement, shall be entitled to make a public announcement of an open offer within fifteen working days of the date of the detailed public statement made by the acquirer who has made the first public announcement.
- 2. Upon the public announcement of a competing offer, an acquirer who had made a preceding competing offer shall be entitled to revise the terms of his open offer provided the revised

terms are more favorable to the shareholders of the target company.

Provided that the acquirers making the competing offers shall be entitled to make upward revisions of the offer price at any time up to one working day prior to the commencement of the tendering period.

# 3.6 Open offer Process



# Manager to the Open Offer

Prior to the public announcement, the acquirer shall appoint a Merchant Banker registered with the Board, who is not an associate of the acquirer, as a Manager to the Open Offer.

#### Timing of Public Announcement and Detailed Public Statement

- 1. A short public announcement shall be made on the same date as the date of transaction which triggered the open offer requirement.
- 2. A **Detailed Public Statement** shall be made within a period of 5 working days from the date on which the short public announcement was made.

#### Manner of Publication of Public Announcement

 The Public Announcement shall be sent to all stock exchanges, where the shares of the Target Company are listed and the respective stock exchanges shall further disseminate forthwith, such information to the public.

- 2. A copy of the public announcement shall be sent to the Board and the target company at its registered office within one working day of the date of the public announcement.
- 3. The detailed public statement shall be published in all editions of;
  - any one English national daily with wide circulation,
  - any one Hindi national daily with wide circulation, and
  - any one regional language daily with wide circulation at the place where the registered office of the target company is situated and
  - one regional language daily at the place of the stock exchange where the maximum volume of trading in the shares of the target company are recorded during the sixty trading days preceding the date of the public announcement.
- 4. Simultaneously with publication of such detailed public statement in the newspapers, a copy of the same shall be sent to;
  - the Board through the manager to the open offer,
  - all the stock exchanges on which the shares of the target company are listed, and the stock exchanges shall forthwith disseminate such information to the public,
  - the target company at its registered office, and the target company shall forthwith circulate it to the members of its board.

#### Filing of Letter of Offer

- 1. Within 5 working days from the date of making Detailed Public Statement, the acquirer shall through the merchant banker to the open offer, file with the Board, a draft letter of offer containing such information as may be specified along with a non-refundable fee.
- 2. The Manager to the open offer shall provide soft copies of the public announcement, detailed public statement and the draft letter of offer along with such specifications as may be specified and the Board shall upload the same on its website.
- 3. The Board shall give its comments on the draft letter of offer as expeditiously as possible but not later than fifteen working days of the receipt of the draft letter of offer.
  - In the event of no comments being issued by the Board within such period, it shall be deemed that the Board does not have any comments to offer.
  - In cases where the Board has sought clarifications or additional information from the manager to the open offer, the period for issuance of comments shall be extended to the fifth working

day from the date of receipt of satisfactory reply to the clarification or additional information sought.

#### Provisions related to Escrow Account

Not later than two working days prior to the date of the detailed public statement of the open offer for acquiring shares, the acquirer shall create an escrow account towards security for performance of his obligations under these regulations, and deposit in escrow account such aggregate amount as per the following scale:

Consideration payable under the Open Offer	Escrow Amount
On the first ₹ 500 Crores	An amount equal to 25% of the consideration.
On the Balance Consideration	An additional amount equal to ten per cent of the balance consideration.

#### Offer Price

The Open offer for acquiring shares shall be made at a price not lower than the price determined in the following manner;

- 1. In the case of direct acquisition of shares or voting rights in, or control over the target company, and indirect acquisition of shares or voting rights in, or control over the target company where the parameters referred to in sub-regulation (2) of regulation 5 are met, the offer price shall be the highest of;
  - (a) the highest negotiated price per share of the target company for any acquisition under the agreement attracting the obligation to make a public announcement of an open offer;
  - (b) the volume-weighted average price paid or payable for acquisitions, whether by the acquirer by any person acting in concert with him, during the fifty-two weeks immediately preceding the date of the public announcement;
  - (c) the highest price paid or payable for any acquisition, whether by the acquirer or by any person acting in concert with him, during the twenty-six weeks immediately preceding the date of the public announcement;
  - (d) the volume-weighted average market price of such shares for a period of sixty trading days immediately preceding the date of the public announcement as traded on the

- stock exchange where the maximum volume of trading in the shares of the target company are recorded during such period, provided such shares are frequently traded;
- (e) where the shares are not frequently traded, the price determined by the acquirer and the manager to the open offer taking into account valuation parameters including, book value, comparable trading multiples, and such other parameters as are customary for valuation of shares of such companies;

## **Mode of Payment**

The offer price may be paid in either of the following manner:

- cash or;
- by issue, exchange or transfer of listed shares in the equity share capital of the acquirer or any person acting in concert with the acquirer or;
- by way of an issue, exchange or transfer of listed secured debt instruments issued by the acquirer or any person acting in concert with a rating not below investment grade as rated by a credit rating agency registered with SEBI;
- by issue, exchange or transfer of convertible debt securities entitling the holder thereof to acquire listed shares in the equity share capital of the acquirer or any person acting in concert with the acquirer or;
- A combination of the mode of payment of consideration as stated above.

#### Release of Amount from Escrow Account

- The manager to the open offer shall not release the escrow account until the expiry of thirty days from the completion of payment of consideration to shareholders who have tendered their shares in acceptance of the open offer.
- 2. In the event of non-fulfillment of obligations under these regulations by the acquirer, the Board may direct the manager to the open offer to forfeit the escrow account or any amounts lying in the special escrow account, either in full or in part.
- 3. The escrow account deposited with the bank in cash shall be released only in the following manner:-
  - the entire amount to the acquirer upon withdrawal of offer in terms of regulation 23 of these regulations are sacrificed by the manager to the open offer;

- for transfer of an amount not exceeding ninety per cent of the escrow account, to the special escrow account in accordance with Regulation 21;
- to the acquirer, the balance of the escrow account after transfer of cash to the special escrow account, on the expiry of thirty days from the completion of payment of consideration to shareholders who have tendered their shares in acceptance of the open offer, as certified by the manager to the open offer;
- the entire amount to the acquirer upon the expiry of thirty days from the completion of
  payment of consideration to shareholders who have tendered their shares in
  acceptance of the open offer, upon certification by the manager to the open offer,
  where the open offer is for exchange of shares or other secured instruments;
- the entire amount to the manager to the open offer, in the event of forfeiture for nonfulfillment of any of the obligations under these regulations, for distribution in the following manner, after deduction of expenses, if any, of registered market intermediaries associated with the open offer,
  - (i) one-third of the escrow account to the target company;
  - (ii) one-third of the escrow account to the Investor Protection and Education Fund established under the Securities and Exchange Board of India (Investor Protection and Education Fund) Regulations, 2009; and
  - (iii) one-third of the escrow account to be distributed pro-rata among the shareholders who have accepted the open offer.

