Fundamentals of Stock Market (HS408)

VII Semester (July-December 2024)

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Stock Market Indices:

NSE, BSE, Nifty 50, SENSEX (Stock Exchange Sensitive Index)

Stock Market Indices

- A statistical source that measures financial market fluctuations.
- Stock market indices are statistical measures that track the performance of a specific section of the stock market or are used to gauge the overall health of the stock market, monitor trends, and serve as benchmarks for investment portfolios.
- The indices are performance indicators that indicate the performance of a certain market segment or the market as a whole.
- A stock market index is constructed by choosing equities from similar companies or those that match a predetermined set of criteria (industry, annual turnover, etc.). These shares are already listed on the exchange and traded.
- Each stock market index tracks the price movement and performance of the stocks.
- The index measures the change in the share prices of different companies.

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- **Composition:** Indices are made up of selected stocks, which represent a particular segment of the market, such as large-cap companies (L&T), technology stocks, or the entire market.

- **Purpose**: They help investors understand the market's general direction, compare the performance of individual stocks or portfolios, and guide investment decisions.

Types of Stock Market Indices

- **Global coverage**: These indices attempt to represent the performance of the global stock market. E.g., the FTSE Global Equity Index Series (managed by FTSE Group, London based) includes over 16,000 companies.

- **Regional coverage**: These indices represent the performance of the stock market of a single geographical region (Asia, Europe, Sub-Saharan, etc.). E.g., FTSE Developed Europe Index, and the FTSE Developed Asia Pacific Index.

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- **Country coverage:** These indices represent the performance of the stock market of a single country and, reflects investor sentiment on the state of its economy. The most frequently quoted market indices are national indices composed of the stocks of large companies listed on a nation's largest stock exchanges,. E.g., S&P 500 Index in US, DAX in Germany, NIFTY 50 in India, FTSE 100 in UK, etc.

- Sectoral Index: Both the BSE and the NSE have some strong indicators that gauge companies in a given sector. Indices like the S&P BSE Healthcare and NSE Pharma are known to be good indicators of changes in the pharmaceutical sector. Another notable example is the S&P BSE PSU and Nifty PSU Bank Indices, which are indices of all listed public sector banks.

- Market Cap Index: Few indices select companies on the basis of their market capitalization. Market capitalization refers to the stock exchange market value of any publicly traded corporation. Indices such as the S&P BSE and NSE small cap 50 are companies with a lower market capitalization as defined by the Securities Exchange Board of India (SEBI).

Market Capitalisation

- Often referred to as "market cap," it is the total value of a publicly traded company's outstanding shares.
- It represents the market's perception of a company's value and is calculated by multiplying the current share price by the total number of outstanding shares.
- Market cap is the market value of a company.

Formula for Market Capitalization:

- Market Capitalization=Current Share Price×Total Number of Outstanding Shares

Example:

- If a company has 10 million shares outstanding and each share is currently trading at ₹100, the market capitalization would be:
- Market Cap=10,000,000×100 = ₹1,000,000,000 (or ₹1 billion)
- Outstanding shares refer to the total number of shares of a company's stock that are currently owned by all its shareholders, including institutional investors, retail investors, and company insiders. These shares are actively traded on the market.

Stock Market Index of India

India has several key stock market indices that represent different segments of its stock market.

1. Sensex (BSE Sensex)

- **Description:** The Sensex, short for the Bombay Stock Exchange Sensitive Index, is one of the oldest and most prominent stock market indices in India.
- **Composition:** It consists of 30 of the largest and most actively traded stocks on the Bombay Stock Exchange (BSE), representing various sectors of the economy.
- **Importance:** Often considered a barometer of the Indian economy, the Sensex reflects the performance of major companies and provides insight into the overall market sentiment.

2. Nifty 50 (NSE Nifty)

- **Description:** The Nifty 50 is the flagship index of the National Stock Exchange (NSE) of India.
- **Composition:** It includes 50 of the largest and most liquid companies listed on the NSE, covering various sectors of the Indian economy.
- **Importance:** The Nifty 50 is widely used by investors as a benchmark for Indian equity markets. It serves as a basis for various financial products like index funds and derivatives.

3. Other Notable Indices in India:

- **Nifty Next 50:** Tracks the next 50 largest companies after the Nifty 50, providing insight into mid-cap companies.
- **BSE MidCap & BSE SmallCap:** Focus on mid-cap and small-cap companies, respectively, giving investors a view of the broader market beyond large-cap stocks.
- **Nifty Bank:** An index that specifically tracks the performance of the banking sector, including leading Indian banks.
- **Nifty IT:** Focuses on the information technology sector, including major IT services companies.
- **Nifty Pharma:** Tracks companies in the pharmaceutical sector.

4. Sectoral and Thematic Indices:

- **Nifty Auto:** Covers major automobile manufacturers and related companies.
- **Nifty FMCG:** Tracks companies in the fast-moving consumer goods (packaged foods, beverages, toiletries, cosmetics, cleaning supplies) sector.
- **Nifty Energy:** Includes companies from the energy sector, such as oil, gas, and power companies.

Market Volatility: Indian indices can be quite volatile due to economic factors, global events, and investor sentiment.

Sectoral Influence: Some indices may be heavily influenced by certain sectors, especially in an economy with prominent industries like IT and banking.

