BCU

6th Semester

Investment Management Module No.1: Introduction to Investment

Concepts of Investments: Attributes – Economic v/s Financial Investment –Investment and Speculation –Features of a good investment –Investment Process. Financial Instruments available for investment: Money Market Instruments –Capital Market Instruments. Derivatives – Types of Derivatives (Only Concepts).

Introduction:

The term 'investing' could be associated with different activities, but the common target in these activities is to 'employ' the money (funds) during the time period seeking to enhance the investor's wealth. Funds to be invested come from assets already owned, borrowed money and savings. By foregoing consumption today and investing their savings, investors expect to enhance their future consumption possibilities by increasing their wealth.

However, it is always useful to make a distinction between real and financial investments. Real investments usually involve some kind of tangible assets, such as land, machinery, factories, etc. Financial investments involve contracts in paper or electronic form, such as stocks, bonds, etc. Investment activity involves the use of funds or savings for acquisition of assets & further creation of assets.

Definition of Investment

"Investment analysis is the study of financial securities for the purpose of successful investing. "An investment is the purchase of goods that are not consumed today but are used in the future to create wealth".

"An investment is a commitment of funds make in the expectation of some positive rate of return".

Example – equity shares, preference share and debentures etc. According to oxford dictionary "investment is defined as the action or process of investment money for profit".

According to Keynes "investment is define as the addition of the value of the capital equipment which has resulted from the productive activity of the period".

Concepts of Investments:

Concepts of investments encompass various principles and strategies that individuals and institutions employ to grow their wealth, achieve financial goals, and manage risk. Here are some fundamental concepts of investments:

Risk and Return: This is the foundational principle of investing. Investors expect to be compensated for taking on risk, and the potential return on an investment is generally correlated with the level of risk involved. Higher-risk investments typically offer the potential for higher returns, while lower-risk investments tend to offer lower returns.

Asset Allocation: Asset allocation involves diversifying an investment portfolio across different asset classes, such as stocks, bonds, real estate, and cash equivalents. The goal is to spread risk and optimize returns based on the investor's risk tolerance, investment objectives, and time horizon.

Diversification: Diversification is the strategy of spreading investments across different securities within the same asset class or across multiple asset classes. By diversifying, investors can reduce the impact of adverse events affecting any single investment or asset class on their overall portfolio.

Time Horizon: The time horizon refers to the length of time an investor expects to hold an investment before needing to access the funds. Investment decisions are often influenced by the investor's time horizon, with longer time horizons typically allowing for more aggressive investment strategies.

Liquidity: Liquidity refers to the ease with which an investment can be bought or sold in the market without significantly impacting its price. Liquid investments are easily tradable and can be converted into cash quickly, while illiquid investments may take longer to sell or may incur significant transaction costs.

Costs and Fees: Investment costs and fees, such as brokerage commissions, management fees, and expense ratios, can significantly impact investment returns over time. It's essential for investors to be aware of and minimize these costs to maximize net returns.

Tax Considerations: Taxes can have a significant impact on investment returns. Understanding the tax implications of different investment strategies and vehicles can help investors minimize tax liabilities and maximize after-tax returns.

Market Efficiency: The concept of market efficiency suggests that asset prices reflect all available information and are priced fairly. Investors may employ different investment strategies, such as passive or active management, based on their beliefs about market efficiency and their ability to outperform the market.

Investment Goals and Objectives: Investors should clearly define their investment goals and objectives, such as wealth accumulation, retirement planning, or funding education expenses. Understanding investment goals helps investors develop appropriate investment strategies and evaluate the success of their investments over time.

Risk Management: Risk management involves identifying, assessing, and mitigating risks associated with investments. This may include diversification, hedging strategies, and the use of risk management tools such as stop-loss orders and insurance.

These concepts provide a foundation for understanding the principles of investing and guiding investment decisions to build and preserve wealth over time.

Attributes

Attributes of investments refer to the characteristics or qualities that investors consider when evaluating investment opportunities. These attributes help investors assess the suitability, risk, and potential return of an investment. Here are some key attributes of investments:

- 1. **Return on Investment (ROI):** One of the primary attributes of an investment is its potential return, which represents the gain or loss on the investment over a specific period. Investors seek investments with the potential for attractive returns that align with their financial goals and risk tolerance.
- 2. **Risk:** Risk is another crucial attribute of investments, representing the uncertainty or variability of returns associated with an investment. Investors assess various types of risk, including market risk, credit risk, liquidity risk, and inflation risk, to determine the level of risk they are willing to accept in exchange for potential returns.
- 3. **Liquidity:** Liquidity refers to the ease with which an investment can be bought or sold in the market without significantly impacting its price. Investors value liquidity because it provides flexibility to access funds quickly and adjust investment portfolios in response to changing market conditions or personal circumstances.
- 4. **Time Horizon:** The time horizon is the length of time an investor expects to hold an investment before selling or redeeming it. Investments can have short-term, medium-term, or long-term time horizons, and investors should align their investment choices with their time horizon and financial objectives.

- 5. **Diversification:** Diversification is the practice of spreading investment capital across different asset classes, sectors, and geographical regions to reduce risk and optimize returns. By diversifying their portfolios, investors can mitigate the impact of adverse events affecting any single investment or asset class.
- 6. **Tax Considerations:** Tax considerations are important attributes of investments, as taxes can significantly impact investment returns. Investors evaluate the tax implications of different investment options, including capital gains taxes, dividend taxes, and tax-deferred or tax-exempt investment vehicles, to minimize tax liabilities and optimize after-tax returns.
- 7. **Volatility:** Volatility refers to the degree of price fluctuations or variability in the value of an investment over time. Investments with higher volatility tend to experience larger price swings and carry greater risk, while investments with lower volatility are perceived as more stable and less risky.
- **8. Transparency and Disclosure:** Transparency and disclosure are essential attributes of investments, as investors rely on accurate and timely information to make informed investment decisions. Investments that provide clear and comprehensive disclosure of financial and operational information inspire confidence and trust among investors.
- **9.** Costs and Fees: Costs and fees associated with an investment can significantly impact its overall return. Investors consider factors such as management fees, transaction costs, and administrative expenses when evaluating investment options to minimize costs and maximize net returns.
- 10. **Sustainability and ESG Factors:** Increasingly, investors are considering environmental, social, and governance (ESG) factors when evaluating investments. Investments that promote sustainability, corporate responsibility, and ethical business practices are valued by investors seeking to align their investments with their values and social impact objectives.