### **Completion of Acquisition**

The acquirer shall not complete the acquisition of shares or voting rights in, or control over, the target company, whether by way of subscription to shares or a purchase of shares attracting the obligation to make an open offer for acquiring shares, until the expiry of the offer period.

The acquirer shall complete the acquisitions contracted under any agreement attracting the obligation to make an open offer not later than twenty-six weeks from the expiry of the offer period.

In the event of any extraordinary and supervening circumstances rendering it impossible to complete such acquisition within such period, the Board may for reasons to be published, may grant an extension of time by such period as it may deem fit in the interests of investors in securities and the securities market.

# **Revision of Open Offer**

Irrespective of whether a competing offer has been made, and acquirer may make an upward revision to the offer price and subject to the other provisions of these regulations, the acquirer at any time prior to the commencement of the last three working days prior to the commencement of tendering period to the event of any revision of the open offer whether by way of an upward revision in the offer price or of the offer size shall:-

- 1. Make corresponding increases to the amount kept in escrow prior to such revision;
- 2. Make an announcement in respect of such revisions in all the newspapers in which the detailed public statement pursuant to the public announcement was made;
- Simultaneously, with the issue of such an announcement, inform SEBI all the stock exchanges on which the shares of the target company are listed and the target company added its registered office.

## **Tendering Period**

The tendering period shall start not later than 12 working days from the date of receipt of comments from the Board and shall remain open for 10 working days.

Shareholders who have tendered shares in acceptance of the open offer shall not be entitled to withdraw such acceptance during the tendering period.

# Withdrawal of Open offer

An open offer once made shall not be withdrawn except under any of the following circumstances;

- Statutory approvals required for the open offer or for effecting the acquisitions attracting the
  obligation to make an open offer under these regulations having been finally refused, subject
  to such requirements for approval having been specifically disclosed in the detailed public
  statement and the letter of offer;
- 2. The acquirer, being a natural person, has died;
- 3. Any condition stipulated in the agreement for acquisition attracting the obligation to make the open offer is not met for reasons outside the reasonable control of the acquirer; or
- 4. Such circumstances as in the opinion of the Board, merit withdrawal.

In the event of withdrawal of the open offer, the acquirer shall through the manager to the open offer, within two working days:

- (a) make an announcement in the same newspapers in which the public announcement of the open offer was published, providing the grounds and reasons for withdrawal of the open offer; and
- (b) simultaneously with the announcement, inform in writing to,
  - (i) the Board;
  - (ii) all the stock exchanges on which the shares of the target company are listed, and the stock exchanges shall forthwith disseminate such information to the public; and
  - (iii) the target company at its registered office.

# 3.7 DISCLOSURES UNDER SEBI (Substantial Acquisition of Shares and Takeover) REGULATIONS, 2011

Regulation	Particulars of Event	Disclosure	
29	DISCLOSURE ON ACQUISTION & DISPOSAL		
(1)	Any acquirer, together with the persons acting in concert with him acquiring shares or voting rights in a target company, which taken together aggregates to 5% or more of shares of such target company or 10% or more of shares of such target company which is a listed entity, having listed its specified securities on Innovators Growth Platform.	Disclosure shall be made within 2 working days of receipt of intimation of allotment of shares, or acquisition or disposal of shares or voting rights in the target company to;  A) Every Stock Exchanges where the shares of the Target Company are listed and  B) The Target Company at its Registered Office	
(2)	Any person together with persons acting in concert with him, holds shares or voting rights entitling them to 5% or more of the shares or voting rights in a target company, shall disclose the number of shares or voting rights held and change in shareholding or voting rights, even if such change results in shareholding falling below 5%, if there has been change in such holdings from the last disclosure made under sub-regulation(1) or under this sub-regulation; and such change exceeds 2% of total shareholding or	Disclosure shall be made within 2 working days of receipt of intimation of allotment of shares, or acquisition or disposal of shares or voting rights in the target company to;  A) Every Stock Exchanges where the shares of the Target Company are listed; and  B) The Target Company at its Registered Office.	

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voting rights in the target company, in such form as may be specified.

(In case of listed entities which have listed its specified securities of Innovators Growth Platform, 5% shall be read as 10% and 2% shall be read as 5%)

#### DISCLOSURE OF ENCUMBERED SHARES

The promoter of every target company shall disclose details of shares in such target company encumbered by him or persons acting in concert with him.

Provided that the disclosure requirement shall not be applicable where such encumbrance is undertaken in a depository.

The promoter of every target company shall disclose details of any invocation of such encumbrance release of such encumbrance of share.

Provided that the disclosure requirement shall not be applicable where such encumbrance is undertaken in a depository.

(4) The promoter of every target company shall declare on a **yearly basis** that he, along with the persons acting in concert, has not made any encumbrance directly or indirectly, other than those already disclosed during the financial year.

Disclosure shall be made with seven working days from creation or invocation or release of encumbrance, as the case may be, to:

- Every stock exchanges where the shares of the target company are listed; and
- B) Target company at its registered office.

Disclosure shall be made with seven working days from creation or invocation or release of encumbrance, as the case may be, to;

- A) Every stock exchanges where the shares of the target company are listed;
   and
- B) Target company at its registered office.

Disclosure shall be made within 7 working days from the end of financial year to:

- A) Every stock exchanges where the shares of the target company are listed;
   and
- B) The Audit Committee of the target company.



# 4. SEBI (BUY-BACK OF SECURITIES) REGULATIONS, 2018

# 4.1 Introduction

The SEBI (Buyback of Securities) Regulations, 2018, marks a milestone in the Indian securities market, providing a comprehensive framework that governs the process of buyback of shares by companies listed on stock exchanges. A buyback is a corporate financial strategy where a company repurchases its own shares from the market, leading to a reduction in the total number of outstanding shares.

The regulations outline various aspects of the buyback process, including:

- 1. Conditions for Buyback: SEBI has established eligibility criteria and conditions that companies must fulfil to initiate a buyback, ensuring that companies have the financial strength to repurchase their shares.
- 2. Tender Offer Mechanism: The regulations prescribe the procedure for the tender offer, specifying how companies should make an offer to their shareholders and the manner in which shareholders can tender their shares.
- 3. Regulation of Insider Trading: SEBI (Buyback of Securities) Regulations, 2018, includes provisions to prevent insider trading during the buyback process, ensuring a level playing field for all investors.
- **4. Monitoring and Reporting**: Companies undertaking buybacks are required to comply with reporting and disclosure requirements to keep the market informed and maintain transparency.

The SEBI (Buyback of Securities) Regulations, 2018, reflects SEBI's commitment to fostering a fair and efficient securities market in India. By establishing a clear framework for buyback transactions, the regulations aim to balance the interests of shareholders, protect market integrity, and contribute to the overall development of the Indian capital market.

# 4.2 Applicability

These regulations shall be applicable to buy-back of shares or other specified securities of a company in accordance with the applicable provisions of the Companies Act, 2013.

# 4.3 Pre-requisite conditions and requirements for buy-back of shares and specified securities which is to be kept in mind.