Difference between NSE and BSE

1. History and Establishment:

- **BSE:**
  - **Founded:** 1875
  - **Significance:** The BSE is the **oldest stock exchange in Asia** and has a long history, making it one of the most established stock exchanges globally.
- **NSE:**
  - **Founded:** 1992
  - **Significance:** The NSE was the first exchange in India to introduce electronic trading, which revolutionized the Indian stock market by making it more transparent, efficient, and accessible.

2. Market Indices:

- **BSE:**
  - **Key Index: SENSEX (S&P BSE SENSEX)**, which tracks the top 30 companies listed on the BSE.
- **NSE:**
  - **Key Index: Nifty 50**, which tracks the top 50 companies listed on the NSE.

3. Number of Listed Companies:

- **BSE:**
  - **Number of Listed Companies:** Over 5,000 companies, making it one of the largest exchanges in the world in terms of listed companies.
- **NSE:**
  - **Number of Listed Companies:** Approximately 2,000 companies, with a focus on large-cap and blue-chip companies.

4. Trading Volume:

- **BSE:**
  - **Trading Volume:** Although BSE has a large number of listed companies, it typically has lower trading volumes compared to NSE.
- **NSE:**
  - **Trading Volume:** NSE has the highest trading volumes in India, particularly in derivatives and equity trading, making it the more liquid exchange.

5. Types of Products:

- **BSE:**
  - **Products Offered:** Equities, derivatives, debt instruments, mutual funds, and bonds. BSE also offers trading in commodities via BSE Commodity Exchange.
- **NSE:**
  - **Products Offered:** Equities, derivatives (futures and options), debt instruments, currency derivatives, and ETFs. NSE is particularly strong in derivatives trading, especially index futures and options.

6. Market Capitalization:

- **BSE:**
  - **Market Capitalization:** BSE has a higher market capitalization due to the large number of listed companies, including many small and mid-cap stocks.
- **NSE:**
  - **Market Capitalization:** While NSE has fewer listed companies, it has a high market cap concentration due to the large and well-established companies that are listed on it.

7. Global Reach and Recognition:

- **BSE:**
  - **Global Recognition:** BSE is globally recognized due to its long history and large number of listed companies. It is also a member of the World Federation of Exchanges (WFE).
- **NSE:**
  - **Global Recognition:** NSE is recognized for its advanced technology and high trading volumes. It has gained significant global attention, especially in derivatives trading.

8. Investor Perception and Accessibility:

- **BSE:**
  - **Perception:** Traditionally seen as the more conservative exchange with a long history, favored by older companies and investors.
- **NSE:**
  - **Perception:** Considered more modern and technologically advanced, often preferred by institutional investors and traders due to its liquidity and trading volumes.

9. IPOs (Initial Public Offerings):

- **BSE:**
  - **IPOs:** Many companies choose to list their IPOs on BSE due to its historical significance.
- **NSE:**
  - **IPOs:** NSE is often chosen for IPOs due to its higher trading volumes and liquidity, attracting more investors.

Difference between SENSEX and Nifty 50

SENSEX and **Nifty 50** are the two most prominent stock market indices in India.

1. Stock Exchange Association:

- **SENSEX:**
  - Associated with the **Bombay Stock Exchange (BSE)**.
  - Officially known as the **S&P BSE SENSEX**.
- **Nifty 50:**
  - Associated with the **National Stock Exchange (NSE)**.
  - Officially known as the **Nifty 50**.

2. Number of Constituents:

- **SENSEX:**
  - Comprises **30** of the largest and most actively traded stocks on the BSE.
- **Nifty 50:**
  - Comprises **50** of the largest and most liquid stocks listed on the NSE.

3. Calculation Methodology:

- **SENSEX:**
  - Market-cap-weighted index, but it uses the **free-float market capitalization** method.
  - **Free-float market cap** refers to the market cap of shares that are readily available for trading, excluding promoter holdings.
- **Nifty 50:**
  - Also a market-cap-weighted index, calculated using the **free-float market capitalization** method.
  - The methodology is similar, but the number of stocks and the specific companies included differ.

4. Liquidity and Volatility:

- **SENSEX:**
  - As it includes only 30 stocks, it might be slightly more volatile and concentrated in a few sectors.
- **Nifty 50:**
  - With 50 stocks, it is generally considered to provide a broader and somewhat more stable representation of the market.

5. Market Coverage:

- **SENSEX:**
  - Represents approximately **45%** of the total market capitalization of the BSE.
- **Nifty 50:**
  - Represents around **65%** of the total market capitalization of the NSE.

Stock Market called as Economic Barometer

Stock Market is often referred to as the "economic barometer" of a country because it reflects the overall health and direction of the economy.

Just as a barometer measures atmospheric pressure and predicts weather changes, the stock market gauges economic conditions and signals potential changes in the economy.

Reflection of Corporate Performance:

- **Stock Prices and Earnings:** The stock market is composed of shares of publicly traded companies. The prices of these shares are influenced by the companies' earnings, profitability, and growth prospects. When companies perform well, their stock prices generally rise, reflecting a strong economy. Conversely, when companies struggle, their stock prices may fall, indicating economic challenges.
- **Aggregate Performance:** The overall performance of the stock market, as measured by indices like the SENSEX or Nifty 50, reflects the aggregate performance of the major corporations in the country. Since these companies contribute significantly to the economy, their performance is a good indicator of the broader economic health.

