

UNIT-1

INVESTMENT

1.1 Investment: Investment means putting your money into something with the expectation of making a profit.

Definition of Investment:

1. **Goods for Future Wealth:** Investment is like buying something today that you won't use now but will help you make more money in the future.
2. **Expecting a Positive Return:** It's when you commit your money with the hope of getting more money back.
3. **Oxford Dictionary:** According to the Oxford Dictionary, investment is the action of putting money into something to make a profit.

Introduction to Stock Market: The stock market is a place where people buy and sell things called securities. For example, the Bombay Stock Exchange is a stock market.

History of Stock Markets in India:

- Stock exchanges in India started in the mid-19th century.
- After the American Civil War in 1860-1861, there were more people buying and selling shares.
- Brokers in Mumbai formed an informal group called "The Native Stock and Share Brokers Association" in 1875.
- World Wars led to more stock trading.
- Stock exchanges were set up in cities like Chennai, Delhi, Nagpur, Kanpur, Hyderabad, and Bangalore.
- The Securities and Contract Regulation Act of 1956 gave the government the power to control stock exchanges.
- Stock exchanges like Mumbai, Kolkata, Chennai, Ahmadabad, Delhi, Hyderabad, and Indore were recognized.
- The Bangalore Stock Exchange was recognized in 1963.
- Currently, there are 23 stock exchanges, and most of them use modern technology.

Trading Methods:

- Until the 20th century, trading was done on the trading floor.
- In floor trading, people shouted to buy or sell shares.
- This system required face-to-face contact between traders.
- It wasn't very transparent and favored brokers over investors.
- The National Stock Exchange (NSE) and Over the Counter Exchange of India (OCTCEI) introduced computer-based trading.
- The Bombay Stock Exchange started screen-based trading in 1995 called Bombay Online Trading System (BOLT).

Primary Market:

- This is where companies raise money by selling new shares, preference shares, debentures, or global depository receipts.
- It's like a company's first sale of its shares to the public, whether it's a new or existing company.

Secondary Market:

- This is where people trade existing shares and securities.
- You can buy and sell equity shares, bonds, and debentures in this market.

1.2 Investment Objectives:

Investing money has specific goals and objectives. Here are the main objectives people have when they invest:

1) Increase Rate of Return and Reduce Risk:

- The primary goal of investing is to make your money grow over time. You want to earn more than you initially put in. Also, it's essential to reduce the risk of losing your money.

Other Investment Objectives:

2) Safety:

- When you invest, you want your money to be in a secure and legal place. You don't want to risk losing it due to shady or illegal dealings.

3) Liquidity:

- Liquidity means how easily you can turn your investments into cash. You might need your money quickly, so you want investments that can be sold easily in the market.

4) Return:

- Of course, you want your investments to make you money. You expect a good return on your investment, which means you want your money to grow over time.

5) Hedge Against Inflation:

- Inflation is when prices for goods and services go up over time, making your money worth less. Your investment should earn enough to cover this inflation, so your purchasing power doesn't decrease.

6) Tax Benefit:

- Some investments offer tax benefits. This means you can reduce the amount of taxes you

have to pay because of your investments. It's like getting an extra financial advantage.

7) Risk: Evaluate the performance of the portfolio

- Risk in investing is the chance that you won't make as much money as you expected or even lose some of your investment. Balancing risk and return is crucial because you want to minimize the risk while maximizing your potential profit.

In simple terms, when you invest, you want your money to grow, be safe and easy to access, and ideally, give you some extra benefits like tax advantages. But you also need to be aware of the risks involved and aim to manage them wisely.

1.3 PROCESS OF INVESTMENT

Process of Investment:

Investing involves a structured process to help make smart decisions about where to put your money. Here are the steps involved:

Step 1: Set Investment Policy:

- This is where you decide how much money you have to invest, what your investment goals are, and how knowledgeable you are about investing.
- You need to establish a clear plan based on your financial situation and objectives.

Step 2: Perform Security Analysis:

- In this step, you analyze the securities or assets you're interested in investing in.
- You look at the market conditions, the industry the asset belongs to, and the specific company or entity offering the asset.
- The goal is to gather information to help you make informed investment decisions.

Step 3: Construct a Portfolio:

- Portfolio construction is like building a mix of investments.
- You diversify your investments, which means spreading your money across different types of assets to reduce risk.
- You also select and allocate your funds to various investments based on your analysis from Step 2.
- The goal is to create a balanced portfolio that aligns with your objectives.

Step 4: Portfolio Revisions:

- Investing isn't a one-time decision. It requires ongoing management.
- You periodically review and revise your portfolio.
- This can involve adjusting your investments based on changes in the market, industry, or your personal financial situation.

- The idea is to ensure your portfolio continues to meet your goals.

Step 5: Evaluate Portfolio Performance:

- You regularly assess how well your investments are doing.
- This involves looking at the returns you've earned compared to your initial objectives.
- If your portfolio is not meeting your goals, you may need to make changes.

In a nutshell, the investment process involves setting clear objectives, analyzing potential investments, building a diversified portfolio, continually reviewing and revising that portfolio, and evaluating how well it's performing. This structured approach helps investors make informed decisions and adapt to changing circumstances in the financial markets.

1.4. INVESTMENT AND SPECULATION

Investment is the employment of fund on asset with the aim of earning income or capital appreciation.