- 1. The Maximum limit for Buy-back shall be *lower* of the following:
  - (a) 25% or less of the aggregate of the paid-up share capital of the Company and its free reserves based on Standalone Financial Statements.
  - (b) 25% or less of the aggregate of the paid-up share capital of the Company and its free reserves based on Consolidated Financial Statements.
- 2. The Ratio of the aggregate of secured and unsecured debts owed by the Company to the paid-up capital and free reserves after buy-back shall -
  - Be less than or equal to 2:1, based on the standalone or consolidated financial statements of the Company, whichever sets out a lower amount or that higher ratio, if Companies Act, 2013 provides otherwise by way of a notification shall prevail; or
  - be less than or equal to 2:1, based on the standalone or consolidated financial statements of the Company, whichever sets out a lower amount, after excluding financial statements of all subsidiaries that are Non-Banking Financial Companies and Housing Finance Companies regulated by Reserve Bank of India or National Housing Bank, as the case may be.

Provided that buy-back of securities shall be permitted only if all such excluded subsidiaries have their ratio of aggregate of secured and unsecured debts to the paid-up capital and free reserves of not more than 6:1 on standalone basis.

- 3. All shares and/or securities sought to be bought back must be fully paid-up.
- 4. Methods of Buy-back:
  - (a) from the existing shareholders or other specified securities holders on a proportionate basis through the tender offer;
  - (b) from the open market, through-
    - (i) book-building process
    - (ii) stock exchange
- 5. The Company shall not buy-back its shares or other specified securities;
  - with an intention to delist the same from stock exchange;

- from any person through negotiated deals, whether on or off the stock exchange or through spot transactions or through any private arrangement.
- 6. No offer for buy-back shall be made by the Company within a period of one year reckoned from the date of expiry of buy-back period of the preceding offer of buy-back, if any.
- 7. The Company shall not be allowed to buy-back its shares unless the consequent reduction of its share capital is affected.
- 8. Sources of Buy-back A Company may undertake a buy-back of its own shares or other specified securities out of—
  - (a) its free reserves;
  - (b) the securities premium account; or
  - (c) the proceeds of the issue of any shares or other specified securities

Provided that no such buy-back shall be made out of the proceeds of an earlier issue of the same kind of shares or same kind of other specified securities.

- 9. No Company shall directly or indirectly purchase its own shares or other specified securities;
  - (a) Through any subsidiary company including its own subsidiary companies;
  - (b) Through any investment company or group of investment companies; or
  - (c) If a default is made by the Company in the repayment of deposits accepted either before or after the commencement of the Companies Act, interest payment hereon, redemption of debentures or preference shares or payment of dividend to any shareholder, or repayment of any term loan or interest payable thereon to any financial institution or banking company.

Provided that the buy-back is not prohibited, if the default is remedied and a period of three years has lapsed after such default ceased to subsist.

# 4.4 General compliance and filing requirements

- A Company shall not authorize buy-back whether by way of tender offer or from open market, unless;
  - The Buy-back is authorised by the Articles of Association of the Company. In case the
    Articles do not provide for the buyback then the Company shall first alter its articles
    and thereafter proceed when they buy back.

 A Special Resolution (SR) authorising the buyback has been passed at the General Meeting (GM) of the Company.

However, no such special resolution shall be required in cases where the amount for the buyback does not exceed 10% of the aggregate of the paid-up share capital (PUSC) of the Company and the free reserves (FR), based on a Standalone Financial Statements (SFS) or on a Consolidated Financial Statements (CFS), whichever is lower. In such a case, the authorization by the board of directors of the Company by way of a board resolution will suffice.

# (To sum up, if the amount of buyback does not exceed 10% of PUSC & FR based on the SFS or CFS, BR will suffice, else SR in GM has to be passed)

- In case where the Special Resolution is required for authorising the buyback, the
  notice of the General Meeting shall be accompanied by an Explanatory Statement in
  accordance with the provisions contained in Section 102 of the Companies Act,
  2013. The mandatory contents of the explanatory statement are enlisted below;
  - (a) Disclosures under sub-section 3 of section 68 of the Companies Act 2013;
    - (i) a full and complete disclosure of all material facts;
    - (ii) the necessity for the buy-back;
    - (iii) the class of shares or securities intended to be purchased under the buyback:
    - (iv) the amount to be invested under the buy-back; and
    - (v) the time-limit for completion of buy-back.
  - (b) Where the buy-back is through tender offer from existing securities holders, the explanatory statement shall contain the following additional disclosures:
    - (i) the maximum price at which the buy-back of shares or other specified securities shall be made and whether the board of directors of the Company is being authorised at the general meeting to determine subsequently the specific price at which the buy-back may be made at the appropriate time;
    - (ii) if the promoter intends to offer his shares or other specified securities, the quantum of shares or other specified securities proposed to be

tendered and the detail of their transactions and their holdings for the last six months prior to the passing of the special resolution for buy-back including information of number of shares or other specified securities acquired, the price and the date of acquisition.

- 2. The Company must ensure that the buyback is completed within a period of *one year from* the date of passing the Special Resolution at the General Meeting or of passing the Board Resolution in the board meeting as the case may be.
- 3. The Company shall, after expiry of the buy-back period, file with the Registrar of Companies (RoC) and the Board, a return containing such particulars relating to the buy-back within thirty days of such expiry, in the format as specified in the Companies (Share Capital and Debentures) Rules, 2014.
- 4. A copy of the Resolution passed at the General Meeting under sub-section (2) of section 68 of the Companies Act shall be filed with the Board and the Stock Exchanges where the shares or other specified securities of the company are listed, within seven working days from the date of passing of the resolution.
- 5. Where the buy-back is from open market either through the Stock Exchange or through book building, the resolution of Board of Directors shall specify the maximum price at which the buy-back shall be made.

**Note:** In case of a buy-back through tender offer, the Board of Directors of the Company may, till one working day prior to the record date, increase the maximum buy-back price and decrease the number of securities proposed to be bought back, such that there is no change in the aggregate size of the buy-back.

- 6. A Company, authorized by a resolution passed by the board of directors at its meeting to buy-back its shares or other specified securities under the proviso to clause (b) of sub-section (2) of section 68 of the Companies Act, 2013 shall file a copy of the resolution, with the Board and the stock exchanges, where the shares or other specified securities of the Company are listed, within two working days of the date of the passing of the resolution.
- 7. No insider shall deal in shares or other specified securities of the Company on the basis of unpublished price sensitive information relating to buy-back of shares or other specified securities of the Company.
- 8. It must be noted that all the filings to the Board under these regulations shall be made electronically after it is digitally signed by the Company Secretary of the Company or any other person authorised by the Board in this regard.

# 4.5 Various compliances under Buyback through Tender Offer

# I. Disclosures, filing requirements and timelines for public announcement

- The Company which has been authorised by a Special Resolution or a resolution passed by the Board as the case may be, shall within two working days from the date of declaration of the results of the postal ballot for special resolution or board resolution as the case may be, shall make a public announcement in the following newspapers;
  - (a) Atleast one English National Daily, and
  - (b) At least one Hindi National Daily, and
  - (c) At least one Regional Daily;

all with wide circulation at the place where the Registered Office of the Company is situated and the said public announcement shall contain all the material information as specified by the Board.