Investor Sentiment and Confidence:

- **Market Sentiment:** The stock market is influenced by investor sentiment, which is shaped by expectations of future economic conditions. If investors are optimistic about the economy, they buy stocks, driving prices up. This optimism is often based on positive economic indicators like GDP growth, low unemployment, and strong consumer spending.
- **Leading Indicator:** Because the stock market is forward-looking, it often reacts to anticipated changes in the economy before they become evident in official statistics. E.g., rising stock prices may signal that investors expect economic growth, while falling prices may indicate concerns about an economic slowdown.

Capital Formation and Investment:

- **Raising Capital:** The stock market provides companies with a platform to raise capital by issuing shares to the public. This capital is used for expansion, innovation, and hiring, which drives economic growth.
- **Investment Opportunities:** The stock market offers a wide range of investment opportunities, allowing both individual and institutional investors to allocate capital to various sectors of the economy. This investment supports business activities and contributes to economic development.

Wealth Effect and Consumer Spending:

- **Wealth Effect:** When stock prices rise, investors experience an increase in wealth, which can lead to higher consumer spending. This is because people feel more financially secure and are more likely to spend on goods and services, boosting economic activity.
- **Consumption and Growth:** Increased consumer spending drives demand for products and services, encouraging businesses to invest, produce more, and hire additional workers, further stimulating the economy.

Indicators of Economic Trends:

- **Economic Indicators:** Stock market indices often move in tandem with key economic indicators such as GDP growth, industrial production, and employment rates. E.g., a rising stock market might coincide with increasing GDP, suggesting economic expansion.
- **Sectoral Insights:** The performance of specific sectors in the stock market can provide insights into particular areas of the economy. E.g., strong performance in the technology sector might indicate innovation and growth in that area, while weakness in the industrial sector could suggest challenges in manufacturing.

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Government and Policy Impact:

- **Policy Reactions:** Governments and central banks monitor the stock market as part of their economic assessment. A declining stock market might prompt policymakers to take measures such as lowering interest rates or implementing fiscal stimulus to support the economy.
- **Market as Feedback:** The stock market acts as a feedback mechanism for economic policies. E.g., if a government introduces reforms that are seen as pro-business, the stock market may respond positively, signaling approval of the policies.

Global Influence and Integration:

- **Global Markets:** In a globalized economy, the stock market's performance can also reflect international economic conditions. E.g., a downturn in global markets can impact domestic markets, indicating broader economic challenges.
- **Trade and Investment:** The stock market's performance can influence and be influenced by international trade and investment flows, further integrating it with the global economy.

How to Invest in the Stock Market without taking anyone's Help??

Investing in the stock market without taking anyone's help is commonly known as "self-directed investing."

1. Educate Yourself:

Start by learning the basics of the stock market, different investment strategies, and common financial terms. There are numerous online resources, books, and courses available for self-directed investors.

2. Set Financial Goals:

Determine your investment objectives, risk tolerance, and time horizon. Are you investing for retirement, wealth accumulation, or a specific financial goal? Clear goals will guide your investment decisions.

3. Create a Budget:

Assess your financial situation and set aside funds specifically for investing. Avoid investing money that you might need for essential expenses or emergencies.

4. Open an Investment Account:

Choose a reputable online brokerage platform and open an investment account. Ensure it offers the tools and resources suitable for your needs.

5. Research and Analyze Stocks:

Conduct thorough research on companies you are interested in. Analyze financial statements, performance, competitive positioning, and growth prospects. Utilize financial news and analyst reports to stay informed.

6. Diversify Your Portfolio:

Spread your investments across various stocks and sectors to reduce risk. Diversification helps protect your portfolio from significant losses if a specific stock or sector performs poorly.

7. Start Small and Invest Regularly:

Begin with a small amount to gain experience and confidence. Regularly contribute funds to your investments, even if it's a small amount. Consistent investing can compound over time.

8. Monitor Your Investments:

Keep track of your portfolio regularly and stay updated on market news and trends. Reevaluate your holdings periodically to ensure they align with your investment goals.

9. Avoid Emotional Decision-Making:

Emotions can cloud judgment and lead to impulsive decisions. Stick to your investment plan and avoid reacting to short-term market fluctuations.

10. Practice Patience and Long-Term Thinking:

Investing in the stock market requires patience. Don't expect immediate returns, and remember that successful investing often involves long-term commitment.

11. Stay Disciplined and Keep Learning:

Investing is a continuous learning process. Stay disciplined in your investment strategy and continue to educate yourself about market trends and new investment opportunities.

12. Seek Professional Advice If Necessary:

While you aim to invest independently, there might be instances where professional advice could be beneficial, especially for complex financial situations or specific investment needs.

DEMAT or Dematerialisation Account

A Demat account is a digital account that helps investors hold shares and securities in an electronic format. It also helps to keep proper track of all the investments an individual makes in shares, exchange-traded funds, bonds, and mutual funds in one place

Imagine you have a **piggy bank/Gullak** at home where you keep all your coins. Similarly, a DEMAT account is like a digital piggy bank/**Gullak** where you can store your investment assets, like stocks and shares, in an electronic form. Instead of holding physical certificates, everything is stored electronically.

Example: Suppose you buy 50 shares of a company. Instead of getting paper certificates for those shares, they will be held in your DEMAT account electronically. Whenever you want to sell those shares, the transactions happen digitally through your DEMAT account.