Economic v/s Financial Investment

Economic Investments:	Financial Investments:
Tangible Assets: Economic investments typically	Financial Instruments: Financial investments
involve the acquisition of tangible assets such as	involve the purchase of financial instruments such as
real estate, machinery, infrastructure, and natural	stocks, bonds, mutual funds, exchange-traded funds
resources. These assets have intrinsic value and	(ETFs), derivatives, and other securities. These
contribute to economic development and	instruments represent ownership or debt claims on
productivity.	assets and entities.
Long-Term Growth: Economic investments are	Market-Based Returns: Financial investments
often made with the intention of promoting long-	generate returns primarily through capital
term economic growth and development. They may	appreciation, interest, dividends, or other
involve significant capital expenditures and have a	distributions earned on the invested capital. Returns
lasting impact on the economy, contributing to job	are influenced by market factors such as supply and
creation, infrastructure development, and	demand dynamics, interest rates, economic
technological advancement.	conditions, and company performance.
Public and Private Sectors: Economic	Liquidity and Marketability: Financial
investments can be made by both the public and	investments offer liquidity and marketability,
private sectors. Public sector investments often	allowing investors to buy and sell securities in liquid
include government spending on infrastructure	markets. This provides investors with flexibility to
projects, education, healthcare, and research and	adjust their investment portfolios, reallocate capital,
development. Private sector investments may	and respond to changing market conditions.
involve business expansions, capital expenditures,	
and innovation initiatives.	
Social and Environmental Impact: Economic	Risk and Return Profile: Financial investments
investments may have broader social and	vary in terms of risk and return profiles, with higher-
environmental implications beyond financial	risk investments typically offering the potential for
returns. They can contribute to societal well-being,	higher returns and vice versa. Investors assess risk
environmental sustainability, and community	factors such as market volatility, credit risk, liquidity

development by addressing social needs and environmental challenges.

Multiplier Effect: Economic investments have the potential to generate multiplier effects, whereby initial investments lead to additional economic activity and growth. For example, investments in infrastructure can stimulate demand for goods and services, create jobs, and spur further investments in related industries.

risk, and geopolitical factors when making investment decisions.

Portfolio Diversification: Financial investments are often used to diversify investment portfolios and spread risk across different asset classes, sectors, and geographical regions. Diversification helps investors manage risk and optimize returns by reducing exposure to specific market fluctuations and events.



FINANCIAL INVESTMENT vs ECONOMIC INVESTMENT

Basis	<u>FINANCIAL</u> <u>INVESTMENT</u>	ECONOMIC INVESTMENT
Meaning	Investing in new/old asset with the aim of earning in future.	Addition/replacement of capital stock necessary for producing goods.
Assets	Involves investment in both real & financial assets	Involves investment in real assets only.
Objective	To make financial gains.	To improve productivity.
Scope	Wider concept. Economic investment is a part of it	Comparatively a narrow concept.
Example	Shares, bonds, new/old assets, etc.	New land, machinery, factory, etc.
Which company?	Developed company generally make financial investment	New companies usually invest in economic investment.

Investment and Speculation

Investment:

Investment is an asset acquired or invested in to build wealth and save money from the hard-earned income or appreciation. Investment is primarily made to obtain an additional source of income or gain profit from the investment over a specific period.

Investors decide to make investments based on statistical surveying, business experience, reasonable business procedures, and investigation of a marketable strategy.

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An example of an investment is buying stocks in a company. When you purchase a company's shares, you become a part-owner. With the increasing profitability of a company, the share values also tend to increase, allowing you to earn a return on your investment. Some companies also pay dividends as a regular income stream to their shareholders.

Objectives of Investment

The primary objectives of investment are –

- Keeping funds safe and secure
- Growing the funds
- Earning a steady source of income
- Reducing the income tax burden
- Planning for retirement
- Meeting financial goals

Speculation:

Speculation involves buying or selling assets, such as stocks, commodities, or currencies, to profit based on predicted price movements rather than the asset's fundamental value. Speculation is often considered a high-risk activity as it involves predicting future events, which can be unpredictable and subject to change.

Example – A company invests in a tech start-up's shares, hoping to sell them for a profit in the short term. It may not be interested in holding the shares for the long term but on speculation that the share values will go up, given the company's positive earnings reports.

In case of an increase in share price, the company could sell them for a profit, generating a gain on the speculation. However, if the share prices crash, the company could incur a loss on the speculation.

In either case, the profits or losses from the speculative transaction would be recorded separately in the company's accounting records. They would be subject to different accounting rules than the company's core business activities.

Objectives of Speculation

The objectives of speculation can vary depending on the individual or institution engaging in it. Here are some common objectives:

- Making profits by buying and selling assets at a higher price than they were bought for.
- Hedging against potential losses in other areas of their portfolio.
- Increasing market liquidity by buying and selling assets can make it easier for other traders to enter or exit positions.
- Leveraging the price discrepancies between different markets or assets, buying low in one market and selling high in another.
- Gathering information about market trends that can be useful for making informed investment decisions in the future.

Investors take a systematic approach to growing their wealth. They invest in assets with reasonable levels of risk in exchange for long-term growth. On the other hand, speculators buy assets that may experience rapid growth but can also lose their entire value in case of a market crash.

	Investment	Speculation
Definition	Money allocation for an asset purchase.	Short-term bets on financial assets to gain quickly.
Aim	The investor's main objective is to achieve small recurring returns in the long term, such as the payment of dividends.	The speculator seeks to achieve small profits in the short term.
Time	Generally, the investor keeps the assets in his portfolio for a long time, years and even a lifetime.	Speculators usually change assets in the short term, in minutes, hours, or a few days.
Analysis	Thorough analysis of fundamental factors, including company ratios, competitive and industry conditions, and technical factors throughout the asset's history.	Technical analysis mainly combined with fundamental and market sentiment.
Income Certainty	Stable.	Erratic.
Risks	Moderate risk. The lower the risk, the lower the return.	High risk. The higher the risk, the higher the potential gains.

Features of a good investment:

Several features characterize a good investment, which investors typically seek when allocating their capital. These features help investors identify opportunities that align with their financial goals, risk tolerance, and investment objectives. Here are some key features of a good investment:

Positive Expected Return: A good investment should offer the potential for positive returns over time. Investors seek investments that have the potential to generate income or capital appreciation, allowing them to grow their wealth and achieve their financial objectives.

Risk-Adjusted Returns: While seeking positive returns, investors also consider the level of risk associated with an investment. A good investment offers attractive risk-adjusted returns, meaning it provides adequate compensation for the level of risk taken. Investors assess risk factors such as volatility, liquidity, credit risk, and market risk when evaluating investment opportunities.

Diversification: Diversification is a key feature of a good investment strategy. Investors aim to spread their capital across different asset classes, sectors, and geographical regions to reduce risk and optimize returns. Diversification helps investors mitigate the impact of adverse events affecting any single investment or asset class on their overall portfolio.

Liquidity: Liquidity refers to the ease with which an investment can be bought or sold in the market without significantly impacting its price. A good investment offers liquidity, allowing investors to enter and exit positions quickly and at fair market prices. Liquidity provides investors with flexibility to adjust their investment portfolios, respond to changing market conditions, and access their funds when needed.