- 2. Simultaneously, the Company is required to file a copy of the public announcement with the board and the stock exchanges electronically, where the shares or the specified securities of the company are listed.
- 3. Stock exchange shall forthwith disseminate the public announcement to the public.
- 4. A copy of the public announcement shall also be placed on the websites of the Company, stock exchanges and the merchant banker.

# II. Disclosures, filing requirements and timelines for letter of offer

The Company shall within *two working days* from the record date file the following documents in electronic mode with the Board:

- (a) A *letter of offer* containing such details as may be specified by the board, through the merchant banker, who is not an associate of the Company.
- (b) A certificate in such form as may be specified by the Board, issued by the merchant banker, who is not an associate of the Company, certifying that the buy-back offer is in compliance of these regulations and the letter of offer contains the information as specified under these regulations.
- (c) A *Declaration of Solvency* as provided under Section 68 (6) of the Companies Act, 2013.

# It is to be noted that in case the buyback is made through the tender offer, then, the Company is not required to file the draft letter of offer with the Board.

# III. Extinguishment of Certificates and closure compliances

 The Company shall extinguish and physically destroy the securities certificates so bought back in the presence of a registrar to an issue or the Merchant Banker and the Secretarial Auditor, within fifteen days of the date of acceptance of the shares or other specified securities.

Provided that the Company shall ensure that all the securities bought-back are extinguished within seven working days of expiry of buy-back period.

Furthermore, it is clarified in the regulation 11 that the aforesaid period of fifteen working days shall in no case extend beyond seven working days of expiry of buyback period.

- 2. The shares or other specified securities offered for buy-back if already dematerialised shall be extinguished and destroyed in the manner specified under the Securities and Exchange Board of India (Depositories and Participants) Regulations,1996, and the bye-laws, the circulars and guidelines framed thereunder.
- 3. The Company shall, furnish a certificate to the Board *within seven working days* of the extinguishment and destruction of certificates, certifying compliance as specified in sub-regulation (i) above, and duly certified and verified by:
  - (a) the registrar and whenever there is no registrar, by the merchant banker;
  - (b) two directors of the Company, one of whom shall be a managing director, where there is one: and
  - (c) the Secretarial Auditor of the Company.
- 4. The Company shall furnish the particulars of the securities certificates extinguished and destroyed under sub-regulation (i), to the Stock Exchanges where the shares of the Company are listed *within seven days* of extinguishment and destruction of the certificates.
- 5. Where a Company buys back its shares or other specified securities under these regulations, it shall maintain a register of the shares or securities so bought, the consideration paid for the shares or securities bought back, the date of cancellation of shares or securities, the date of extinguishing and physically destroying the shares or

securities and such other particulars as may be prescribed in sub-section (9) of section 68 of the Companies Act, 2013.

# 4.6 Various compliances under Buyback from Open Market

- 1. The buy-back of shares or other specified securities from the open market may be in any one of the following methods:
  - (a) through stock exchange, or
  - (b) book-building process
- 2. The Company shall ensure that atleast 75% of the amount earmarked for buy-back, as specified in the resolution of the board of directors or the special resolution, as the case may be, is utilized for buying-back shares or other specified securities.
- 3. The Company shall ensure that at a minimum of 40% of the amount earmarked for the buy-back, as specified in the resolution of the Board of Directors or the special resolution, as the case may be, is utilized within the initial half of the specified duration.

# 4.7 Buyback through Stock Exchange

# I. Disclosures, filing requirements and timelines for public announcement

- 1. The Company shall appoint a merchant banker and make a public announcement in the same manner as pertaining to tender offer.
- 2. The public announcement shall be made *within two working days* from the date of passing the board resolution or date of declaration of results of the postal ballot for special resolution, as relevant and shall contain disclosures as specified by the Board.
- 3. Simultaneously, the Company is required to file a copy of the public announcement with the board and the stock exchanges electronically, where the shares or the specified securities of the company are listed.
- 4. Stock exchange shall forthwith disseminate the public announcement to the public.
- A copy of the public announcement shall also be placed on the websites of the Company, stock exchanges and the merchant banker.
- The public announcement shall also contain disclosures regarding details of the brokers and stock exchanges through which the buy-back of shares or other specified securities would be made.

#### Note:

- (a) The Company is not required to file the draft letter of offer with the Board.
- (b) The buy-back through stock exchanges shall be undertaken only in respect of frequently traded shares.
- (c) The buy-back through stock exchanges shall be subject to the restrictions on placement of bids, price and volume as specified by the Board.

# II. Subsequent compliances for open market buy-back through stock exchange

- 1. The Company shall submit the information regarding the shares or other specified securities bought-back, to the stock exchange on a *daily basis* in such form as may be specified by the Board and the stock exchange shall upload the same on its official website immediately.
- 2. The Company shall upload the information regarding the shares or other specified securities bought-back on its website on a daily basis.
- 3. A Company may buy-back its shares or other specified securities in physical form in the open market through stock exchange by following the procedure as provided hereunder:
  - (i) A separate window shall be created by the stock exchange, which shall remain open during the period of buy-back, for buy-back of shares or other specified securities in physical form.
  - (ii) The Company shall buy-back shares or other specified securities from eligible shareholders holding physical shares through the separate window specified in subregulation(i), only after verification of the identity proof and address proof by the broker.
  - (iii) The price at which the shares or other specified securities are bought back shall be the volume weighted average price of the shares or other specified securities boughtback, other than in the physical form, during the calendar week in which such shares or other specified securities were received by the broker.

# III. Extinguishment of certificates for open market buy-back through stock exchange

- The provisions pertaining to the extinguishment of certificates for tender offers shall apply for extinguishment of certificates under buyback of shares or other specified securities through stock exchanges.
- 2. The company shall complete the verification of acceptances within fifteen working days of the payout.

- 3. The Company shall extinguish and physically destroy the securities certificates so bought back during the month in the presence of a Merchant Banker and the Secretarial Auditor on or before the fifteenth day of the succeeding month.
- 4. The Company shall ensure that all the securities so bought-back are extinguished within seven working days of expiry of buy-back period.

# 4.8 Buyback through Book Building

A Company may buy-back its shares or other specified securities from its existing securities holders through the book building process.

# I. Disclosures, filing requirements and timelines for public announcement

- The Company, which has been authorised by a special resolution or are solution passed by its Board of Directors, as the case may be, shall appoint a merchant banker and make a public announcement within two working days from the date of the approval of Board of Directors or of the shareholders, as the case may be.
- 2. The disclosures in the public announcement shall be made in accordance with the manner as specified in these regulations.
- 3. The book building process shall commence within seven working days from the date of the public announcement.
- 4. The public announcement shall contain the detailed methodology pertaining to intimation required to be made prior to the opening of the buy-back offer as specified by the Board.
- **II. Extinguishment of certificates**: The provisions pertaining to extinguishment of certificates for tender offer shall be applicable mutatis mutandis to the buy-back through book building.