• Investment has two attributes namely time and risk.

• Present consumption is sacrificed to get a return in the future.

• The sacrifice that has to be borne is certain but the return in the future may be uncertain.

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• To The Economist investment is the net addition made to the nation's capital stock that consists of goods and services that are used in the production process.

• Financial investment is the allocation of money to asset that is expected to return same given over a period of time.

Speculation means taking up the business risk in the hope of getting short term gain

• Speculation essentially involves buying and selling activities with the expectation of getting profit from the price fluctuations.

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• Purchasing securities with the low price and selling with high price is termed as speculation.

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.The speculator is more interested in the market action and its price movement.

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.The investor would try to match the risk and return

1.4.1 Investment vs. Speculation:

Meaning:

- **Investment (Investor):** Investment is like putting your money into something with the goal of earning income or increasing the value of your capital over time. Investors usually have a longer-term perspective.
- **Speculation:** Speculation is when you take on business risks, hoping to make short-term gains. It's like making bets on the price of assets going up or down in a very short period.

Time Horizon:

- **Investment (Investor):** Investors plan for a longer time horizon. They might hold onto their investments for one year to several years.
- **Speculation:** Speculation involves very short-term plans. Speculators may buy and sell assets within days or months.

Risk:

- **Investment (Investor):** Investors typically assume moderate levels of risk. They aim for a balance between risk and return.
- **Speculation:** Speculators are willing to undertake high levels of risk. They are looking for high returns, even if it means taking on more risk.

Return:

- **Investment (Investor):** Investors prefer moderate, steady returns. They are content with a reasonable rate of return for the level of risk they are taking.
- **Speculation:** Speculators aim for high returns, often in a short time frame. They are willing to take greater risks to achieve these high rewards.

Decision-Making:

- **Investment (Investor):** Investors consider fundamental factors and regularly evaluate a company's performance. They focus on the company's financial health and prospects.

- **Speculation:** Speculators often rely on inside information or market behavior. Their decisions are driven more by short-term market trends and rumors.

Funds:

- **Investment (Investor):** Investors typically use their own funds and avoid borrowing. They rely on personal resources.
- **Speculation:** Speculators may use borrowed funds to supplement their resources. They take on more leverage to increase their potential gains, but it also increases their risk.

In simpler terms, investment is a careful, long-term approach where you aim for stable returns and manage risk. Speculation, on the other hand, is riskier, focused on quick gains, and often involves borrowed money. It's more like making bets and taking chances in the short term.

UNIT-2

FUNDAMENTAL ANALYSIS & TECHNICAL ANALYSIS

2.1 Framework of Fundamental Analysis:

The intrinsic value of an equity share depends on a multitude of factors. The earning of the company the growth rate and the risk exposure of the company has a direct bearing on the price of the share.

Fundamental analysis consists of

- A. Economic analysis
- B. Industry analysis
- C. Company analysis

A. Economic Analysis:

- The economy's health impacts investments in many ways. Here are some factors to consider:
 - **Gross Domestic Product (GDP):** This represents the overall economic growth. Higher GDP growth is favorable for the stock market.
 - **Savings and Investments:** Growth needs investment, and that requires savings. The patterns of savings and investment affect the stock market.
 - **Inflation:** High inflation can harm the stock market, as it erodes the value of shares.
 - **Interest Rates:** Interest rates affect a company's financing costs. Lower interest rates are better for profitability.
 - **Government Budget:** A balanced budget is good for the stock market, as it helps stabilize costs.
 - **Tax Structure:** Lower taxes can encourage more investment in the stock market.
 - **Balance of Payment:** A surplus balance of payment is positive for the stock market.
 - **Monsoon and Agriculture:** Industries like agriculture are affected by factors like monsoons.
 - **Infrastructure Facilities:** Good infrastructure supports industrial growth.

B. Industry Analysis:

- After economic analysis, look at different industries, which are groups of companies with similar products or technology.
- Consider these factors in industry analysis:
 - **Past Sales and Earnings:** Analyze past performance to predict the industry's future.
 - **Government Attitude:** Government policies toward an industry can affect its prospects.
 - **Labour and Competitive Conditions:** Labor and competition impact profitability.
 - **Product Differentiation:** Industries producing unique products often have higher demand.
 - **SWOT Analysis:** Examine strengths, weaknesses, opportunities, and threats for the industry.
 - **Industry's Share Price Relative to Earnings:** This can influence investment decisions.

C. Company Analysis:

- Analyze individual companies within the chosen industry.
- Factors to consider include:
 - **Competitive Edge:** How well the company competes in its market.
 - **Earnings:** The company's accounting policies and earnings.
 - **Capital Structure:** How the company finances its assets.

- **Management Quality:** The experience and effectiveness of the company's management.
- **Operating Efficiency:** The company's ability to operate efficiently.
- **Financial Performance:** Analyzing financial statements for strengths and weaknesses.

Example: Let's say you're considering investing in the automobile industry. First, you'd analyze the overall economic conditions, such as GDP growth and interest rates. Then, you'd look at the specific factors affecting the automobile industry, like government policies, competition, and technological advancements. Finally, you'd analyze individual companies within the industry, considering their earnings, management quality, and financial performance to decide which stocks to invest in.

2.2 Technical Analysis:

Technical analysis is a way of evaluating stocks or other assets by looking at their past market activity. It's based on several key ideas:

Meaning:

- It's all about spotting trends in stock prices early and using that information to decide when to buy or sell.