Institutions, which control Demat Account in India:

1. NSDL: National Securities Depository Limited (1996, NSE)

2. CDSL: Central Depository Services Limited (1999, BSE)

Meaning Trading Account

Trading Account:

Think of a trading account as a gateway that allows you to buy and sell stocks, just like a shop where you can buy and sell various items. It's an account provided by a stockbroker or a financial institution that enables you to place orders for buying and selling investments like stocks, mutual funds, and more.

Example:

You want to buy 10 shares of a company, so you place an order through your trading account. When the stock's price reaches the level you're comfortable with, the order gets executed, and the shares are purchased, and they go into your DEMAT account.

Meaning of Trading Terminal

Trading Terminal:

A trading terminal is like a control center for your trading activities. It's a software platform provided by the broker that allows you to see live stock prices, monitor market movements, and place orders in real-time.

Example:

Imagine you have a smartphone with a trading app installed. This app serves as your trading terminal, where you can see how the stock prices change throughout the day, and you can place buy or sell orders using the app.

Take away:

Think of DEMAT as your electronic piggy bank for holding investments, the Trading Account as the gateway to buy and sell those investments, and the Trading Terminal as the tool you use to manage and control your trades. They all work together to help you invest and trade in the stock market.

Calculation of Stock Market Indices

Market-Cap-Weighted Index/Value Weighted Index:

Market-Cap-Weighted Index is a type of stock market index in which each component (stock) is weighted according to its market capitalization (Market cap). This means that companies with larger market capitalizations have a greater influence on the index's performance than smaller companies. The market capitalization of a company is calculated by multiplying the current share price by the total number of outstanding shares.

Market cap is the total market value of a company's outstanding shares.

$$\text{Market Cap} = \text{Current Share Price} \times \text{Number of Outstanding Shares}$$

Weighting Methodology: In a market-cap-weighted index, each stock's weight in the index is proportional to its market capitalization.

Larger companies, with higher market caps, have a larger impact on the index's value.

E.g., Reliance Vs. Voltas

Calculation of Market cap weighted index

Sl.No.	Stock Name	Stock price as on 1st Jan 2019 (Rs.)	No. of Shares (Lakhs)	Today Price (1st Jan 2024)
1	Reliance	450	20	2500
2	TCS	1250	15	3100
3	HDFC Bank	500	25	1450
4	INFOSYS	500	30	1500
5	HUL	900	15	2600

Stock Name	Old Price (Rs.)	No. of Shares (Lakhs)	Old M. Cap (Lakh)	Old weights	In % Terms
Reliance	450	20	9000	0.13	13
TCS	1250	15	18750	0.27	27
HDFC Bank	500	25	12500	0.18	18
INFOSYS	500	30	15000	0.22	22
HUL	900	15	13500	0.2	20
Total			**68750**	**1**	**100**

Total M. Cap=68,750 cr.

How to distribute these 5 companies while buying stocks?

In which proportion to take which companies?

Suppose, you have Rs. 100/ how to invest this money in these companies?

Rel=9000/68750=0.13 or 13%

So, from the Rs. 100/ you invest Rs. 13/ on Reliance.

TCS=18750/68750=0.27 or 27%

So, from the Rs. 100/ you invest Rs. 27/ on TCS.

Stock Name	**No. of Shares (Lakhs)**	**New Price**	**New M. Cap (Lakh)**	**New weights**	**In % Terms**
Reliance	20	2500	50,000	0.23	23
TCS	15	3100	46500	0.21	21
HDFC Bank	25	1450	36250	0.17	17
INFOSYS	30	1500	45000	0.21	21
HUL	15	2600	39000	0.18	18
Total			**216750**	**1**	**100**

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In 2019, M. Cap=68750

In 2024, M. Cap=216750

In last 5 years, these 5 companies have given a return of 200%.

Rel=50000/216750=0.23 or 23%

So, from the Rs. 100/ you invest Rs. 23/ on Reliance.

TCS=46500/216750=0.21 or 21%

So, from the Rs. 100/ you invest Rs. 21/ on TCS.

M. cap of Reliance have increased so in 2024 you will invest more in reliance then in TCS.

Importance of Market-Cap-Weighted Index:

- **Reflects Economic Reality:** Since larger companies tend to play a more significant role in the economy, a market-cap-weighted index accurately reflects the economic contribution of these companies.
- **Investment Benchmark:** Market-cap-weighted indices are widely used as benchmarks for mutual funds, ETFs (Exchange Traded Funds), and other investment vehicles. Investors often compare their portfolio performance against these indices.

Significance of Market-Cap-Weighted Index:

- **Risk and Return Profile:** The index tends to be less volatile than equal-weighted or price-weighted indices because larger companies are generally more stable. However, this also means that the index's performance is heavily influenced by the largest companies.
- **Market Sentiment Indicator:** A market-cap-weighted index is a good indicator of overall market sentiment. When the index is rising, it often means that the largest companies (and, by extension, the broader market) are performing well.
- **Efficient Market Hypothesis (EMH):** The market-cap-weighted index aligns with the Efficient Market Hypothesis, which suggests that stock prices reflect all available information. Since the largest companies are the most closely followed by analysts and investors, their stock prices are believed to be the most efficient.

Advantages of Market-Cap-Weighted Indices:

- **Simplicity and Transparency:** The methodology is straightforward, easy to understand, and transparent.
- **Liquidity and Stability:** Larger companies generally have more liquidity and financial stability, making the index less susceptible to extreme volatility.
- **Automatic Rebalancing:** As companies' market caps change with stock price fluctuations, the index naturally rebalances itself without the need for manual intervention.