# 4.9 General Obligations

# I. Company

- 1. The Company shall ensure that:
  - (a) the letter of offer, the public announcement of the offer or any other advertisement, circular, brochure, publicity material shall contain true, factual and material information and shall not contain any misleading information and must state that the directors of the Company accept the responsibility for the information contained in such documents;

- (b) the Company shall not issue any shares or other specified securities including by way of bonus till the date of expiry of buyback period for the offer made under these regulations;
- (c) the Company shall pay the consideration only by way of cash;
- (d) the Company shall not withdraw the offer to buy-back after the draft letter of offer is filed with the Board or public announcement of the offer to buyback is made;
- (e) the promoter(s) or his/their associates shall not deal in the shares or other specified securities of the Company in the stock exchange or offmarket, including inter-se transfer of shares among the promoters during the period from the date of passing the resolution of the board of directors or the special resolution, as the case may be, till the closing of the offer.
- (f) the Company shall not raise further capital for a period of one year from the expiry of buyback period, except in discharge of its subsisting obligations.
- No public announcement of buy-back shall be made during the pendency of any scheme of amalgamation or compromise or arrangement pursuant to the provisions of the Companies Act.
- The Company shall nominate a Compliance Officer and investors service centre for compliance with the buy-back regulations and to redress the grievances of the investors.
- 4. The particulars of the security certificates extinguished and destroyed shall be furnished by the Company to the stock exchanges where the shares or other specified securities of the Company are listed within seven working days of extinguishment and destruction of the certificates.
- 5. The Company shall within two working days of expiry of buy-back period issue a public advertisement in a national daily, inter alia, disclosing:
  - number of shares or other specified securities bought;
  - price at which the shares or other specified securities bought;
  - total amount invested in the buy-back;

- details of the securities holders from whom shares or other specified securities exceeding one percent of total shares or other specified securities were bought back; and
- the consequent changes in the capital structure and the shareholding pattern after and before the buy-back.
- 6. The Company in addition to these regulations shall comply with the provisions of buy-back as contained in the Companies Act and other applicable laws.

#### II. Merchant Banker

- 1. The merchant banker shall ensure that—
  - (a) the Company is able to implement the offer;
  - (b) the provision relating to escrow account has been complied with;
  - (c) firm arrangements for monies for payment to fulfil the obligations under the offer are in place;
  - (d) the public announcement of buy-back is made in terms of the regulations;
  - (e) the letter of offer has been filed in terms of the regulations;
  - (f) a due diligence certificatealong with the draft letter of offer has been furnished to the Board:
  - (g) the contents of the public announcement of offer as well as the letter of offer are true, fair and adequate and quoting the source wherever necessary;
  - (h) due compliance of sections 68, 69 and 70 of the Companies Act and any other laws or rules as may be applicable in this regard has been made;
  - the bank with whom the escrow or special amount has been deposited releases the balance amount to the Company only upon fulfilment of all obligations by the Company under the regulations;
  - (j) a final report in the electronic mode shall be submitted to the Board within fifteen working days from the date of expiry of the buy-back period.



# 5. SEBI [PROHIBITION OF INSIDER TRADING (PIT)] REGULATIONS, 2015

#### 5.1 Introduction

In its relentless pursuit of maintaining market integrity and protecting the interests of investors, the Securities and Exchange Board of India (SEBI) introduced the "Prohibition on Insider Trading" Regulations in 2015. Insider trading, the unauthorized use of non-public information for trading in securities, poses a significant threat to market fairness and investor confidence. The SEBI (Prohibition on Insider Trading) Regulations, 2015, represent a crucial regulatory framework designed to curb illicit practices, promote transparency, and safeguard the sanctity of the securities market in India.

# 5.2 Key Objectives

- (i) Preventing Unfair Practices: The primary objective of these regulations is to prevent unfair trading practices arising from the misuse of confidential and unpublished information by insiders, ensuring a level playing field for all market participants.
- (ii) Safeguarding Investor Interests: The regulations aim to protect the interests of investors by promoting fair and transparent trading conditions. This involves preventing those with access to privileged information from gaining an undue advantage over other market participants.
- (iii) Maintaining Market Integrity: SEBI seeks to maintain the integrity and credibility of the securities market by curbing insider trading, which can erode trust and confidence in the financial system.

The SEBI (Prohibition on Insider Trading) Regulations, 2015, stand as a robust framework aimed at eradicating the menace of insider trading and fostering a fair and transparent securities market in India. By delineating clear guidelines, enforcing strict compliance, and emphasizing the importance of ethical conduct, these regulations contribute significantly to the overall integrity and resilience of the Indian capital market.

To begin with, first of all, let us have an idea about the important terms which will be used frequently used while discussing the various parameters of this Regulation.

#### 5.3 Definitions

- 1. **Insider** "Insider" means any person who is:
  - (i) a connected person; or
  - (ii) in possession of or having access to unpublished price sensitive information;

#### 2. "Connected person" means, -

- (i) any person who is or has during the six months prior to the concerned act been associated with a company, directly or indirectly, in any capacity including by reason of frequent communication with its officers or by being in any contractual, fiduciary or employment relationship or by being a director, officer or an employee of the company or holds any position including a professional or business relationship between himself and the company whether temporary or permanent, that allows such person, directly or indirectly, access to unpublished price sensitive information or is reasonably expected to allow such access.
- (ii) Without prejudice to the generality of the foregoing, the persons falling within the following categories shall be deemed to be connected persons unless the contrary is established, -
  - (a) an immediate relative of connected persons specified in clause (i); or
  - (b) a holding company or associate company or subsidiary company; or
  - (c) an intermediary as specified in section 12 of the Securities and Exchange Board of India Act, 1992 or an employee or director thereof; or
  - (d) an investment company, trustee company, asset management company or an employee or director thereof; or
  - (e) an official of a stock exchange or of clearing house or corporation; or
  - (f) a member of board of trustees of a mutual fund or a member of the board of directors of the asset management company of a mutual fund or is an employee thereof; or
  - (g) a member of the board of directors or an employee, of a public financial institution as defined in section 2 (72) of the Companies Act, 2013; or
  - (h) an official or an employee of a self-regulatory organization recognised or authorized by the Board; or

- (i). a banker of the company; or
- (ii). a concern, firm, trust, Hindu undivided family, company, or association of persons wherein a director of a company or his immediate relative or banker of the company, has more than ten per cent. of the holding or interest.
- 3. Unpublished price sensitive information "Unpublished price sensitive information means any information, relating to a Company or its securities, directly or indirectly, that is not generally available which upon becoming generally available, is likely to materially affect the price of the securities and shall, ordinarily including but not restricted to, information relating to the following:
  - (i) financial results;
  - (ii) dividends;
  - (iii) change in capital structure;
  - (iv) mergers, de-mergers, acquisitions, delisting, disposals and expansion of business and such other transactions:
  - (v) changes in key managerial personnel.
- 4. Trading- "Trading' means and includes subscribing, redeeming, switching, buying, selling, dealing, or agreeing to subscribe, redeem, switch, buy, sell, deal in any securities, and "trade" shall be construed accordingly.
- **Trading Day** "Trading day" means a day on which the recognized stock exchanges are open for trading.
- 6. Immediate Relative "Immediate relative" means a spouse of a person, and includes parent, sibling, and child of such person or of the spouse, any of whom is either dependent financially on such person, or consults such person in taking decisions relating to trading in securities.
- **7. Generally available information** "Generally available information" means information that is accessible to the public on a non-discriminatory basis.