Transparency and Information: Investors value transparency and access to relevant information when evaluating investment opportunities. A good investment provides clear and comprehensive disclosure of relevant financial and operational information, allowing investors to make informed decisions. Transparency enhances investor confidence and trust in the investment opportunity.

Alignment with Investment Objectives: A good investment aligns with the investor's financial goals, risk tolerance, and investment objectives. Whether the goal is wealth accumulation, income generation, capital preservation, or risk mitigation, the investment should support the investor's long-term financial plan and objectives.

Competitive Advantage or Value Proposition: A good investment often possesses a competitive advantage or value proposition that sets it apart from others in the market. This could include factors such as innovative technology, strong brand recognition, unique intellectual property, or a sustainable business model that positions the investment for long-term success and growth.

Scalability and Growth Potential: Investors seek investments with scalability and growth potential, meaning they have the capacity to expand operations, generate increasing revenues and profits, and capture market share over time. Investments with scalability offer the potential for compounding returns and long-term wealth creation.

Tax Efficiency: Tax efficiency is an important consideration for investors, particularly in optimizing after-tax returns. A good investment minimizes tax liabilities through strategies such as tax-deferred accounts, tax-efficient investment vehicles, and tax-loss harvesting, allowing investors to maximize net returns.

Stewardship and Governance: Investors value sound stewardship and governance practices in the companies or entities in which they invest. A good investment is managed by competent and ethical leadership, with robust corporate governance practices and a commitment to shareholder value creation and transparency.

In summary, a good investment combines positive expected returns, attractive risk-adjusted returns, diversification, liquidity, transparency, alignment with investment objectives, competitive advantage, scalability, tax efficiency, and sound stewardship and governance. By considering these features, investors can identify opportunities that have the potential to enhance their financial well-being and achieve their long-term goals.

Investment Process:

The investment process is a systematic approach that investors follow to identify, analyse, select, and manage investment opportunities effectively. While the specific steps may vary depending on the investor's goals, risk tolerance, and investment strategy, the investment process generally consists of the following key stages:

Setting Investment Objectives: The first step in the investment process is to define clear and specific investment objectives. Investors identify their financial goals, such as wealth accumulation, retirement planning, funding education expenses, or generating income. Objectives should be measurable, realistic, and time-bound, guiding subsequent investment decisions.

Risk Assessment and Risk Tolerance: Investors assess their risk tolerance, which refers to their willingness and ability to tolerate fluctuations in investment returns and accept the possibility of loss. Risk assessment involves evaluating factors such as investment time horizon, financial resources, income stability, and emotional comfort with market volatility. Understanding risk tolerance helps investors select appropriate investment strategies and asset allocations.

Asset Allocation: Asset allocation involves determining the optimal mix of asset classes, such as stocks, bonds, real estate, and cash equivalents, to achieve investment objectives while managing risk. Investors consider factors such as expected returns, volatility, correlation, and diversification benefits when allocating capital across different asset classes. Asset allocation decisions are based on the investor's risk tolerance, investment objectives, time horizon, and market outlook.

Security Selection: Once asset allocation targets are established, investors proceed to select specific securities or investment products within each asset class. This may involve researching individual stocks, bonds, mutual funds, exchange-traded funds (ETFs), or other investment vehicles. Investors analyze factors such as financial performance, valuation, industry trends, management quality, and macroeconomic conditions to identify investment opportunities that align with their objectives and criteria.

Due Diligence and Research: Investors conduct thorough due diligence and research on potential investments to assess their quality, suitability, and potential risks and rewards. This may include analyzing financial statements, conducting company or industry research, evaluating competitive positioning, assessing regulatory compliance, and reviewing historical performance. Due diligence helps investors make informed investment decisions and mitigate the risk of poor outcomes.

Portfolio Construction: Portfolio construction involves assembling a diversified portfolio of selected investments based on the asset allocation strategy and risk-return objectives. Investors consider factors such as portfolio size, liquidity, investment constraints, tax considerations, and rebalancing requirements when constructing their portfolios. The goal is to optimize risk-adjusted returns while aligning the portfolio with the investor's objectives and risk tolerance.

Monitoring and Review: The investment process does not end after portfolio construction; it requires ongoing monitoring and review to ensure alignment with investment objectives and market conditions. Investors regularly assess portfolio performance, rebalance asset allocations as needed, and adjust investment strategies in response to changes in market conditions, economic outlook, or personal circumstances. Monitoring helps investors stay on track toward their financial goals and adapt to evolving market dynamics over time.

Continuous Learning and Improvement: Successful investors recognize the importance of continuous learning and improvement in refining their investment process and decision-making skills. They stay informed about market trends, industry developments, and investment strategies through research, education, and engagement with financial professionals and peers. Continuous learning enables investors to adapt to changing market environments, identify new opportunities, and enhance their investment outcomes over the long term.

Financial Instruments available for investment

There is a wide array of financial instruments available for investment, each with its own characteristics, risk-return profiles, and suitability for different investor objectives. Here are some of the most common financial instruments used for investment:

- 1. **Stocks**: Stocks represent ownership stakes in publicly traded companies. Investors purchase shares of stock in companies, and in return, they may receive dividends (if the company distributes profits) and benefit from capital appreciation if the stock price increases over time. Stocks offer the potential for high returns but also carry higher risk due to market volatility.
- 2. **Bonds**: Bonds are debt securities issued by governments, municipalities, or corporations to raise capital. When investors buy bonds, they are essentially lending money to the issuer in exchange for periodic interest payments (coupons) and repayment of the principal amount at maturity. Bonds are generally considered lower risk than stocks but offer lower returns.
- 3. **Mutual Funds**: Mutual funds pool money from multiple investors to invest in a diversified portfolio of stocks, bonds, or other securities managed by professional fund managers. Mutual funds offer diversification, professional management, and liquidity, making them popular investment vehicles for individual investors.

- 4. **Exchange-Traded Funds (ETFs)**: ETFs are investment funds traded on stock exchanges that hold assets such as stocks, bonds, commodities, or a combination thereof. ETFs offer investors exposure to a diversified portfolio of assets similar to mutual funds but trade like individual stocks, providing flexibility, liquidity, and transparency.
- 5. **Real Estate Investment Trusts** (**REITs**): REITs are investment vehicles that allow investors to invest in income-generating real estate properties such as commercial properties, residential buildings, or infrastructure projects. REITs provide regular income distributions and potential capital appreciation while offering diversification and liquidity in real estate investments.
- 6. **Certificates of Deposit (CDs)**: CDs are time deposits offered by banks and credit unions that pay fixed interest rates over a specified term, ranging from a few months to several years. CDs offer safety of principal and guaranteed returns but typically have lower interest rates than other investments and may impose penalties for early withdrawal.
- 7. **Treasury Securities**: Treasury securities are debt obligations issued by the Department of the Treasury to finance government spending. They include Treasury bills (T-bills), Treasury notes (T-notes), and Treasury bonds (T-bonds), each with varying maturities and interest rates. Treasury securities are considered risk-free investments backed by the U.S. government.
- 8. **Options and Futures**: Options and futures are derivatives contracts that allow investors to speculate on the price movements of underlying assets such as stocks, commodities, or indices. Options provide the right (but not the obligation) to buy or sell an asset at a predetermined price, while futures obligate the buyer and seller to transact at a future date and price.
- 9. **Commodities**: Commodities are physical goods such as gold, silver, oil, agricultural products, and metals that can be traded in commodity markets. Investors can invest in commodities directly through futures contracts or indirectly through ETFs, mutual funds, or commodity-specific investment vehicles.
- 10. **Cryptocurrencies**: Cryptocurrencies are digital or virtual currencies that use cryptography for security and operate on decentralized networks based on blockchain technology. Popular cryptocurrencies include Bitcoin, Ethereum, and Ripple. Cryptocurrencies offer speculative investment opportunities but carry high volatility and regulatory risks.