Disadvantages of Market-Cap-Weighted Indices:

- **Concentration Risk:** Since the index is heavily weighted toward larger companies, it may not accurately reflect the performance of smaller or emerging companies. This can lead to concentration risk if a few large companies dominate the index.
- **Overvaluation of Large Companies:** The market cap of large companies may become inflated, leading to an overrepresentation of these companies in the index. This could skew the perception of overall market health.
- **Underrepresentation of Small and Mid-Cap Stocks:** Smaller companies, despite their growth potential, have a minimal impact on the index's performance, which might not fully capture the dynamics of the broader economy.

Price-Weighted Index

Price-Weighted Index is a type of stock market index in which each stock is weighted according to its price per share, rather than its market capitalization.

This means that stocks with higher prices have a greater influence on the index's value, regardless of the size or market capitalization of the company.

A price-weighted index, the index trading price is based on the trading prices of the individual stocks that make up the index basket

In a price-weighted index, the higher a company's stock price, the more it contributes to the index

Price-Weighted Index refers to the stock index where the member companies are allocated on the basis or in the proportion of the price per share of the respective member company prevailing at the particular point of time and helps keep track of the overall health of the economy along with its current condition.

Examples of Price-Weighted Indices:

- **Dow Jones Industrial Average (DJIA):** Consisting of 30 large publicly traded companies in the United States.
- **Nikkei 225 (Japan):** Representing 225 of the largest companies listed on the Tokyo Stock Exchange.

Significance of Price-Weighted Index:

- **Reflecting Market Sentiment:** A price-weighted index reflects the sentiment of higher-priced stocks more than lower-priced ones. This can give insights into how higher-priced stocks, often seen as industry leaders, are performing.
- **Historical Benchmark:** Price-weighted indices like the DJIA have long been used as benchmarks to gauge the performance of the broader market or specific sectors. They hold significant historical value and are widely followed by investors and the media.

Advantages of Price-Weighted Indices:

- **Simplicity:** The method of calculation is easy to understand, and it provides a quick way to gauge the performance of a selected group of stocks.
- **Focus on High-Priced Stocks:** By giving more weight to higher-priced stocks, the index highlights the performance of companies that have high stock prices, which are often seen as industry leaders or market influencers.

Disadvantages of Price-Weighted Indices:

- **Price Bias:** The index may give an outsized influence to high-priced stocks, regardless of the company's actual size or market impact. This can lead to a skewed representation of the market.

- **Stock Splits and Adjustments:** When a company in the index undergoes a stock split, its influence on the index decreases, even though the company's market capitalization remains the same. This can distort the index's true reflection of market performance.

Stock splits refer to the process whereby a company increases its number of shares, reducing the per-share price of the stocks. Reducing the costs makes purchasing the company's shares easier for traders, and they can continue choosing them for trade despite their rising value.

- **Less Representation of Market Cap:** Smaller companies with lower stock prices may have less influence on the index, even if they have large market capitalizations and significant economic impact.

Calculation of **Price-Weighted** index

Sl.No.	Stock Name	Stock price as on 1st Jan 2015 (Rs.)	No. of Shares (Lakhs)	Today Price (1st Jan 2024)
1	Reliance	450	20	2500
2	TCS	1250	15	3100
3	HDFC Bank	500	25	1450
4	INFOSYS	500	30	1500
5	HUL	900	15	2600

Stock Name	Old Price (Rs.) (2015)	Weights
Reliance	450	0.125 or 12%
TCS	1250	0.347 or 35%
HDFC Bank	500	0.138 or 14%
INFOSYS	500	0.138 or 14%
HUL	900	0.25 or 25%
Total	**3600**	**1 or 100%**

Weight= Old Share Price/Total Share Prices

Reliance= 450/3600=0.125

TCS= 1250/3600=0.347

Stock Name	Old Price	Weights	Today Price	% Change in Price (Return)
Reliance	450	0.125 or 12%	2500	455.55%
TCS	1250	0.347 or 35%	3100	148
HDFC Bank	500	0.138 or 14%	1450	190
INFOSYS	500	0.138 or 14%	1500	200
HUL	900	0.25 or 25%	2600	188.88
Total	**3600**	**1 or 100%**	**11150**	**210 (Net Return)**

% Change in price= [(Today price-Old Price)/Old Price]*100

= [(11150-3600)/3600]*100 = 210

Rel= [(2500-450)/450]*100 = 455.55

Equal-Weighted Index

- A type of stock market index in which each component stock is given an equal weight, regardless of the company's size, market capitalization, or stock price.
- This means that all companies in the index contribute equally to the index's overall performance, making it fundamentally different from market-cap-weighted or price-weighted indices.
- So stocks of the smallest companies are given equal significance, or weight, to the largest companies when it comes to evaluating the overall group's performance.
- **Diversification:** Equal-weighted indices tend to provide more diversification compared to market-cap-weighted indices because they are not dominated by large companies. Smaller companies have the same impact on the index as larger ones, providing a more balanced representation across different segments of the market.
- **Exposure to Smaller Companies:** Since equal weighting increases the influence of smaller companies, these indices often provide more exposure to mid-cap and small-cap stocks, which can be beneficial in capturing growth opportunities that larger companies might not offer.