# 5.4 Appointment of a Compliance Officer

Pursuant to the provisions contained in Regulation 2(1)(c) of SEBI (Prohibition of Insider Trading, Regulations, 2015, it is mandatory to appoint a Compliance Officer.

Compliance Officer means any senior officer, designated so and reporting to the board of directors or head of the organization in case board is not there, who is financially literate and is capable of appreciating requirements for legal and regulatory compliance under these regulations and who shall be responsible for compliance of policies, procedures, maintenance of records, monitoring adherence to the rules for the preservation of unpublished price sensitive information, monitoring of trades and the implementation of the codes specified in these regulations under the overall supervision of the board of directors of the listed Company or the head of an organization, as the case may be.

Financially literate shall mean a person who has the ability to read and understand basic financial statements i.e. balance sheet, profit and loss account, and statement of cash flows.

# Is it mandatory to appoint a Company Secretary as a Compliance Officer under SEBI (PIT) Regulations, 2015?

Unlike SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, it is not mandatory to appoint a Company Secretary as a Compliance Officer. Any person, who possess the above-mentioned qualifications can be appointed as a Compliance Officer under SEBI (PIT) Regulations, 2015.

# 5.5 Trading Plans

Pursuant to the provisions contained in Regulation 5 of SEBI (Prohibition of Insider Trading) Regulations, 2015, an insider shall be entitled to formulate a trading plan and present it to the Compliance Officer for approval and public disclosure pursuant to which trades may be carried out on his behalf in accordance with such plan.

#### **Such Trading Plan shall:**

- 1. not entail commencement of trading on behalf of the insider earlier than six months from the public disclosure of the plan;
- 2. not entail trading for the period between the twentieth trading day prior to the last day of any financial period for which results are required to be announced by the issuer of the securities and the second trading day after the disclosure of such financial results;
- 3. entail trading for a period of not less than twelve months;
- 4. not entail overlap of any period for which another trading plan is already inexistence;

5. set out either the value of trades to be effected or the number of securities to be traded along with the nature of the trade and the intervals at, or dates on which such trades shall be effected; and not entail trading in securities for market abuse.

#### The Compliance Officer:

- shall review the trading plan to assess whether the plan would have any potential for violation of these regulations and
- shall be entitled to seek such express undertakings as may be necessary to enable such assessment and to approve and monitor the implementation of the plan.

The Compliance Officer is entitled to review and approve the plan. For this purpose, the insider is required to declare that he is not in possession of unpublished price sensitive information or that he would ensure that any unpublished price sensitive information in his possession becomes generally available before he commences executing his trades. Once satisfied, the Compliance Officer may approve the trading plan, which would then have to be implemented in accordance with these regulations.

The trading plan, once approved, shall be irrevocable and the insider shall mandatorily have to implement the plan, without:

- being entitled to either deviate from it, or
- to execute any trade in the securities outside the scope of the trading plan.

It is to be noted that the implementation of Trading Plan shall not be commenced unless the unpublished price sensitive information in the possession of the insider becomes generally available at the time of the commencement of implementation to ensure that the provisions of Regulation 4(1) are complied with.

Upon approval of the Trading Plan, the Compliance Officer shall notify the plan to the Stock Exchanges where the securities are listed.

# 5.6 Communication or Procurement of Unpublished Price Sensitive Information and Maintenance of a Structured Digital Data Base in cases of Units of Mutual Fund

 No insider, having the possession of unpublished price sensitive information, shall communicate, provide, or allow access to such information to any person including other insiders except where such communication is in furtherance of legitimate purposes, performance of duties or discharge of legal obligations.

- No person shall procure from or cause the communication by any insider of unpublished price sensitive information, except in furtherance of legitimate purposes, performance of duties or discharge of legal obligations.
- 3. The board of directors of an asset management Company with the approval of the Trustees shall make a policy for determination of "legitimate purposes".
  - The term "legitimate purpose" shall include sharing of unpublished price sensitive information in the ordinary course of business by an insider with Trustees, Registrars and Share Transfer Agents, Custodians, Valuation Agencies, Fund Accountants, Association of Mutual funds of India, Credit Rating Agencies, legal advisors, auditors or other advisors or consultants, except where such sharing has been carried out to evade or circumvent the prohibitions of these regulations.
- 4. Any person in receipt of unpublished price sensitive information pursuant to a "legitimate purpose" shall be considered an "insider and due notice shall be given to such persons to maintain confidentiality of such unpublished price sensitive information in compliance with these regulations.
- 5. The board of directors of an asset management Company shall require the parties to execute agreements to contract confidentiality and non-disclosure obligations on the part of such parties and such parties shall keep information so received confidential, except for the purpose specified herein and shall not otherwise deal in the units of a mutual fund when in possession of unpublished price sensitive information.
- 6. The board of directors or head(s) of the organisation of every person required to handle unpublished price sensitive information shall ensure that a Structured Digital Database (SDD) is maintained containing:-
  - the nature of unpublished price sensitive information;
  - the names of such persons who have shared the information
  - the names of such persons with whom information is shared under this regulation along with the Permanent Account Number or any other identifier authorized by law where Permanent Account Number is not available.

Such database shall not be outsourced and shall be maintained internally with adequate internal controls and checks such as time stamping and audit trails to ensure non tampering of the database.

The Structured Digital Database is preserved for a period of not less than eight years after completion of the relevant transactions and in the event of receipt of any information from the Board

regarding any investigation or enforcement proceedings, the relevant information in the structured digital database shall be preserved till the completion of such proceedings.

# 5.7 Disclosures by Certain Persons

- 1. An asset management Company shall, on such date as may be specified by the board and on a quarterly basis thereafter, disclose the details of holdings in the units of its mutual fund schemes, on an aggregated basis, held by the Designated Persons of asset management Company, trustees and their immediate relatives on the platform of Stock Exchanges or in any other manner as may be specified by the Board.
- 2. Details of all the transactions in the units of its own mutual funds, above such thresholds as may be specified by the Board, executed by the Designated Persons of asset management Company, trustees and their immediate relatives shall be reported by the concerned person to the Compliance Officer of asset management Company within two business days from the date of transaction.

