CHAPTER 4

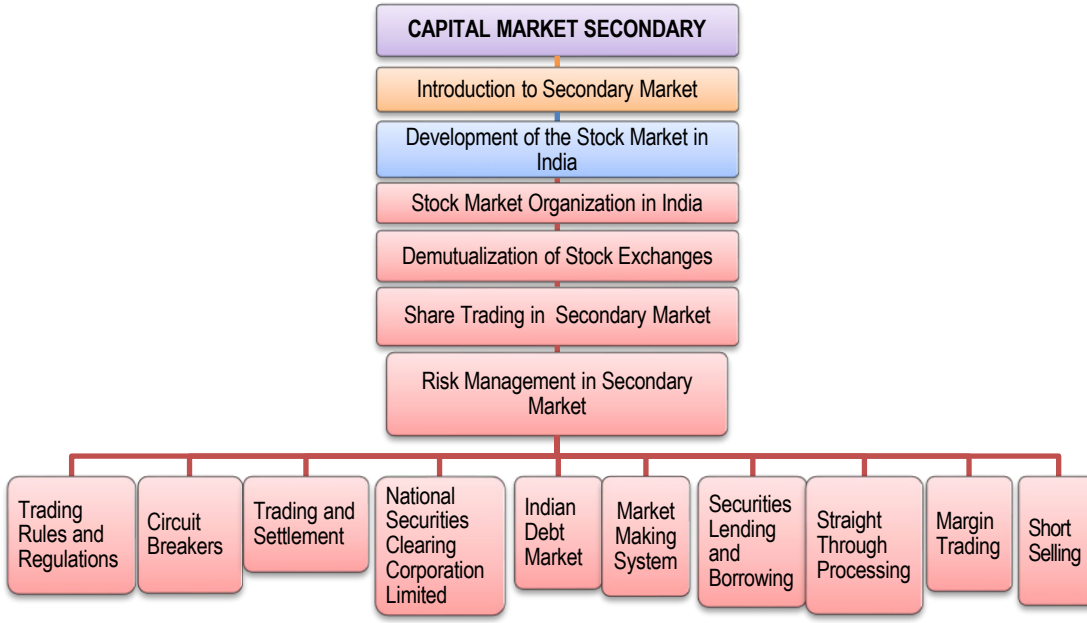
CAPITAL MARKET - SECONDARY

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

CHAPTER OVERVIEW



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.

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, Various issues					

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.

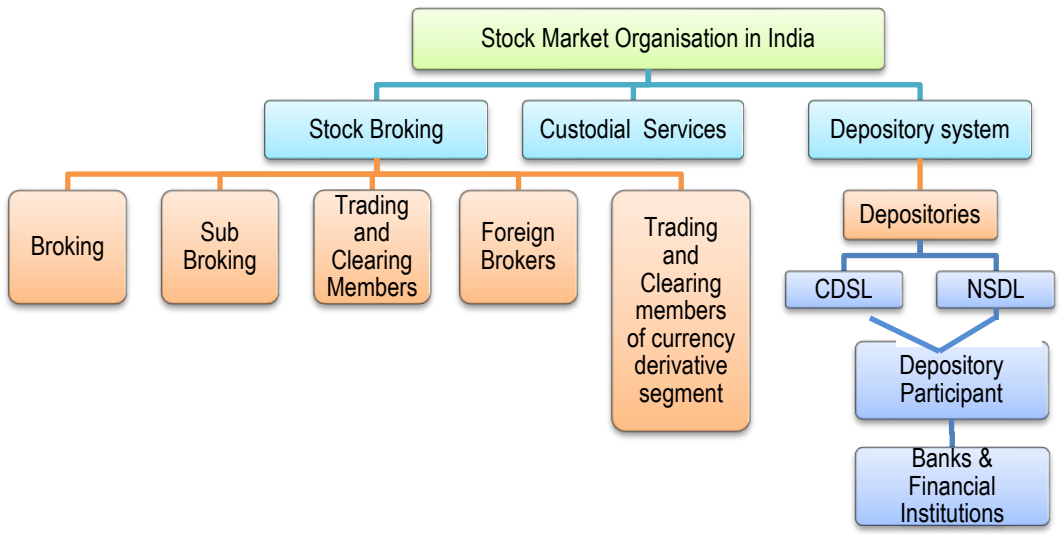
Select Ratios Relating to the Stock Market (Per cent)

Year	Market Capitalisation 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 fromT+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-by-step. 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:

$$\text{Index Value} = \text{Index on Previous Day} \times \frac{\text{Total market capitalisation for current day}}{\text{Total capitalisation of the previous day}}$$

- 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 x 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 x ₹ 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 shares x ₹ 80) x 0.80 = 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.

Circuit Breaker

Trigger limit	Trigger Time	Market halt duration
10%	Before 1 p.m.	45 minutes
	At or after 1 p.m. upto 2.30 pm	15 minutes
	At or after 2.30 p.m.	No halt
15%	Before 1p.m	1 hr. 45 min.
	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

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.

(v) 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 x 365/7 x 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

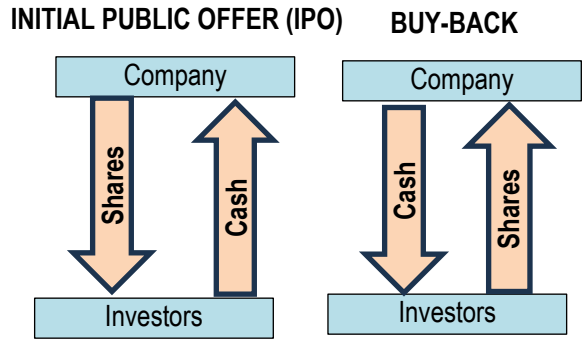
8.1 Buy Back of Shares

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 ₹ 2 crore to ₹ 50 lakh after the buyback. Because cash is an asset, this will lower the total assets of the company from ₹ 5 crore to ₹ 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 ₹ 2 to ₹ 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 ±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 multi-service 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:

i. 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 members.

   (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 ₹ 100. The transaction prices of the securities are (i) ₹ 100.50; (ii) ₹ 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. The Securities Lending price (SLP) of a security is ₹ 100. The transaction price (TP) of a security is ₹ 100.35. You are required to calculate annualized yield where the borrowing period is 10 days.

   (a) 15%

   (b) 12.78%

   (c) 18.25%

   (d) 16%

6. Stocks 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 10th 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 (₹) [1 x 2]	Closing Price of Share P
15:00:20	380.89	1524	580476.36	Closing Price = ₹ 3270671/8564 = 381.9093
15:01:30	381.79	1635	624226.65	
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 x 365/7 x 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.