How It Works:

- Technical analysts don't really care about the fundamental value of a company or asset. Instead, they focus on things like price movements and trading volume.
- They use charts and other tools to look for patterns that suggest future price movements.
- In a nutshell, technical analysis studies the behavior of the market itself, rather than trying to measure the intrinsic value of a security.

Assumptions:

1. Market Value is Determined by Supply and Demand:

- Technical analysts believe that the price of a stock or asset is determined by the balance between how many people want to buy it (demand) and how many people want to sell it (supply).
- When demand is greater than supply, prices go up, and vice versa.

2. The Market Discounts Everything:

- This means that all information, whether public or private, is already reflected in the price of a stock.
- For example, if a company announces a fantastic new product, technical analysts would argue that this information is already incorporated into the stock's price.

3. The Market Always Moves in Trends:

- Technical analysis assumes that market prices tend to move in trends. In other words, if a stock's price has been going up, it's likely to continue going up for a while, and the same goes for downward trends.

4. History Repeats Itself:

- Technical analysts believe that patterns that have occurred in the past tend to repeat themselves in the future.
- For example, if a stock has consistently gone up after a certain pattern in the past, technical analysts might expect it to do the same in the future.

Example: Let's say you're looking at the stock price of a company. Technical analysis involves studying the past price movements of the stock, looking at trading volumes, and using chart patterns to predict future price movements. If you see a pattern that suggests the stock has consistently gone up after a certain signal in the past, you might decide to buy the stock now in the hope that it will follow the same pattern.

2.3 Technical Analysis vs. Fundamental Analysis:

Both technical analysis and fundamental analysis are methods used for evaluating securities (like stocks), but they have different approaches and use different data.

Definition:

- **Fundamental Analysis:** It calculates the intrinsic value of a stock by examining economic factors and fundamentals like financial statements, earnings, expenses, assets, and liabilities. It aims to determine the true value of a company.
- **Technical Analysis:** It looks at a stock's price and trading volume history to predict future price movements. It doesn't care about the intrinsic value of a stock; it's all about analyzing patterns and trends in price data.

Data Used:

- **Fundamental Analysis:** Relies on financial statements and economic data.
- **Technical Analysis:** Focuses on price and volume data from stock charts.

Investing Approach:

- **Fundamental Analysis:** Typically used for long-term investing. Investors look to buy when the stock's price falls below its intrinsic value.
- **Technical Analysis:** More commonly used for short-term trading. Traders buy and sell based on the stock's price movements.

Concepts Used:

- **Fundamental Analysis:** Key concepts include Return on Equity (ROE) and Return on Assets (ROA), which evaluate a company's financial performance.
- **Technical Analysis:** Key concepts include Dow Theory (which studies price trends) and various price indicators and patterns.

Vision:

- **Fundamental Analysis:** Looks both backward (evaluating past financial data) and forward (making predictions about future value).
- **Technical Analysis:** Primarily looks backward (analyzing past price data to predict future trends).

Real-Time Example: Imagine you're considering investing in a technology company.

- **Fundamental Analysis:** You'd examine the company's financial statements, its earnings growth, the strength of its management, and the overall health of the tech industry. You might decide to invest based on a belief in the company's long-term potential.
- **Technical Analysis:** You'd focus on the company's recent stock price movements and trading volume. If you see a pattern suggesting that the stock is currently in an upward trend, you might decide to buy it with the expectation of selling it for a short-term profit.

In summary, fundamental analysis looks at the company's financial health and long-term potential, while technical analysis focuses on short-term price patterns and trends. Both approaches have their place in the world of investing and trading.

UNIT-3

MEASUREMENT OF RISK AND RETURN

3.1 Revenue Return (Return on Revenue - ROR):

Meaning:

- Revenue Return, also known as Return on Revenue (ROR), is a measure of a company's profitability.
- It is calculated by dividing the net income by the total revenue (sales) of the company.

How It Works:

- **Net Income:** This is the company's profit, which is calculated as total revenue (sales) minus all expenses, including both cash expenses and non-cash expenses like depreciation.
- **Total Revenue:** This represents the total sales generated by the company, before any deductions like sales discounts, returns, and allowances.

Examples of Sales Mix:

- A company can improve its ROR by increasing its net income. One way to do this is by changing the sales mix, which means altering the proportion of each product a business sells relative to total sales.
- Each product a company sells may have a different profit margin (the profit earned on each sale). By shifting sales toward products with higher profit margins, a business can increase its net income and therefore its ROR.

Real-Time Example: Let's consider a retail store that sells both baseball gloves and baseball bats:

- The baseball gloves sell for \$80 each and generate a profit of \$16 each, resulting in a profit margin of 20% ($\$16 \text{ profit} / \80 sale price).
- The baseball bats sell for \$200 each and generate a profit of \$20 each, resulting in a profit margin of 10% ($\$20 \text{ profit} / \200 sale price).

To improve its ROR, the store decides to focus its sales and marketing efforts on baseball gloves because they have a higher profit margin. By doing so, they can earn more net income for every dollar of sales, ultimately increasing their ROR.

In simple terms, ROR helps businesses and investors understand how efficiently a company is turning its sales into profits. By managing expenses and optimizing the sales mix, a company can enhance its ROR, which is a critical factor for investors when making investment decisions.