# 5.8 Codes under SEBI (Prohibition of Insider Trading) Regulations, 2015

	CODES				
CODE OF FAIR DISCLOSURE BY LISTED COMPANIES	CODE OF CONDUCT BY LISTED COMPANIES	CODE OF CONDUCT FOR INTERMEDIARIES AND FIDUCIARIES			

#### Code of Fair Disclosure

- The board of directors of every Company, whose securities are listed on a stock exchange, shall formulate and publish on its official website, a code of practices and procedures for fair disclosure of unpublished price sensitive information that it would follow in order to adhere to each of the principles set out in Schedule A to these regulations, without diluting the provisions of these regulations in any manner.
- Every such code of practices and procedures for fair disclosure of unpublished price sensitive information and every amendment thereto shall be promptly intimated to the stock exchanges where the securities are listed.

#### **Code of Conduct**

 The board of directors of every listed Company and the board of directors or head(s) of the organisation of every intermediary shall ensure that the Chief Executive Officer or Managing Director shall formulate a code of conduct with their approval to regulate, monitor and report trading by its designated persons and immediate relatives of designated persons towards achieving compliance with these regulations, adopting the minimum standards set out in Schedule B in case of a listed Company and Schedule C in case of an intermediary to these regulations, without diluting the provisions of these regulations in any manner.

- The board of directors or head(s) of the organisation, of every other person who is required to handle unpublished price sensitive information in the course of business operations shall formulate a code of conduct to regulate, monitor and report trading by their designated persons and immediate relative of designated persons towards achieving compliance with these regulations, adopting the minimum standards set out in Schedule C to these regulations, without diluting the provisions of these regulations in any manner.
  - Professional firms such as auditors, accountancy firms, law firms, analysts, insolvency professional entities, consultants, banks etc., assisting or advising listed companies shall be collectively referred to as fiduciaries for the purpose of these regulations.
- Every listed Company, intermediary and other persons formulating a code of conduct shall identify and designate a compliance officer to administer the code of conduct and other requirements under these regulations.

#### Code of Conduct v/s Code of Fair Disclosure

	Basis of Difference	Code of Conduct	Code of Fair Disclosure			
1.	Applicability	Designated Persons and their Immediate relatives	Board of Directors and Chief Investor Relations Officer			
2.	Intent	To regulate, monitor and report trading by its Designated Persons and immediate relatives of Designated Persons	To ensure prompt and uniform disclosure of UPSI and avoid its selective disclosure			
3.	Minimum Standards	Minimum Standards as per Schedule B	Minimum Standards as per Schedule C			
4.	Intimation to Stock Exchange	Formulated Code of Conduct to be confirmed to the stock exchange	Formulated Code of fair disclosure and amendments thereto to be intimated to the stock exchange			
5.	Disclosure on the Website of the Company	Not required	Mandatory			

Code of Conduct of Listed Con	npany	v/s Code of Conduct of Intermediaries and Fiduciaries
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	Basis of Difference	Code of Conduct of Listed Company	Code of Conduct of Intermediaries and Fiduciaries		
1.	Persons responsible for formulation	CEO & MD formulates with the approval of Board of Directors	Head of Organization		
2.	Minimum Standards	Minimum Standards as per Schedule B	Minimum Standards as per Schedule C		
3.	Restricted List	No express requirement of maintaining restricted list.	Requires maintenance of restricted list for approving or rejecting applications for preclearance of trades.		
4.	Trading window closure	Trading window is required to be closed by listed entity	Trading window is closed by client listed entity.		

# 5.9 Disclosures under SEBI (PIT) Regulations, 2015

#### Initial Disclosures (Regulation 7 (1))

Every person on appointment as a Key-Managerial Personnel or a Director of the Company or upon becoming a promoter or member of the promoter group shall disclose his holding of securities of the Company as on the date of appointment or becoming a promoter, to the Companywithin seven days of such appointment or becoming a promoter.

#### Continual Disclosures (Regulation 7 (2))

Every promoter, member of promoter group, designated person and director of every Company shall disclose to the Company the number of such securities acquired or disposed of within two trading days of such transaction if the value of the securities traded, whether in one transaction or a series of transactions over any calendar quarter, aggregates to a traded value in excess of ten lakh rupees or such other value as may be specified;

On receipt of above information, the Company shall notify the same to the stock exchange *within 2 trading days* of receipt information or from becoming aware of such information.

#### Disclosures By Other Connected Persons (Regulation 7 (3))

Any Company whose securities are listed on a stock exchange may, at its discretion require any other connected person or class of connected persons to make disclosures of holdings and trading in securities of the Company in such form and at such frequency as may be determined by the Company in order to monitor compliance with these regulations.

#### Restriction on Communication / Procurement of Unpublished Price Sensitive Information

- No insider shall communicate, provide, or allow access to any unpublished price sensitive information, relating to a Company or securities listed or proposed to be listed, to any person including other insiders except where such communication is in furtherance of legitimate purposes, performance of duties or discharge of legal obligations.
- No person shall procure from or cause the communication by any insider of unpublished price sensitive information, relating to a Company or securities listed or proposed to be listed, except in furtherance of legitimate purposes, performance of duties or discharge of legal obligations.
- 3. Notwithstanding anything contained in this regulation, an unpublished price sensitive information may be communicated, provided, allowed access to or procured, in connection with a transaction that would:
  - (a) entail an obligation to make an open offer under the takeover regulations where the board of directors of the listed Company is of informed opinion that sharing of such information is in the best interests of the Company.
  - (b) not attract the obligation to make an open offer under the takeover regulations but where the board of directors of the listed Company is of informed opinion that sharing of such information is in the best interests of the Company and the information that constitute unpublished price sensitive information is disseminated to be made generally available at least two trading days prior to the proposed transaction being effected in such form as the board of directors may determine to be adequate and fair to cover all relevant and material facts.

# 5.10 Obligations of Insider, Designated Persons, Compliance Officer, Board and Audit Committee

## 5.10.10bligations of Insider

- 1. Insider shall not communicate, provide, allow as to UPSI;
- 2. No person shall procure or cause communication by any insider;
- 3. Insider shall handle UPSI on 'need to know basis';
- 4. Share UPSI only for legitimate purpose;
- 5. Insider shall not trade in securities of the Company while in possession of UPSI.

#### 5.10.2 Obligations of Designated Persons

- Make timely disclosures pertaining to Initial, annual, continual (trades) disclosures including off-market.
- 2. Adhere to the Company's code of fair disclosure and code of conduct.
- 3. Before sharing UPSI, DPs shall ascertain whether sharing of UPSI is for legitimate purposes and enter into confidentiality agreement/ give confidentiality notice.
- 4. Enter the details of persons with whom UPSI is shared in SDD after sharing UPSI.