These are just a few examples of the many financial instruments available for investment. Depending on their financial goals, risk tolerance, and investment preferences, investors can build diversified portfolios by combining various financial instruments to achieve their objectives while managing risk effectively. It's essential for investors to conduct thorough research, seek professional advice, and carefully assess the risks and potential returns of each investment option before making investment decisions.

MONEY MARKET INSTRUMENTS:

The money market is an organized exchange market where participants can lend and borrow short-term, high-quality debt securities with average maturities of one year or less. It enables governments, banks, and other large institutions to sell short-term securities to fund their short-term cash flow needs. Money markets also allow individual investors to invest small amounts of money in a low-risk setting. Some of the instruments traded in the money market include Treasury bills, certificates of deposit, commercial paper, federal funds, bills of exchange, and short-term mortgage-backed securities and asset-backed securities.

Large corporations with short-term cash flow needs can borrow from the market directly through their dealer, while small companies with excess cash can borrow through money market mutual funds.

The money market is a crucial financial market segment where short-term borrowing and lending of funds occur. It facilitates the smooth functioning of the economy by providing a platform for participants to meet their immediate cash needs and manage liquidity. The participants in the money market include governments, corporations, financial institutions, and individual investors. Transactions in the money market typically involve highly liquid and low-risk instruments with maturities of one year or less. Some common types of money market instruments include:

1.Treasury bills:

Treasury bills (T-bills) are short term borrowing instruments issued by the Government of India. These are the oldest money market instruments that are still in use. The Treasury bill does not pay any interest, but are available at a discount of face value at the time of issue. Treasury Bills can be classified in two ways i.e. based on maturity and bases on type. These are the safest instruments as they are backed by a government guarantee. The rate of return, also known as risk-free rate, is low for treasury bills like T-364, T-182 and so on, as compared to all other instruments. Here are some key points about Treasury bills:

- 1. Issued by Governments: Treasury bills are typically issued by national governments to finance their short-term borrowing needs. In the United States, they are issued by the U.S. Department of the Treasury.
- **2. Short-Term Maturity:** T-bills have short-term maturities, usually ranging from a few days to one year. Common maturities include 4 weeks (one month), 13 weeks (three months), 26 weeks (six months), and 52 weeks (one year).
- **3. Discount Securities:** Treasury bills are sold at a discount to their face value. Investors purchase T-bills for less than their face value, and upon maturity, the government pays the holder the full face value. The difference between the purchase price and face value represents the investor's return.
- **4. Risk-Free:** T-bills are considered virtually risk-free because they are backed by the full faith and credit of the issuing government. There is minimal risk of default, making them one of the safest investments available.
- **5. Liquidity:** Treasury bills are highly liquid investments. They can be easily bought and sold in the secondary market before maturity, providing investors with flexibility and access to their funds.
- **6. No Interest Payments:** Unlike conventional bonds, T-bills do not pay periodic interest payments. Instead, investors earn a return through the difference between the purchase price and the face value at maturity.
- **7.** Competitive Auctions: Treasury bills are typically sold through auctions conducted by the government. Investors submit competitive bids specifying the discount rate they are willing to accept. The government accepts bids starting from the lowest rates until it raises the desired amount of funds.
- **8.** Use in Monetary Policy: Central banks often use T-bills as instruments of monetary policy. They can buy or sell T-bills in the open market to adjust the money supply and influence interest rates.
- **9. Benchmark Rates:** Treasury bills are widely regarded as benchmarks for short-term interest rates. Changes in T-bill yields can affect borrowing costs for businesses and consumers.
- **10. Investor Base:** T-bills are popular investments among individuals, institutions, and central banks. They are often used by investors seeking safety, liquidity, and a place to park cash temporarily.

- Issued by GOI
- They are of two durations
- 91 days and 364 days
- Are negotiable instruments and can be rediscounted with GOI
- They are sold on an auction basis every week in certain minimum denominations by the RBI
- They do not carry an explicit interest rate. Instead they are issued at a discount to be redeemed at par.

The implicit return is a function of the size of discount and the period of maturity

- They have zero default risk, assured return, are easily available

2. Certificate of deposits

Certificate of Deposits (CDs) are financial instruments offered by banks and credit unions that allow investors to deposit funds for a fixed period of time at a specified interest rate. A certificate of deposit (CD) is issued directly by a commercial bank, but it can be purchased through brokerage firms. It comes with a maturity date ranging from three months to five years and can be issued in any denomination. Most CDs offer a fixed maturity date and interest rate, and they attract a penalty for withdrawing prior to the time of maturity. Just like a bank's checking account, a certificate of deposit is insured by the Federal Deposit Insurance Corporation (FDIC). Here are some key features of Certificate of Deposits:

- 1. **Fixed-Term**: CDs have a fixed maturity period, typically ranging from a few months to several years. During this period, the investor cannot withdraw the funds without incurring a penalty.
- 2. **Fixed Interest Rate**: The interest rate on CDs is predetermined and remains fixed for the duration of the investment period. This provides investors with certainty about the returns they will earn on their investment.
- 3. **Safety**: CDs are considered relatively safe investments because they are typically issued by federally insured financial institutions, such as banks and credit unions. Deposits in CDs are often insured by the Federal Deposit Insurance Corporation (FDIC) in the United States, up to certain limits.
- 4. **Liquidity Options**: While CDs are designed to be held until maturity, some institutions offer CDs with features that allow early withdrawal under certain conditions. However, early withdrawal may result in penalties or forfeiture of a portion of the interest earned.
- 5. **Minimum Deposit Requirements**: Financial institutions may impose minimum deposit requirements for opening a CD account. The minimum deposit amount varies depending on the institution and the type of CD.
- 6. **Interest Payment Frequency**: Interest on CDs may be paid out at different frequencies, including monthly, quarterly, semi-annually, annually, or at maturity. Investors can choose the frequency of interest payments based on their preferences and financial goals.
- 7. **Callable CDs**: Some CDs may have a callable feature, which allows the issuing institution to redeem the CD before its maturity date. Callable CDs typically offer higher interest rates than non-callable CDs to compensate investors for the risk of early redemption.
- 8. **Variety of Terms**: CDs are available with a wide range of maturity terms, from short-term CDs with durations of a few months to long-term CDs with durations of several years. Investors can choose the term that best suits their investment horizon and financial objectives.