3.2 Capital Appreciation: Understanding the Increase in Asset Value

Meaning:

- Capital appreciation refers to the increase in the value of an asset, such as stocks, real estate, or other investments, based on a rise in market price.

How It Works:

- When the market price of an asset rises, the value of the asset increases, resulting in capital appreciation.

- It can occur passively without any action from the investor and is not realized until the asset is sold.

Examples of Capital Appreciation:

1. **Stock Investment:** Suppose an investor buys a stock for \$50 per share, and over time, the market price of the stock increases to \$80 per share. The investor has experienced capital appreciation of \$30 per share ($\$80 - \50), which represents the increase in the value of the stock.
2. **Real Estate:** If you purchase a house in a neighborhood that experiences significant development and growth, the value of your property may appreciate over time. For instance, if you bought a house for \$200,000 and its value increases to \$300,000 due to the development of nearby schools and shopping centers, you have achieved capital appreciation of \$100,000.

Distinguishing Capital Appreciation from Capital Gain:

- Capital appreciation is different from a capital gain, which is the profit realized when an asset is sold. Capital appreciation represents the increase in the asset's value while it is still held, whereas capital gains occur when the asset is sold at a higher price than the purchase price.

Investment Strategy:

- Capital appreciation is often a primary goal for investors seeking long-term growth in their investments. They aim to benefit from the rising value of their assets, which can occur due to various factors, including economic growth and improved market conditions.

Total Return:

- Capital appreciation is one of the two main sources of investment returns, with the other being dividend or interest income. When combined with these income returns, it forms the total return on an investment, providing a comprehensive view of investment performance.

Causes of Capital Appreciation:

- Capital appreciation can occur due to various reasons, such as a strong economy (e.g., GDP growth), changes in interest rates (e.g., lower rates can boost real estate values), company growth exceeding expectations (leading to stock price increases), or local developments (enhancing property values).

In summary, capital appreciation represents the increase in the value of an asset over time, and it is a key factor in achieving long-term investment growth. It can be realized when the asset is eventually sold, providing investors with a return on their investment.

3.3 Holding Period: Understanding the Timeframe of Investment

Meaning:

- A holding period is the duration for which an investment is held by an investor. It refers to the time between the purchase and sale of a security or asset.

Tax Implications:

- The holding period is crucial for determining the tax treatment of capital gains or losses. It helps classify gains as either short-term or long-term, which can have different tax rates.

Long-Term vs. Short-Term Holding:

- A long-term holding period typically spans one year or more, starting from the day after the asset's acquisition. Investments held for less than one year are considered short-term holds.

Calculating a Holding Period:

- To calculate a holding period, an investor begins counting from the day after acquiring the security. Each month's count starts on the third day of that month.
- For example, Sarah bought 100 shares of stock on January 2, 2016. Her holding period starts counting from January 3, 2016.
- If she sells the stock on December 23, 2016 (less than one year later), it's a short-term capital gain or loss. If she sells it on January 3, 2017 (more than one year later), it's a long-term capital gain or loss.

Tacking On:

- When an investor receives a gift of appreciated stock or other securities, the recipient's cost basis is determined using the donor's basis. The recipient's holding period includes the length of the donor's holding period, a concept called "tacking on."

Stock Dividends and Holding:

- For stock dividends, the holding period for the new shares is the same as for the old shares. Meeting the minimum holding period is essential for dividends to qualify for special tax treatment.
- Common stock must be held for over 60 days throughout the 120-day period beginning 60 days before the ex-dividend date.
- Preferred stock must be held for at least 90 days during the 180-day period starting 90 days before the ex-dividend date.

Example of Holding Period:

- Paul purchased 100 shares of stock in April 2015. In June 2016, the company declared a two-for-one stock split. Paul's holding period for the new shares, or portions of new shares, remains the same as for the original shares, starting from April 2015.

In summary, the holding period is the timeframe during which an investment is held, affecting the classification of capital gains for tax purposes. It plays a vital role in determining whether gains are short-term or long-term, with associated tax implications. The holding period can also "tack on" the donor's holding period in cases of gifted securities and is essential for meeting dividend qualification requirements.

3.4. CALCULATION OF EXPECTED RETURN

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UNIT-4

VALUATION OF SECURITIES

4.1 Valuation of Securities: Understanding the Market Value

Definition:

- Valuation of securities means determining the market value of various financial instruments like stocks, bonds, and derivatives issued by entities such as government agencies, financial institutions, and corporations.

Factors Affecting Market Value:

- Several factors influence the market value of securities, including:
 - Liquidity:** How easy it is to buy or sell the security in the market.
 - Demand and Supply:** The balance between buyers and sellers for similar instruments.
 - Stock Market Rates:** Current rates of similar securities in the stock market.
 - Present Value of Future Cash Flows:** The expected future cash flows the security will generate.

Types of Securities:

1. Equity Shares (Common Shares):

- Represent ownership in a company and carry voting rights.
- Shareholders can elect board members and influence major decisions.
- Common stock typically offers higher returns over the long term but also comes with higher risk.
- In case of bankruptcy, common shareholders are paid after creditors and preferred shareholders.
- Example: Apple Inc. common shares (AAPL).