Advantages of Equal-Weighted Indices:

- **Reduced Concentration Risk:** Unlike market-cap-weighted indices, where a few large companies can dominate the index, equal-weighted indices distribute risk more evenly across all constituents.
- **Potential for Higher Returns:** By giving smaller companies equal weight, equal-weighted indices can capture growth opportunities that may be overlooked in market-cap-weighted indices.
- **Better Reflection of Broad Market Trends:** Since equal-weighted indices are not skewed by the performance of a few large companies, they may offer a more accurate reflection of overall market trends.

Disadvantages of Equal-Weighted Indices:

- **Overrepresentation of Volatile Stocks:** Smaller companies and those with higher volatility have the same weight as larger, more stable companies, which can make the index more volatile.
- **Less Efficient in Large Markets:** In markets where large-cap stocks dominate, an equal-weighted approach might not be as efficient or representative of the economic reality.

Stock Name	Old Price (2015)	Weights	Index Value (P*W)	Today Price (2024)	% Change in Price (Return)
Netflix	354.45	0.25	(354.45*0.25)=88.6125		
Apple	189	0.25	47.25		
Amazon	1869	0.25	467.25		
Meta	185.3	0.25	46.325		
Total	**2597.75**	**100**	**649.43**		

Weights= 1/N

¼=0.25

% Change in price= [(Today price-Old Price)/Old Price]*100

How do a Company Issues Shares?

When a company "gives" or issues shares, it is essentially selling ownership stakes in the company to investors in exchange for capital.

This process can occur in several ways, depending on whether the company is private or public and whether it's issuing shares for the first time or as part of a subsequent offering.

1. Initial Public Offering (IPO):

- **Going Public:** When a private company decides to go public, it offers shares to the general public for the first time through an Initial Public Offering (IPO).
- **Process:**
  - **Preparation:** The company works with investment banks to prepare a prospectus, which provides detailed information about the company, its financials, and the risks associated with investing.
  - **Regulatory Approval:** The company must register with the securities regulatory authority (SEC in the U.S. or SEBI in India) and get approval to issue shares to the public.
  - **Pricing:** Investment banks help the company determine the initial price of the shares based on the company's valuation, demand, and market conditions.
  - **Public Offering:** Once everything is set, the shares are offered to the public through a stock exchange. Investors can then buy shares, providing the company with capital.
  - **Listing:** After the IPO, the company's shares are listed on a stock exchange, where they can be bought and sold by investors.

2. Follow-On Public Offering (FPO):

- **Additional Shares:** After an IPO, a company may issue more shares to raise additional capital through a Follow-On Public Offering (FPO).
- **Process:** Similar to an IPO, but since the company is already public, the process is generally quicker and involves issuing new shares or selling existing shares held by current shareholders.

3. Private Placement:

- **Direct Offering to Specific Investors:** In a private placement, a company offers shares directly to a select group of investors, such as institutional investors, private equity firms, or certain wealthy individual investors.
- **Process:** The company negotiates directly with the investors, who typically buy large blocks of shares at a predetermined price. This method is often used by companies that need to raise capital quickly without going through the lengthy process of a public offering.
- **Regulatory Exemption:** Private placements usually have fewer regulatory requirements than public offerings but may come with restrictions on the resale of the shares.

4. Rights Issue:

- **Offering to Existing Shareholders:** In a rights issue, a company offers additional shares to its existing shareholders at a discounted price. This allows current shareholders to maintain their ownership percentage in the company.
- **Process:** Shareholders are given the right (but not the obligation) to purchase additional shares in proportion to their existing holdings. If they choose not to buy, they can often sell their rights to others.

5. Employee Stock Options (ESOPs):

- **Incentivizing Employees:** Companies may issue shares to employees through Employee Stock Option Plans (ESOPs) as part of their compensation package.
- **Process:** Employees are given the option to purchase company shares at a set price after a certain period (the vesting period). This aligns employees' interests with those of the company by giving them a stake in the company's success.

6. Share Buybacks and Re-Issuance:

- **Buying Back Shares:** A company may buy back its own shares from the market, reducing the number of shares outstanding. Later, it may re-issue these shares to raise capital.
- **Re-Issuance Process:** The company can sell the repurchased shares back into the market, often at a higher price if the company's value has increased.

7. Secondary Offering:

- **Existing Shares Sale:** In a secondary offering, existing shareholders, such as founders or early investors, sell their shares to the public. This does not involve issuing new shares or raising additional capital for the company.
- **Process:** The company and selling shareholders typically work with underwriters to facilitate the sale. The proceeds go to the selling shareholders, not the company.

Underwriters: The play a crucial role in the financial and business world, particularly in the context of public offerings, insurance, and loans. In business, **underwriters** are financial specialists, usually investment banks or financial institutions, that assess, assume, and manage risk in financial transactions. They are particularly prominent in the process of initial public offerings (IPOs), debt offerings, and insurance.

8. Bonus Shares:

- **Issuing Free Shares:** Sometimes, companies issue bonus shares to existing shareholders by converting their retained earnings or reserves into additional shares. This increases the number of shares held by each shareholder without requiring them to invest more money.
- **Process:** The company announces a bonus issue, specifying the ratio (e.g., 1 bonus share for every 2 shares held). Shareholders receive these additional shares in their accounts automatically.

Who decides what Percentage of Shares to be sold on Stock Market?