Overall, Certificate of Deposits offer investors a safe and predictable way to earn interest on their savings over a fixed period of time. They are particularly suitable for individuals seeking a low-risk investment option with guaranteed returns and are willing to lock in their funds for a specific period.

- Negotiable instruments issued by banks / financial institutions with a maturity ranging from 3 months to 1 year
- These are bank deposits transferable from one party to another
- The principal investors are banks, financial institutions, corporates and mutual funds
- These carry an explicit rate of interest
- Banks normally tailor make their denominations and maturities to suit the needs of the investors

3. Commercial papers

Commercial Paper (CP) refers to short-term, unsecured debt instruments issued by corporations, financial institutions, and sometimes governments to meet short-term funding needs. commercial papers is an unsecured money market instruments issued in the form of promissory note. It was introduced In India in 1990 with the objectives of enabling corporate borrowers diversify their sources of short-term borrowing and to provide an additional investment instrument to investors. Commercial paper is a money-market security issued (sold) by large corporations to obtain funds to meet short-term debt obligations and is backed only by an issuing bank or company's promise to pay the face value on the maturity date specified on the note. Here are some key features of commercial papers:

- 1. **Short-Term Maturity**: Commercial papers typically have maturities ranging from 1 day to 270 days, although they commonly have maturities of 1 to 3 months. They are designed to provide short-term financing for operational expenses, inventory purchases, and working capital needs.
- 2. **Unsecured Debt**: Commercial papers are usually unsecured, meaning they are not backed by collateral. Instead, they rely on the creditworthiness and reputation of the issuing entity to attract investors.
- 3. **Issued at Discount**: Commercial papers are typically issued at a discount to their face value. Investors purchase commercial papers at a price lower than their face value, and upon maturity, the issuer repays the full face value to the investor. The difference between the purchase price and face value represents the investor's return.
- 4. **Low Credit Risk**: Commercial papers are generally considered low-risk investments, especially when issued by highly-rated corporations or financial institutions. However, investors should carefully assess the creditworthiness of the issuer before investing in commercial papers, as there is still a risk of default.
- 5. **Large Denominations**: Commercial papers are usually issued in large denominations, typically ranging from \$100,000 to \$5 million or more. This makes them primarily suitable for institutional investors, such as banks, mutual funds, pension funds, and corporations.
- 6. **Secondary Market Trading**: While commercial papers are typically held until maturity, they can be traded in the secondary market before maturity. However, secondary market trading for commercial papers is less common compared to other fixed-income securities like bonds.
- 7. **Regulated Market**: Commercial papers are subject to regulations and guidelines set by regulatory authorities, such as the Securities and Exchange Commission (SEC) in the United States. Issuers must comply with disclosure requirements and ensure transparency in their issuance and reporting practices.
- 8. **Flexibility and Cost-Effectiveness**: Commercial papers offer issuers flexibility in terms of timing, size, and maturity of issuance. They are often a cost-effective alternative to traditional bank loans for short-term financing needs, as they typically carry lower issuance costs and interest rates.

Overall, commercial papers serve as an important source of short-term funding for corporations, financial institutions, and governments, providing them with access to capital markets to meet their liquidity and working capital requirements. They offer investors a relatively safe and liquid investment option with potentially higher returns than other short-term investments like Treasury bills or bank deposits.

- Issued in form of promissory notes redeemable at par by the holder on maturity
- Usually has a maturity period of 90 to 180 days
- They are sold at a discount to be redeemed at par
- CPs can be issued by corporates having a minimum net worth of Rs 5 crores and an investment grade from credit rating agencies
- Minimum issue size is Rs 25 lacs
 - **4. Repurchase Agreements (Repo)**: Repos are short-term agreements between parties where one party sells securities to another party with an agreement to repurchase them at a later date, usually at a higher price. Repos are commonly used by financial institutions for liquidity management and collateralized borrowing. It is also called a Sell-Buy transaction. The seller buys the security at a predetermined time and amount which also includes the interest rate at which the buyer agreed to buy the security.
 - 5. Banker's Acceptances (BAs): Banker's acceptances are short-term negotiable debt instruments issued by a company and guaranteed by a bank. They are used to facilitate international trade transactions, with the bank serving as a credit intermediary to guarantee payment to the holder of the acceptance. a banker's acceptance is a document that promises future payment that is guaranteed by the commercial bank. It is considered to be a very safe investment option and is widely used in foreign trade, bankers' acceptance are time drafts which are accepted and guaranteed by the banks and drawn on a deposit at the bank. The maturity period of banker's acceptance can range from 30 to 180 days.
 - **6. Money Market Mutual Funds** (**MMMFs**): MMMFs are mutual funds that invest in a diversified portfolio of money market instruments, providing individual and institutional investors with access to the money market. MMMFs offer liquidity, diversification, and professional management, making them popular cash management tools for investors seeking stability and income.
 - 7. Short-term Treasury and Government Securities: Besides Treasury bills, governments also issue other short-term debt securities, such as Treasury notes and Treasury bonds with shorter maturities, to meet funding needs and manage cash flow.

Money market instruments are characterized by their high liquidity, safety, and relatively low risk, making them suitable for investors seeking preservation of capital and stability of returns in the short term. They are widely used by individuals, corporations, financial institutions, and governments for cash management, liquidity management, and short-term investing needs.

Function Of Money Market:

- 1. **Provides funds** the money market provides short term funds for borrowing at a lower rate of interest. The private and the public institutions can borrow money from the money market to finance capital requirements and fund business growth through the system of finance bills and commercial paper. The govt. can also borrow funds the money market by issuing treasury bills. However, money market issues money market instruments like commercial papers, treasury bills and so on and helps in development of trade, industry and commerce within and outside India.
- 2. **Central Bank Policies-** The central bank is responsible for guiding the monetary policy of a country and taking measures to ensure a healthy financial system. Through the money market, the central bank can perform its policy-making function efficiently.

For example, the short-term interest rates in the money market represent the prevailing conditions in the banking industry and can guide the central bank in developing an appropriate interest rate policy. Also, the integrated money markets help the central bank to influence the sub-markets and implement its monetary policy objectives.