2. Preferred Shares:

- Represent ownership but usually have limited or no voting rights.
- Preferred shareholders receive fixed dividends, providing more income stability compared to common stock.
- They have priority in receiving payments in case of liquidation.
- Preferred shares may be callable, allowing the issuer to buy them back at a premium.
- Considered a hybrid between equity and debt.
- Example: PepsiCo's Preferred Stock (PEP-PB).

3. Bonds:

- Debt securities that represent a loan made by an investor to the issuer.
- Bondholders receive periodic interest payments (coupon) and the principal amount at maturity.
- Generally considered less risky than stocks, making them a popular choice for income-focused investors.
- Example: U.S. Treasury Bonds.

4. Debentures:

- Unsecured debt instruments not backed by collateral.
- Issued by corporations and governments.
- Repayable at maturity, with periodic interest payments.
- Rely on the issuer's creditworthiness.
- Example: Corporate debentures issued by Microsoft.

5. Units of Mutual Funds:

- Investment programs that pool money from various investors to purchase diversified holdings.
- Professionally managed to achieve specific investment goals.
- Investors can buy and sell units of the mutual fund.
- Example: Vanguard 500 Index Fund.

In summary, the valuation of securities involves determining their market value, influenced by factors like liquidity, supply and demand, market rates, and future cash flows. Common and preferred shares represent ownership, but common shares offer higher returns and more risk. Bonds

and debentures are debt instruments with varying levels of security, and mutual funds pool money from multiple investors for diversified investments.

4.2 Approaches of Valuation: Understanding How to Value Different Types of Securities

4.2.1 Bond Valuation:

Definition: Bond valuation is the process of determining the intrinsic value of a bond, which represents the present value of its future cash flows, including periodic interest payments and the principal repayment at maturity.

Approach:

- Bond valuation relies on the following key factors:

1. **Face Value (Par Value):** The amount the bondholder will receive at maturity.
2. **Coupon Rate:** The fixed interest rate the bond pays annually, expressed as a percentage of the face value.
3. **Market Interest Rate:** The prevailing interest rate in the market for similar bonds.
4. **Time to Maturity:** The number of years until the bond reaches its face value and matures.

Example: Consider a 5-year bond with a face value of \$1,000, a coupon rate of 5%, and a market interest rate of 4%. To calculate its value:

- Determine the annual interest payment: $\$1,000 \text{ (face value)} \times 5\% \text{ (coupon rate)} = \50 per year.
- Calculate the present value of each interest payment using the market interest rate.
- Calculate the present value of the face value at maturity.
- Add the present values of interest payments and the face value to find the bond's value.

4.2.2 Preference Share Valuation:

Definition: Preference share valuation involves determining the fair market value of preferred shares, which have fixed dividend payments and may or may not have a call option.

Approach:

- Preference share valuation focuses on:

1. **Dividend Rate:** The fixed dividend rate paid annually, expressed as a percentage of the preference share's face value.
2. **Market Interest Rate:** The prevailing interest rate for similar preference shares in

the market.

3. **Call Option:** If the preference share can be called by the issuer, it may affect the valuation.

Example: Consider a preference share with a face value of \$100, a 6% dividend rate, and a market interest rate of 5%. If it does not have a call option, the valuation involves calculating the present value of the fixed annual dividends.

4.2.3 Common Stock Valuation:

Definition: Common stock valuation aims to determine the intrinsic value of common shares in a company, considering factors like future cash flows and growth prospects.

Approach:

- Common stock valuation typically involves using various methods, including:

1. **Dividend Discount Model (DDM):** Estimates the value of a stock by discounting its expected future dividends to their present value.
2. **Price-to-Earnings (P/E) Ratio:** Compares a company's stock price to its earnings per share (EPS), providing insights into its relative valuation compared to peers.
3. **Discounted Cash Flow (DCF) Analysis:** Evaluates a stock's value based on its projected cash flows and discounting them to present value.
4. **Comparable Company Analysis (CCA):** Compares a company's valuation metrics to those of similar publicly traded companies.

Example: Using the DDM, if a company is expected to pay \$2 in dividends next year, and the investor requires a 10% return on investment, the present value of the stock would be calculated as $\$2 / (0.10 - \text{expected dividend growth rate})$.

In summary, bond valuation considers face value, coupon rate, market interest rate, and time to maturity. Preference share valuation focuses on dividend rate, market interest rate, and potential call options. Common stock valuation employs methods like DDM, P/E ratio, DCF analysis, and CCA to estimate intrinsic value based on future cash flows and growth prospects.

4.3 METHODS OF BOND VALUATION:

refer main pdf pg no 8

Problems: Bond, Preference, Common stock Valuation

UNIT-5

PORTFOLIO MANAGEMENT

5. PORTFOLIO MANAGEMENT

Definition: Portfolio Management implies tactfully managing an investment portfolio, by selecting the best investment mix in the right proportion and continuously shifting them in the portfolio, to increase the return on investment and maximize the wealth of the investor. Here, portfolio refers to a range of financial products, i.e. stocks, bonds, mutual funds.

Imagine you have some money to invest, like \$10,000. Instead of putting all your money into just one thing, like buying stocks in one company, you decide to spread it out and invest in a few different things, like stocks, bonds, and mutual funds. This collection of different investments is your "portfolio."