#### 5.10.3 Obligations of Compliance Officer

Compliance Officer shall be responsible for maintaining the following records:

- Database of Designated Persons and immediate relatives, along with other details as prescribed in the Regulations, in the format prescribed in the Code.
- Structured digital database containing the names of such persons or entities as the case may be with whom information is shared under the Regulations in the prescribed format
- Trading plans approved;
- Trades pre-cleared;
- Details of Trades executed pursuant to pre-clearance;
- Details of instances where the requirement of holding the listed securities of the Company during the holding period was waived for emergency reasons;
- Holdings of Designated Persons in the securities of the Company;
- Initial and Continual Disclosures received under the Regulations;
- Disclosure in relation to off-market trades by Insiders received under the Regulations;
- Disclosure of trades received from other connected person under the Regulations;
- Details of programmes undertaken by the Company for sensitizing the Designated Persons about their responsibilities under the Regulations;
- Details of violations under the Code and Regulations by Designated Persons;
- ♦ List of directors and employees comprising of the MD/CEO and upto two levels below CEO of the Company and furnishing details to the depositories of any change in the list, on an immediate basis and not later than 2 (two) working days.
- Record of proceedings of the Inquiry Committee.

#### 5.10.4 Role of Audit Committee

- 1. Review compliance with the provisions of the Regulations at least once in a financial year;
- 2. Verify adequacy and effectiveness of the systems for internal control and suggest measures to strengthen the same;
- 3. Chairman of Audit Committee to receive reports from the Compliance Officer atleast once in a year;
- 4. Ensuring that the gap between clearance of accounts by Audit Committee and Board Meeting is as narrow as possible and preferably on the same day to avoid leakage of material information.

#### 5.10.5 Role of Board of Directors

- 1. Designate compliance officer and specify the designated persons for the purpose of this regulations
- 2. Formulate the Code of fair disclosure of UPSI including policy for determining legitimate purpose.
- 3. Ensure that code of conduct to regulate, monitor, and report trading by DPs and their immediate relatives is formulated by the CEO/MD.
- 4. Approve policy and procedure for inquiry in case of leak of UPSI and policy for determination of legitimate purpose.
- 5. Ensure that UPSI is shared only for legitimate purpose and is in the best interest of the Company.
- 6. Ensure structured digital database is maintained.
- 7. Direct parties to execute agreements for maintaining confidentiality and non-disclosure obligations.
- 8. Specify the DPs in consultation with the compliance officer.
- 9. Stipulate thresholds and formats for pre-clearance.

## **TEST YOUR KNOWLEDGE**

# **Multiple Choice Questions (MCQs)**

- I. SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2018
- 1. Who is responsible for overseeing the compliance of securities laws and addressing investors' grievances?
  - (a) Lead Manager
  - (b) Compliance Officer
  - (c) Syndicate Member
  - (d) Registrar to the Issue
- 2. In the appointment of lead managers, what safeguards should be there to ensure the protection of investors and compliance with relevant laws?
  - (a) The lead manager must be an associate of the issuer
  - (b) The lead manager's rights and obligations are not predetermined
  - (c) Agreements may include clauses without limiting liabilities
  - (d) The lead manager cannot assess the capability of other intermediaries
- 3. What is the role of a compliance officer and the importance of appointing one in the context of securities issuance.
  - (a) The compliance officer is responsible for marketing the issue.
  - (b) The compliance officer ensures the issuer's profitability.
  - (c) The compliance officer monitors securities law compliance and addresses investors' grievances.
  - (d) The compliance officer handles post-issue responsibilities.
- II. SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015
- 4. In the case of in-house share transfer facility, when should a listed entity register with the Board as a Category II share transfer agent or appoint a Registrar to an issue and share transfer agent?
  - (a) When the total number of holders exceeds 50,000

- (b) When the total number of holders exceeds 75,000
- (c) When the total number of holders exceeds 100,000
- (d) When the total number of holders exceeds 150,000
- 5. How often should the Audit Committee of a listed entity meet according to Regulation 18?
  - (a) Twice in a year
  - (b) Three times in a year
  - (c) Four times in a year
  - (d) Once in a year
- 6. Who can be the Chairperson of the Nomination and Remuneration Committee according to Regulation 19?
  - (a) Executive Director
  - (b) Independent Director
  - (c) Any Director
  - (d) CEO of the Company

#### III. SEBI (Substantial Acquisition of Shares and Takeover) Regulations, 2011

- 7. What does the term "Acquisition" mean, as per SEBI [Substantial Acquisitions of Shares and Takeover (SAST)] Regulations, 2011?
  - (a) Direct or indirect acquisition of shares or voting rights
  - (b) Transfer of control over a target company
  - (c) Purchase of frequently traded shares
  - (d) Acquisition of securities on the Innovators Growth Platform
- 8. What is the significance of the "Identified Date" in the regulations?
  - (a) The date of the public announcement
  - (b) The date when the tendering period begins
  - (c) The date for determining shareholders for sending the letter of offer
  - (d) The date of acquisition of control over a target company

- 9. What triggers the obligation for a mandatory open offer according to Regulation 3?
  - (a) Acquisition of 25% or more of voting rights in a target company
  - (b) Acquisition of 20% or more of shares in a target company
  - (c) Acquisition of control over a frequently traded company
  - (d) Acquisition pursuant to a resolution plan under the Insolvency and Bankruptcy Code

#### IV. SEBI (Buy-back of Securities) Regulations, 2018

- 10. What is the maximum limit for buy-back of shares or specified securities based on standalone financial statements?
  - (a) 20%
  - (b) 25%
  - (c) 30%
  - (d) 35%
- 11. Under the SEBI Buy-back Regulations, the company's debt to paid-up capital and free reserves ratio should not exceed:
  - (a) 1:1
  - (b) 2:1
  - (c) 3:1
  - (d) 4:1
- 12. Which source is NOT allowed for buy-back according to SEBI regulations?
  - (a) Securities premium account
  - (b) Proceeds of the current buy-back
  - (c) Proceeds of an earlier issue of the same kind
  - (d) Free reserves

#### V. SEBI [Prohibition of Insider trading (PIT)] Regulations, 2015

- 13. What is the role of a Compliance Officer as per the SEBI (PIT) Regulations, 2015?
  - (a) Monitoring share prices
  - (b) Implementing marketing strategies

- (c) Ensuring compliance with legal and regulatory requirements
- (d) Conducting financial audits
- 14. Who can be appointed as a Compliance Officer under SEBI (PIT) Regulations, 2015?
  - (a) Any employee of the organization
  - (b) Only the Company Secretary
  - (c) Any person meeting specified qualifications
  - (d) External legal consultants only
- 15. Which of the following statements regarding Trading Plans is correct?
  - (a) Trading can commence immediately after public disclosure of the plan.
  - (b) Trading is allowed during the period around the announcement of financial results.
  - (c) Overlapping with existing trading plans is permissible.
  - (d) The plan must be irrevocable once approved.

# **ANSWERS/SOLUTIONS**

### Answers to the MCQ based Questions.

1.	(b)	2.	(c)	3.	(c)	4.	(c)	5.	(c)
6.	(b)	7.	(a)	8.	(c)	9.	(a)	10.	(b)
11.	(b)	12.	(c)	13.	(c)	14.	(c)	15.	(d)