- 3. **Helps government-** the money market instruments helps the government raise money for financing government projects for public welfare and infrastructure development. The govt. can borrow short term funds by issuing treasury bills at low interest rates. On the other hand, if the government were ton issue paper money or borrow short term funds by issuing treasury bills at low interest rates. On the other hand, if the govt. were to issue paper money or borrow from the central bank, it would lead to inflation in the economy.
- 4. **Helps in Financial Mobility-** the money market helps in financial mobility by enabling easy transfer of funds from one sector to the other. Financial mobility is essential for the development of industry and commerce in the economy.
- 5. **Promote Liquidity and Safety-** this is one of the most important functions of money market, as it provides safety and liquidity of funds. It also encourages saving and investments. These investments instruments have shorter maturity which means they can readily be converted to cash. The money market instruments are issues by entities with good credit score which a=makes them safe investment option.
- 6. **Economy in use of cash-** as the money market deals in near-money assets and not proper money; it helps in economizing the use of cash. It provides a convenient and safe way of transferring funds from one place to another, there by immensely helps commerce and industry in India.

Advantages And Disadvantages Of Money Markets:

Advantages:

- **Liquidity:** Money market instruments are highly liquid, meaning they can be easily bought or sold with minimal impact on market value. This allows investors to access their funds quickly, providing flexibility and ease of cash management.
- **Safety:** Money market instruments are generally considered low risk. They frequently come from respectable institutions like governments and reputable businesses, which lowers the risk of default. This makes money market investments a relatively safe option for preserving capital.
- **Stable Returns:** Money market instruments offer stable and predictable returns. They typically provide interest payments or discounts at maturity, allowing investors to earn a modest return on their investments. This makes money market investments suitable for those seeking stability and capital preservation.
- **Diversification:** Money market instruments provide an opportunity for portfolio diversification. Investing in various money market instruments with varying maturities and issuers can spread their risk and reduce exposure to any single entity or maturity date.
- **Short-Term Financing:** For borrowers, money markets offer a convenient and efficient source of short-term financing. Governments, corporations, and financial institutions can issue money market instruments to raise funds quickly and meet their immediate cash flow needs. This enables them to bridge temporary funding gaps and manage liquidity effectively.

Disadvantages:

- Lower Returns: While money market investments offer stability, they generally provide lower returns than other investment options, such as stocks or long-term bonds. The conservative nature of money market instruments translates to a lower potential for significant capital appreciation or high yields.
- **Inflation Risk:** Money market investments may be susceptible to inflation risk. If the interest rates on money market instruments fail to keep pace with inflation, the real value of the investment can erode over time. This can impact the purchasing power of the investor's funds.
- **Limited Growth Potential:** Money market investments may not provide significant opportunities for capital growth. These instruments primarily focus on capital preservation and short-term liquidity management, making them less suitable for investors seeking substantial growth or long-term wealth accumulation.
- **Regulatory Changes:** Money market investments can be subject to regulatory changes, which may impact their performance and liquidity. Changes in regulations governing money market funds or the issuers of money market instruments can introduce uncertainties and affect the attractiveness of these investments.
- Market Conditions: Current market conditions, such as interest rate fluctuations and market volatility, can have an impact on money market investments. Changes in interest rates can affect the yields on money market instruments, potentially impacting returns for investors.
- **Limited Investment Options:** Money markets provide a narrower range of investment options than broader financial markets. Investors looking for more diverse investment opportunities or higher potential returns may need to explore other financial market segments.

Capital Market:

Capital markets are marketplaces for buying and selling bonds, stocks, currencies and other financial assets. They assist entrepreneurs and help small businesses grow into big ones. Additionally, they provide opportunities for regular people to invest and save for their future.

Capital markets are key engines of economic growth and wealth creation in any economy. Typically, suppliers include banks and investors who offer capital for lending or investing. Businesses, governments, and individuals seek capital in this market. A capital market aims to improve transaction efficiency by bringing together suppliers and investors and facilitating their share exchange.

A capital market is a broad term for the physical and online spaces where financial instruments are traded. Stock markets, bond markets, and currency markets (forex) are all types of capital markets. They facilitate the sale and purchase of equity shares, debentures, preference shares, zero-coupon bonds, and debt instruments.

A capital market is a platform for channelling savings and investments among suppliers and those in need. An entity with a surplus fund can transfer it to another that needs capital for its business purpose through this platform.

A firm, for example, borrows money from households or individuals for business operations. Individuals or households invest money in a company's shares or bonds in the capital markets. In exchange for their investment, investors gain profits and goods.

The capital market consists of finance suppliers and buyers, as well as trading instruments and mechanisms. Regulatory bodies are also present.

Capital Market Instruments

Capital market instruments are financial instruments that facilitate the transfer of funds between investors and borrowers in the long-term financial market. These instruments are typically used for raising capital for

business expansion, infrastructure development, and other long-term investment projects. Capital market instruments include:

1. Equities

As capital market instruments, equities enable companies to raise capital by selling ownership stakes. They are traded on stock markets, allowing investors to buy and sell shares, with their value influenced by the company's performance and market dynamics. This trading not only provides liquidity but also helps in price discovery, making equities vital for both corporate financing and investment opportunities. Equities, includes both equity and preference shares, serve as key capital market instruments.

• Equity Share

An equity share represents a portion of ownership in a company. When you buy equity shares, you become a part-owner of that company. As a shareholder, you may get voting rights in major company decisions and a share of the profits, known as dividends. These shares can increase in value if the company does well, offering profit potential.

• Preference Share

Preference shares are a type of stock in a company that give shareholders certain advantages over common stockholders. Typically, preference shareholders receive dividends before common shareholders and these dividends are often fixed. While they usually don't have voting rights in company decisions, they have a higher claim on company assets if the company goes bankrupt. Preference shares are a blend of stocks and bonds characteristics.

2. Debt Instruments

Debt instruments, like bonds and debentures, are essentially loans that investors give to companies or governments. When you invest in these, you're lending money and in return, you receive interest payments over a specified period. At the end of the term, the principal amount is repaid.

They are a key part of capital markets, providing a way for entities to raise funds for various projects. Unlike equities, which represent ownership, debt instruments are a form of borrowing and offer a fixed return, making them a different kind of investment with generally lower risk compared to stocks.

Bonds

Bonds are like loans given by investors to companies or governments. When you buy a bond, you're lending money to the bond issuer. In return, they promise to pay you back the principal amount on a future date and make regular interest payments along the way, known as coupon payments. Bonds are a way to invest while earning steady income, and are generally considered lower-risk compared to stocks.

Debentures

Debt instruments, like bonds and debentures, are essentially loans that investors give to companies or governments. When you invest in these, you're lending money and in return, you receive interest payments over a specified period. At the end of the term, the principal amount is repaid. They are a key part of capital markets, providing a way for entities to raise funds for various projects. Unlike equities, which represent ownership, debt instruments are a form of borrowing and offer a fixed return, making them a different kind of investment with generally lower risk compared to stocks

3. Derivative Instruments

Derivative instruments are financial contracts whose value is derived from an underlying asset, like stocks, commodities, or interest rates. They are used for hedging risks or for speculation. Examples include:

Forward: A customized contract between two parties to buy or sell an asset at a predetermined future date and price.