Now, portfolio management is like taking care of this collection of investments to make sure your money grows over time. Here's how it works:

1. **Selecting the Best Mix:** You need to decide how much of your money you want to put into each type of investment. For example, you might put \$5,000 into stocks, \$3,000 into bonds, and \$2,000 into mutual funds. This mix depends on your goals and how much risk you're willing to take. Stocks are riskier but can offer higher returns, while bonds are safer but have lower returns.
2. **Continuous Adjustment:** The financial markets can change a lot. Prices of stocks, bonds, and mutual funds go up and down. So, you need to keep an eye on your investments. If you notice that your stocks are doing really well but your bonds are not, you might decide to sell some of your stocks and buy more bonds to balance things out. This way, you're not putting all your eggs in one basket.
3. **Increasing Returns:** The goal of portfolio management is to make your money work harder for you. If you manage your portfolio well, you can potentially make more money than if you just left your \$10,000 sitting in a regular savings account. For example, if your stocks go up in value, you can sell them at a profit.
4. **Maximizing Wealth:** Ultimately, the aim is to grow your wealth over time. By diversifying your investments (spreading them out), adjusting them as needed, and picking good

opportunities, you can increase your chances of making more money.

Real-Life Example: Let's say you invested \$10,000 in your portfolio. Over time, your stocks went up in value by 20%, your bonds increased by 5%, and your mutual funds stayed about the same. Your portfolio is now worth \$11,500. That's a \$1,500 increase in your wealth because you managed your investments wisely.

In a nutshell, portfolio management is like being a smart gardener for your money. You plant different types of seeds, water them regularly, and make sure they get enough sunlight. By doing this, you hope that your garden (your investments) will grow and flourish, making you more money in the long run.

5.1. PROCESS OF PORTFOLIO MANAGEMENT: -Investment process describes how an investor should go about making decisions with regard to what marketable securities to invest in, how extensive the investments should be made. A five step procedure for making these decisions forms the basis of the investment process:

PROCESS OF PORTFOLIO MANAGEMENT:

1. Set Investment Policy: This is like deciding the rules of the game before you start playing. In this step, you decide what your goals are for your investments. For example, do you want to save for retirement, buy a house, or just grow your wealth? You also decide how much risk you're willing to take. Think of this as setting the boundaries for your investment journey.

Real-Time Example: Suppose you're saving for a vacation in five years, and you're willing to take some risks to make your money grow. Your investment policy might be to aim for a 7% annual return on your investments.

2. Perform Security Analysis: Here, you're like a detective trying to figure out which investments are worth your money. You research and analyze different options like stocks, bonds, or mutual funds. You want to find investments that have the potential to give you good returns based on your investment policy.

Real-Time Example: You research a tech company's stock. You look at their financial health, past performance, and industry trends. If the company is doing well, you might decide to invest in their stock.

3. Construct Portfolio: Think of this step as building a team of investments that work together. You decide how much money you'll put into each investment you've chosen. This is like assembling a group of players for your team, with each player having a specific role.

Real-Time Example: You might decide to put 60% of your money in stocks (for potential growth), 30% in bonds (for stability), and 10% in a mutual fund (for diversification). This mix forms your investment portfolio.

4. Revise the Portfolio: The financial world changes, just like a game with constantly changing rules. In this step, you regularly check how your investments are doing. If some investments are

doing really well, you might want to buy more of them. If others are not performing as expected, you might need to adjust or even sell them.

Real-Time Example: Let's say your stocks are doing exceptionally well, but your bonds aren't. You might sell some of your winning stocks and buy more bonds to balance your portfolio according to your investment policy.

5. Evaluate Portfolio Performance: Lastly, you need to see how well your investments are actually doing. Are they helping you meet your goals and stay within your risk limits? This is like checking the scoreboard in a game to see if you're winning or not.

Real-Time Example: You wanted a 7% annual return for your vacation fund, and after a year, your portfolio has earned 8%. You're doing better than expected, so you're on track to have enough money for your dream vacation.

In summary, portfolio management is like playing a financial game with clear rules. You start by setting your goals and risk tolerance, then choose your investments, build a balanced portfolio, adjust as needed, and keep score to make sure you're winning the game of growing your wealth.

Scope of Portfolio Management:

Scope of Portfolio Management refers to all the different aspects and areas that portfolio managers need to consider when managing investments. It's like looking at all the pieces of a puzzle to make sure they fit together well.

Here are some key aspects within the scope of portfolio management:

1. Asset Classes: This involves deciding where to invest your money among different types of assets like stocks, bonds, real estate, and more. Each asset class comes with its own risks and potential rewards.

Real-Time Example: If you have a mix of stocks and bonds in your portfolio, you're managing different asset classes. Stocks have the potential for higher returns but more risk, while bonds offer stability but lower returns.

2. Risk Management: Managing risk means figuring out how much uncertainty you're comfortable with in your investments. It's about making sure you don't put all your money into something too risky.

Real-Time Example: If you're nearing retirement and need your investments to be more stable, you might reduce your exposure to risky stocks and increase investments in safer bonds to manage risk.

3. Diversification: Diversification is like not putting all your eggs in one basket. It means spreading your investments across different assets, industries, or regions to reduce the impact if one investment performs poorly.

Real-Time Example: Imagine you have stocks in several tech companies, but the tech industry takes a hit. If you also have investments in healthcare and real estate, the overall impact on your portfolio might be less severe.

4. Investment Time Horizon: This is how long you plan to hold your investments before you need the money. It affects your choice of assets and how you manage your portfolio.