Board of Directors:

- The Board of Directors plays a critical role in making strategic decisions, including whether to take the company public and how many shares to offer. The board assesses the company's financial needs, future growth plans, and the implications of selling a portion of the ownership to the public.
- The board typically works closely with the management team, financial advisors, and underwriters to determine the appropriate percentage of shares to offer to the public.

Promoters and Founders:

- Promoters and founders are significant stakeholders in the decision-making process. They hold substantial shares and often have a strong interest in maintaining control over the company. They must approve the percentage of shares being sold, as it directly affects their ownership and control over the business.
- Promoters may decide to sell a portion of their shares in the Initial Public Offering (IPO) or subsequent offerings, balancing between raising capital and retaining control.

Major Investors (Venture Capitalists, Private Equity, etc.):

- If the company has raised funds from venture capitalists, private equity firms, or other institutional investors, these entities may also have a say in the decision. They may push for a higher percentage of shares to be sold to realize returns on their investment.
- These investors often negotiate terms that affect how many shares can be sold and when, such as lock-up periods that restrict the sale of shares for a certain time after an IPO.

Financial Advisors and Underwriters:

- Investment banks and underwriters play an advisory role. They provide insights into market conditions, optimal pricing, and the right amount of shares to sell to balance demand and control dilution. Their advice helps set the offering size and pricing strategy.

Shareholders' Approval:

- Significant decisions regarding issuing shares usually require approval from existing shareholders, especially when new shares are being created or when a major change in ownership structure is involved. Shareholder meetings and votes may be conducted to gain approval for such actions.

Factors Influencing the Decision:

1. Capital Requirements:

- The primary reason for selling shares is to raise capital for business expansion, paying down debt, or funding new projects. The amount of capital needed will influence how many shares are sold.

2. Control and Ownership Dilution:

- Companies carefully consider the impact of share sales on existing control and ownership. Selling too many shares can dilute the founders' or promoters' control, which might be undesirable if they wish to retain significant influence over company decisions.

3. Market Conditions:

- Market sentiment and conditions greatly influence the decision. Favorable market conditions may prompt a company to sell a larger percentage to capitalize on high valuations, while unfavorable conditions may lead to a smaller offering or delay.

4. Regulatory Requirements:

- Regulatory bodies like the Securities and Exchange Board of India (SEBI) in India or the Securities and Exchange Commission (SEC) in the U.S. set rules that might affect how shares are offered, such as minimum public shareholding requirements.

5. Valuation Considerations:

- The company's valuation plays a critical role in determining how many shares to offer.

Free-Float Index

- **Free-Float Index** is a type of stock market index in which the **weights of the stocks are determined by the number of shares that are available for trading (the free float) rather than the total number of shares outstanding**.
- The concept of free float excludes shares that are not readily available for trading, such as those held by promoters, founders, government entities, or long-term investors (held by insiders/locked in shares).
- Also known as the public float, it is the number of shares of a company that are **available for public trading in the secondary market**.
- It's calculated by excluding shares that are held by insiders, such as company officers, promoters, and governments (held by insiders).
- Most accurate measure.

If Company A has 100 million total shares, but only 70 million are available for public trading, and Company B has 100 million shares with 90 million available for trading, Company B will have a higher weight in a free-float index despite both having the same total market capitalization.

Free Float: The free float of a company refers to the portion of its shares that are available for public trading on the stock market. This excludes shares held by insiders, promoters, or any other entities that are unlikely to sell their shares in the open market.

Weighting by Free Float: In a free-float index, each stock's weight in the index is based on the market capitalization of its free-floating shares rather than its total market capitalization. This means that companies with a higher proportion of shares available for trading will have a greater impact on the index.

Importance of Free-Float Index:

- **More Accurate Market Representation:** Free-float indices are considered to be more accurate representations of market sentiment because they focus on shares that are actively traded, rather than shares that are held by insiders or locked in long-term holdings.

- **Better Reflection of Liquidity:** By weighting stocks according to their free-floating shares, these indices better reflect the liquidity of each stock. This is particularly important for investors who are concerned with the ease of buying and selling shares in the market.

- **Helps investors determine risk:** Investors can use the free float index to determine if a company is a good investment, based on whether the float is high or low.

Significance of Free-Float Index:

- **Regulatory and Market Adoption:** Many major stock market indices around the world, including the S&P 500, FTSE 100, and India's Nifty 50, have adopted the free-float methodology. This widespread adoption highlights its importance as a more accurate and representative measure of market performance.

- **Investment Benchmark:** Free-float indices are widely used as benchmarks by mutual funds, ETFs, and other investment products. They provide a better measure for fund managers who seek to track or outperform the index.

Examples of Free-Float Indices:

- **S&P 500 (U.S.):** The S&P 500 is calculated using free-float market capitalization, meaning that only the shares available for public trading are considered when determining the weight of each constituent.

- **Nifty 50 (India):** India's Nifty 50 index is also based on the free-float market capitalization of the 50 largest and most liquid stocks on the National Stock Exchange (NSE).

- **FTSE 100 (UK):** The FTSE 100 index uses free-float-adjusted market capitalization to determine the weight of each stock in the index.

Advantages of Free-Float Indices:

- **Better Liquidity Representation:** By focusing on shares that are actually available for trading, free-float indices provide a more realistic representation of market liquidity and investor sentiment.
- **Reduced Impact of Non-Tradable Shares:** The exclusion of non-tradable shares from the weighting process ensures that the index is not unduly influenced by large blocks of stock that are not actively traded.
- **More Responsive to Market Dynamics:** Free-float indices are more sensitive to changes in the market since they reflect the behavior of actively traded shares, making them a better indicator of current market conditions.