Future: Similar to forwards but standardized and traded on exchanges. They oblige the buyer to purchase, or the seller to sell, an asset at a set future date and price.

Options: These give the buyer the right, but not the obligation, to buy (call option) or sell (put option) an asset at a specified price before a certain date.

Interest Rate Swap: A contract in which two parties exchange cash flows based on different interest rates applied to a principal amount, often used to hedge interest rate risks.

4. Exchange-Traded Funds

Exchange-traded funds (ETFs) are capital market instruments that track indexes, commodities, bonds, or a basket of assets like an index fund but trade like stocks on an exchange. Each ETF share represents a portion of the fund's portfolio, giving investors access to a diversified set of assets or a specific market segment.

They offer flexibility, as they can be bought and sold throughout the trading day at market prices, and typically have lower fees than traditional mutual funds. ETFs are popular among investors for portfolio diversification, ease of trading, and their ability to reflect real-time market prices, making them an effective tool for both passive and active investment strategies.

5. Foreign Exchange Instruments

Foreign Exchange Instruments in the capital market are tools used for trading currencies between countries. These include currency pairs like the US Dollar against the Euro. Investors and companies use them to exchange one currency for another, which is essential for international trade, travel, or investment.

They can also be used for speculation, and betting on currency movements to make profits. These instruments help manage risks associated with currency fluctuations and play a vital role in global financial markets, facilitating cross-border transactions and investments.

6. Real Estate Investment Trusts (REITs):

REITs are investment vehicles that allow investors to invest in income-generating real estate properties such as commercial properties, residential buildings, or infrastructure projects. REITs provide regular income distributions and potential capital appreciation while offering diversification and liquidity in real estate investments.

Types of Capital Market:

There are two main categories of capital markets: Primary markets and secondary markets.

Primary Markets:

Primary capital markets are where companies first sell new stock or bonds publicly. Also known as the 'New Issues Market', it is a place where businesses and governments seek out new financing. The new money is converted into debt or shares of the company. Debt or stocks are locked in until they are sold on a secondary market, repurchased by the company, or mature.

Primary capital markets trade two major financial instruments: equities (stocks) and debt. An Initial Public Offering (<u>IPO</u>) is the process of introducing new equities to the market. It's simply the process of selling part of a company to the public for capital.

Bonds, on the other hand, are a bit more complicated. Underwriters act as intermediaries in the issuance of bonds. If Company A wants to issue INR 10 crore in bonds, it goes to the underwriter. These bonds are then issued and sold by the underwriter to investors.

In this instance, the underwriter is responsible for ensuring that Company A gets the capital it needs. A bond underwriter buys bonds from Company A and then sells them on the market - typically at a higher price. The underwriter then takes on the risk, but Company A receives the entire loan.

Secondary Market:

Investors trade old debt or stocks on the secondary capital market. It differs from the primary market because the debt has already been issued here.

Investors trade stock in the secondary capital markets through exchanges such as the Bombay Stock Exchange, the Calcutta Stock Exchange, and the New York Stock Exchange. A stock exchange also allows people to sell the old stock if they no longer want it, which results in the 'liquidation' of these stocks. Thus, the seller now has cash rather than an asset.

Unlike stocks, bonds are typically held for a longer period - usually until they expire. However, those who hold bonds but need cash quickly can rely on the secondary market.

Investors use the secondary market to obtain cash, either to invest in another stock or for personal consumption. It involves liquidating assets so that other things can be purchased.

Functions of Capital Market:

- 1. **Links Borrowers and Investors:** Capital markets serve as an intermediary between people with excess funds and those in need of funds.
- 2. **Capital Formation:** The capital market plays an important role in capital formation. By timely providing sufficient funds, it meets the financial needs of different sectors of the economy.
- 3. **Regulate Security Prices:** It contributes to securities' stability and systematic pricing. The system monitors whole processes and ensures that no unproductive or speculative activities occur. A standard or minimum interest rate is charged to the borrower. As a result, the economy's security prices stabilize.
- 4. **Provides Opportunities to Investors:** The capital markets have enough financial instruments to meet any investor's needs, regardless of the risk level. Capital markets also provide investors with the opportunity to increase their capital yields. The interest rate on most savings accounts is extremely low compared to the rate on equities. Therefore, investors can earn a higher rate of return on the capital market, though some risks are involved as well.
- 5. **Minimises Transaction Cost And Time:** Long-term securities are traded on the capital market. The whole trading process is simplified and reduced in cost and time. A system and program automate every aspect of the trading process, thus speeding up the entire process.
- 6. **Capital Liquidity:** The financial markets allow people to invest their money. In exchange, they receive ownership of a stock or bond. Bond certificates cannot be used to purchase a car, food, or other assets, so they may need to be liquidated. Investors can sell their assets for liquid funds to a third party on the capital markets.

Features of a Capital Market:

The following are the features of capital markets:

Safety: Government regulates the capital markets. They operate under a defined set of rules. Therefore, investors consider it a safe place for trading.

Channelizes savings: Capital markets act as a link between savers and investors. They mobilise the savings from savers to industry players and promote economic growth.

Long term investment: Capital markets provide a platform for long term investments. Any investors looking for investing in long term investments can do so through capital markets.

Ms Deepika L, Assistant Professor, SSMRV College

Wealth Creation: The capital market provides an opportunity to investors with surplus funds to invest in capital market instruments like shares and bonds and create wealth for themselves through the power of compounding.

Helps intermediaries: The capital market mobilises savings from savers to borrowers with the help of intermediaries like stock exchanges, brokers, banks, etc. By doing so, the capital market is helping intermediaries conduct business and earn income.

Differences between Money Market and Capital Market

Basis	Money Market	Capital Market
Definition	A random course of financial institutions, bill brokers, money dealers, banks, etc., wherein dealing on short-term financial tools are being settled is referred to as Money Market.	A kind of financial market where the company or government securities are generated and patronised with the intention of establishing long-term finance to coincide with the capital necessary is called Capital Market.
Market Nature	Money markets are informal in nature.	Capital markets are formal in nature.
Investor Types	Commercial Papers, Treasury Certificate of Deposit, Bills, Trade Credit, etc.	Bonds, Debentures, Shares, Asset Secularisation, Retained Earnings, Euro Issues, etc.
Investor Types	Commercial banks, non-financial institutions, central bank, chit funds, etc	Stockbrokers, insurance companies, Commercial banks, underwriters, etc.
Market Liquidity	Money markets are highly liquid.	Capital markets are comparatively less liquid.
Risk Involved	Money markets have low risk.	Capital markets are riskier in comparison to money markets.
Maturity of Instruments	Instruments mature within a year.	Instruments take longer time to attain maturity
Purpose served	To achieve short term credit requirements of the trade.	To achieve long term credit requirements of the trade.
Functions served	Increasing liquidity of funds in the economy	Stabilising economy by increase in savings
Return on investment achieved	ROI is usually low in money market	ROI is comparatively high in capital market

Derivatives

The term derivative refers to a type of financial contract whose value is dependent on an underlying asset, group of assets, or benchmark. A derivative is set between two or more parties that can trade on an exchange or over-the-counter (OTC).