Real-Time Example: If you're investing for retirement, which is decades away, you might be more willing to take risks for potentially higher returns. But if you're saving for a down payment on a house in a few years, you'll likely want more stability.

5. Performance Evaluation: This involves regularly checking how your investments are doing compared to your goals. If they're not performing as expected, you may need to make adjustments.

Real-Time Example: You wanted to save \$50,000 for a down payment on a house in five years. After three years, you check your portfolio and see it's only grown to \$40,000. You might need to revise your investment strategy to meet your goal.

In summary, the scope of portfolio management covers all the different aspects of managing your investments to help you achieve your financial goals while managing risk. Just like a skilled chef considers various ingredients, flavors, and techniques to create a delicious dish, a portfolio manager looks at different assets, risks, and strategies to build a well-balanced investment portfolio.

5.1.2 BENEFITS OF PORTFOLIO MANAGEMENT

1. Increased Decision-Making Transparency: This means that portfolio management helps make decisions more clear and understandable. It ensures that all parts of a business or investment options are evaluated consistently.

Real-Time Example: Think of a restaurant manager who wants to decide which dishes to keep on the menu. Portfolio management in this context would involve consistently evaluating each dish's popularity, cost, and profitability, making it easier to see which ones should stay or go.

2. Consistent Approach to Risk Measurement: Portfolio management provides a standardized way to measure and understand risks associated with different investments or business units.

Real-Time Example: Imagine you're a car manufacturer deciding whether to invest in a new electric car model. Portfolio management helps you evaluate the risks involved, such as market competition, supply chain challenges, and changing regulations, in a consistent manner.

3. Including Different Views of Risk: It means considering various perspectives on risk when making decisions, ensuring a more comprehensive understanding of potential challenges.

Real-Time Example: A financial institution uses portfolio management to factor in both the views of its risk analysts and the opinions of its customers when deciding on new financial products. This way, they consider different risk perceptions.

4. Enhancement to Due Diligence: Portfolio management improves the process of thoroughly investigating and evaluating investment opportunities or business ventures.

Real-Time Example: Before a venture capitalist invests in a startup, portfolio management helps them conduct detailed due diligence, examining the startup's financials, market potential, and team capabilities more effectively.

5. Better Understanding of Value Creation: It helps in recognizing how different investment opportunities contribute to overall value and profit.

Real-Time Example: A tech company uses portfolio management to see how different projects, like developing new software or expanding into new markets, contribute to their overall growth and profitability.

6. Consideration of Correlation and Diversification: This means thinking about how different parts of a business or investments affect each other and how spreading resources can reduce risks.

Real-Time Example: An investment fund manager diversifies by investing in a mix of industries (tech, healthcare, energy) rather than putting all the money in a single industry to reduce the impact if one industry underperforms.

7. Guidance for Strategic Planning: Portfolio management helps guide long-term strategies by identifying where a company needs to focus to improve its risk and return.

Real-Time Example: A retail company uses portfolio management to determine that expanding its e-commerce presence is crucial for long-term growth, leading to a strategic plan for online sales.

8. Consideration of Qualitative and Non-Financial Implications: It involves looking beyond just the numbers and considering non-financial factors that can impact decisions.

Real-Time Example: A sustainable energy company considers the environmental and social impacts of its projects alongside financial returns when deciding which projects to pursue.

These benefits of portfolio management help organizations make informed and consistent decisions, manage risks effectively, and align their investments with their goals, which can apply to businesses of all sizes and industries.

5.2 Modern Portfolio Theory (MPT) is like a strategy for making your investments smarter and safer. It's all about picking a group of different investments that, when combined, reduce the overall risk of your portfolio.

Here's how it works:

1. Risk Diversification: Think of your investments as a team of players in a game. MPT says

that if you have different types of players (or investments), they won't all perform the same way at the same time. Some may do well when others aren't, which can lower the overall risk.

Real-Time Example: Imagine you have \$10,000 to invest. Instead of putting it all in one company's stock, you split it between stocks, bonds, and real estate. If the stock market goes down, your bonds or real estate investments might not be affected as much.

2. **Risk and Return Tradeoff:** MPT recognizes that riskier investments can potentially give you higher returns. But it also says that you shouldn't put all your money into super-risky stuff. You should balance risk and return.

Real-Time Example: Suppose you're looking at two investments - a tech startup and a government bond. The startup is riskier but could bring big returns, while the bond is safer but offers lower returns. MPT helps you find the right mix to balance the risk and potential reward based on your goals.

3. **Maximizing Expected Return for a Given Risk:** MPT helps you build a portfolio that aims to give you the most expected return (potential profit) for a certain level of risk. It's like aiming to score the most points in a game without taking too many risks.

Real-Time Example: If you're willing to take a moderate level of risk in your investments, MPT helps you select a mix of assets that gives you the best chance of making the most money within that risk level.

4. **Minimizing Risk for a Given Expected Return:** On the flip side, MPT also helps you build a portfolio that aims to have the least risk possible while still reaching your expected return. It's like playing it safe but with a goal in mind.

Real-Time Example: If you want a steady return without too much ups and downs, MPT helps you choose assets that balance risk in a way that's suitable for your target return.

In summary, Modern Portfolio Theory is like being a skilled coach for your investments. You carefully select a mix of different players (investments), balance their strengths and weaknesses, and aim for a winning strategy that maximizes your potential returns while managing risk. It's about diversifying smartly to build a well-rounded investment team.