Disadvantages of Free-Float Indices:

- **Complexity in Calculation:** The free-float methodology requires more complex calculations and frequent updates to account for changes in the number of shares available for trading, such as when companies issue new shares or when large shareholders sell their holdings.
- **Potential for Overweighting Smaller Companies:** If a smaller company has a high percentage of its shares available for trading, it might receive a larger weight in a free-float index compared to a larger company with fewer tradable shares, potentially leading to a skewed representation.

Total number of outstanding shares: refers to the total shares of a company's stock that are currently owned by all its shareholders, including retail investors, institutional investors, and company insiders (such as executives, officers, and employees). These shares represent the company's total equity and are crucial in determining its market capitalization and other financial metrics.

E.g.: Let's assume a Company Marvel has a total of 10 Lakh outstanding shares, out of which 1.2 lakh shares are held by promoters and 1 lakh shares are held by the government. The current market price of each share is Rs. 24.00/. Calculate the free float factor and free float market capitalisation.

	No. of Outstanding Shares	Shareholding Pattern
Promoters	1,20,000	12%
Govt.	1,00,000	10%
Public	7,80,000	78%
Total	**10,00,000**	**100%**

…Cont'd

Shareholding Pattern= (No. of Share/Total No. of outstanding shares)*100

Promoters= (1,20,000/10,00,000)*100 = 12%

Free Float Factor= (No. of shares held by the public/Total No. of outstanding shares)*100

=7,80,000/10,00,000 = 78%

##Note: Free Float Factor only includes Shares available for Public

Free Float Market Cap: Share Price X No. of Outstanding Shares X Free Float Factor

=24 X 10,00,000 X 78%

Free Float Adjusted Market Cap= 1.872 Cr

How to decide what Percentage of Shares to be sold on Stock Market for a Company?

1. Assess the Company's Capital Needs:

- **Determine Fundraising Goals:** The first step is to identify how much capital the company needs to raise. This can be for expansion, paying down debt, funding new projects, or enhancing liquidity. The amount required will directly influence the percentage of shares to be sold.
- **Future Financial Planning:** Companies also consider their future capital needs. If the company anticipates needing more funds in the near future, it may opt to sell a smaller percentage initially and plan for secondary offerings later.

2. Consider Control and Ownership Dilution:

- **Impact on Control:** The company must consider the impact of the share sale on the ownership structure. Selling a high percentage of shares can dilute the control of existing shareholders, especially the founders and promoters. It's crucial to find a balance between raising sufficient funds and maintaining desired control over the company.
- **Promoter's Stake:** Promoters typically aim to maintain a significant stake to retain influence over company decisions. This is especially important in family-run businesses or where strategic control is vital.

3. Evaluate Market Conditions and Sentiment:

- **Timing and Market Environment:** The decision is heavily influenced by current market conditions. Favorable market conditions (e.g., bullish market sentiment, strong investor appetite) can lead the company to sell a higher percentage of shares to capitalize on high valuations.
- **Valuation Levels:** The company's valuation at the time of the share sale will impact how many shares need to be sold to raise the desired amount. Higher valuations mean fewer shares need to be sold to meet the fundraising goal.

4. Consult Financial Advisors and Underwriters:

- **Role of Investment Banks and Advisors:** Financial advisors, investment banks, and underwriters provide expert guidance on market demand, optimal pricing, and the appropriate percentage of shares to be sold. They analyze market trends, investor appetite, and competitive landscape to recommend a suitable offering size.
- **Demand Forecasting:** Advisors assess potential demand through market research and roadshows to determine the likely interest from investors. This helps in deciding whether a smaller or larger offering would be more successful.

5. Regulatory Requirements and Compliance:

- **Minimum Public Shareholding:** Regulatory bodies often have rules on the minimum percentage of shares that need to be publicly held. For instance, in India, SEBI requires listed companies to maintain a minimum public shareholding of 25%.
- **Lock-up Periods and Restrictions:** Regulations may also impose lock-up periods, restricting the sale of certain shares immediately after the offering, affecting how many shares can be realistically sold upfront.

6. Analyze Existing Shareholder and Investor Preferences:

- **Major Investors' Input:** Existing investors, such as venture capitalists or private equity firms, may have preferences regarding the percentage of shares sold. They may push for a certain amount of liquidity to achieve returns or retain a stake for future growth potential.
- **Shareholder Agreements:** Existing shareholder agreements may include terms that dictate or limit the percentage of shares that can be sold during an IPO or subsequent offerings.

7. Set the Desired Free Float:

- **Establishing Free Float:** Companies decide on the desired level of free float (the percentage of shares available for trading in the market) based on liquidity targets and investor interest. A higher free float typically attracts more institutional investors, but it must be balanced against control considerations.
- **Market Perception and Trading Liquidity:** A sufficient free float is important for ensuring good trading liquidity and attracting institutional investors, who often prefer companies with a larger pool of tradable shares.

8. Strategic Long-Term Planning:

- **Future Capital Raising Plans:** The company should consider its long-term strategy, including future fundraising needs. If the company plans to conduct further share sales or secondary offerings, it may decide to sell a smaller percentage initially to avoid excessive dilution.
- **Growth and Expansion Goals:** The decision should align with the company's broader growth strategy, ensuring that the capital raised supports planned investments without compromising strategic control.