5.3 PORTFOLIO MODELS

Portfolio models

1. Markowitz Model (or Modern Portfolio Theory):

The Markowitz Model, created by Harry Markowitz, is like a recipe for creating a well-balanced investment portfolio. It's all about picking a mix of investments that gives you the best possible return for a certain level of risk.

Explanation in Simple Words: Imagine you have a bunch of different ingredients to make a salad. Some are spicy, some are sweet, and some are bitter. You want to make a delicious salad, so you pick a combination of ingredients that balances the flavors just right. The Markowitz Model does something similar with investments. It helps you select a mix of assets (like stocks, bonds, and real estate) that balances risk and return.

Real-Time Example: Suppose you have \$10,000 to invest. The Markowitz Model would analyze different assets, their historical performance, and how they interact with each other. It might suggest putting 60% in stocks (higher risk, higher potential return), 30% in bonds (lower risk, lower return), and 10% in real estate (medium risk, medium return). This mix aims to give you the best expected return for the level of risk you're comfortable with.

2. Sharpe Single Index Model:

The Sharpe Single Index Model, developed by William Sharpe, is like a way to simplify and measure the risk and return of a single investment compared to the entire market. It helps you see if an investment is doing better or worse than the overall market.

Explanation in Simple Words: Think of the stock market as a big race with many horses. The Sharpe Single Index Model is like a tool that helps you compare how fast your horse (investment) is running compared to the average speed of all the horses (the market). If your horse is running faster, it's doing well. If it's slower, you might need to reconsider.

Real-Time Example: Suppose you invest in a tech company's stock. The Sharpe Single Index Model considers how much the stock goes up or down compared to the overall stock market. If, over time, your tech stock goes up more when the market is up and down less when the market is down, it's considered a good investment relative to the market. This model helps you evaluate if your investment is beating or lagging behind the broader market.

In summary, the Markowitz Model helps you create a diversified portfolio that balances risk and return, similar to making a well-balanced salad. On the other hand, the Sharpe Single Index Model is a tool to compare how well your investment is performing compared to the overall market, much like comparing a racing horse's speed to the average speed of all horses in a race.

5.4.5 Sharpe Single Index Model is like a tool that helps you figure out if your investment is doing better or worse than the overall market, and by how much.

Explanation in Simple Words:

Imagine you and your friend are in a bicycle race. You both start at the same time, and you want to know if you're a faster cyclist compared to the average speed of all the cyclists in the race.

1. You both pedal your bicycles (representing your investments in stocks).
2. As the race progresses, you track how much faster or slower you are compared to the average speed of all the racers.

Real-Time Example:

Let's say the average speed of all racers (the market) is 20 miles per hour. You track your speed and find out that you are going at 25 miles per hour. This means you're doing better than the average racer in the competition. You're outperforming the market.

Now, let's suppose your friend is riding at 18 miles per hour. They are slower than the market's average speed, meaning they are underperforming the market.

So, the Sharpe Single Index Model helps you measure how much you're outperforming or underperforming the market by comparing your investment's returns to the overall market's returns. It's a way to assess if your investment strategy is doing well or not when compared to the broader financial landscape.

5.4.6 Capital Asset Pricing Model (CAPM):

The **CAPM** is like a formula used to figure out how much return you should expect from an investment, especially when you're adding it to an already diversified portfolio.

Explanation in Simple Words:

Imagine you're buying a new car, and you want to know if it's worth the price. The CAPM helps you calculate what kind of performance (return) you should expect from this car to make it a good deal.

Here's what CAPM takes into account:

- **Market Risks (Beta):** It looks at how risky your investment is compared to the overall market. If it's riskier, it should offer a higher return.
- **Expected Return of the Market:** This is like the average performance of all the cars (investments) in the market.
- **Expected Return of a Risk-Free Investment:** Think of this as a super safe investment, like a savings account. It sets a baseline for how much return you should expect without taking any risks.

Real-Time Example:

Suppose you're considering investing in a tech company's stock. You use CAPM to analyze its risk (Beta), the average return of the stock market, and the return of a risk-free investment, like a government bond.

If the CAPM calculation suggests that you should expect a 10% return from the tech company's stock given its risk level and the overall market conditions, it helps you decide whether that return justifies the investment's price.

5.4.7 Security Market Line (SML):

The **Security Market Line (SML)** is like a graph that shows you how different investments are expected to perform in relation to their risk levels. It's a visual representation of CAPM.

Explanation in Simple Words:

Imagine you have a chart that shows different cars (investments) lined up from the least risky to the riskiest. The chart also shows how fast each car (investment) should go to make it a good deal, considering its risk level.

Real-Time Example:

Suppose you have a list of various stocks, each with different risk levels (Beta). The SML helps you see if these stocks are priced correctly based on their expected returns.

If a stock is plotted above the SML, it suggests it's expected to perform better than what its risk level justifies, making it a potentially good investment. If it's below the line, it might not be offering enough return for its level of risk.

In summary, CAPM is like a math formula that calculates what kind of return you should expect from an investment based on its risk and market conditions. SML is a graphical representation of CAPM that helps you see if different investments are priced correctly based on their risk and expected return. It's like evaluating cars based on their speed and price to determine if they're a good deal.