Derivatives are financial contracts that derive their value from an underlying asset such as stocks, commodities, currencies etc., and are set between two or more parties, where the value of the derivative is derived from price or value fluctuations of the underlying assets. Derivatives can be used to hedge a position, speculate on the directional movement of an underlying asset, or leverage holdings. (A hedge is a trade that is made with the purpose of reducing the risk of adverse price movements in another asset.)

Derivative trading happens over the counter or via an exchange. Over-the-counter trading works between two private parties and is not regulated by a central authority. Furthermore, as two private parties agree on the contract, it is susceptible to counterparty risk. This risk refers to the possibility or rather the danger of one of the parties defaulting on the derivative contract.

(OTC refers to a transaction conducted directly between two parties, without the supervision of an exchange. Exchange-traded refers to a transaction executed on a centralized exchange, with the exchange acting as a middleman)

- Derivatives are financial contracts, set between two or more parties, that derive their value from an underlying asset, group of assets, or benchmark.
- A derivative can trade on an exchange or over-the-counter.
- Prices for derivatives derive from fluctuations in the underlying asset.
- Derivatives are usually leveraged instruments, which increases their potential risks and rewards.
- Common derivatives include futures contracts, forwards, options, and swaps

Types of Derivatives

Derivatives today are based on a wide variety of transactions and have many more uses. There are even derivatives based on weather data, such as the amount of rain or the number of sunny days in a region. There are many different types of derivatives that can be used for risk management, speculation, and leveraging a position. The derivatives market is one that continues to grow, offering products to fit nearly any need or risk tolerance.

There are two classes of derivative products: "lock" and "option." Lock products (e.g., futures, forwards, or swaps) bind the respective parties from the outset to the agreed-upon terms over the life of the contract. Option products (e.g., stock options), on the other hand, offer the holder the right, but not the obligation, to buy or sell the underlying asset or security at a specific price on or before the option's expiration date. The most common derivative types are futures, forwards, swaps, and options.

1. Options:

Like futures, options refer to derivative contracts that take place between buyers and sellers. But, unlike futures, options contracts are a right and not an obligation, meaning both parties can exit the contract at any time. However, if an investor wants to exercise their rights, they can do so. The option seller is also known as the option writer, and the specified price agreed by both parties is referred to as the strike price.

Call Option: A call option gives the holder the right, but not the obligation, to buy an underlying asset at a specified price (strike price) within a specified period (expiration date).

Example: An investor purchases a call option on 100 shares of Company ABC with a strike price of \$50 expiring in three months. If the price of Company ABC's stock rises above \$50 before the expiration date, the investor can exercise the option to buy the shares at the predetermined price.

Put Option: A put option gives the holder the right, but not the obligation, to sell an underlying asset at a specified price (strike price) within a specified period (expiration date).

Example: An investor purchases a put option on 100 shares of Company XYZ with a strike price of \$60 expiring in three months. If the price of Company XYZ's stock falls below \$60 before the expiration date, the investor can exercise the option to sell the shares at the predetermined price. Futures:

2. Futures:

A futures contract refers to an agreement between the buyer and seller of an underlying asset. The buyer decides to buy an asset at a predetermined price on the contract execution date, and the seller agrees to sell the asset on the contract execution date. Futures is an obligatory contract, meaning the buyer and seller must honour the contract.

Stock Futures: Stock futures are contracts that obligate the buyer to purchase (long position) or the seller to sell (short position) a specified quantity of a particular stock at a predetermined price (futures price) on a future date.

Example: An investor enters into a futures contract to buy 100 shares of Company DEF at \$70 per share in three months. If the price of Company DEF's stock rises above \$70 by the expiration date, the investor can profit from the price difference.

Commodity Futures: Commodity futures are contracts that obligate the buyer to purchase (long position) or the seller to sell (short position) a specified quantity of a commodity (e.g., oil, gold, wheat) at a predetermined price (futures price) on a future date.

Example: A farmer enters into a futures contract to sell 1,000 bushels of wheat at \$5 per bushel in six months. If the market price of wheat falls below \$5 per bushel by the expiration date, the farmer can profit from the price difference.

3. Swaps:

Like forwards, swaps are not traded through stock exchanges and happen through over-the-counter deals between financial institutions and businesses. Swaps are financial agreements between two parties where one party promises to make payments in exchange for receiving another set of payments. The payments are usually based on interest, and the two parties often respond to the payments at regular intervals. Swaps are also known as derivative contracts, and they involve exchanging the value of an asset or cash flows

Interest Rate Swaps: Interest rate swaps involve the exchange of fixed-rate and floating-rate interest payments between two parties based on a notional principal amount.

Example: Company XYZ agrees to pay a bank fixed-rate interest payments on a notional principal amount of \$10 million, while the bank agrees to pay Company XYZ floating-rate interest payments based on LIBOR (London Interbank Offered Rate) on the same notional principal amount.

Currency Swaps: Currency swaps involve the exchange of cash flows denominated in different currencies between two parties over a specified period.

Example: Company ABC in the United States agrees to exchange U.S. dollars for euros with Company DEF in Europe over the next five years. This allows Company ABC to hedge against exchange rate fluctuations when conducting business in Europe.

Commodity swaps: Two parties agree to exchange cash flows that depend on the price of a commodity, such as livestock or oil. These swaps are often used to hedge against price fluctuations.

4. Forward contracts: Forwards are much like a futures contract. Here, the holder of the contract is obligated to honour the contract. But, unlike futures and options, forwards are not traded on stock exchanges and are unstandardised. Investors buy forwards through over-the-counter deals. Also, the buyers and sellers of forwards can customise the contract.

They agreements between two parties to buy or sell an asset at a specified price (forward price) on a future date. Unlike futures contracts, forward contracts are typically customized and traded over-the-counter (OTC). **Example**: A multinational corporation enters into a forward contract to buy 1,000 barrels of oil at \$70 per barrel in six months to hedge against future price increases.

Difference between a futures and options contract

Options are financial derivatives that provide the holder with the right (but not the obligation) to buy (call option) or sell (put option) an underlying asset at a specified price within a predetermined time frame. Here are some characteristics to note:

Characteristic	Futures Contract	Options Contract
Obligation	Both parties (buyer and seller) have an obligation to buy/sell the underlying asset at the agreed-upon price and date.	The buyer has the right (but not the obligation) to buy/sell the underlying asset. The seller has an obligation if the buyer chooses to exercise.
Nature	Obligatory and involves a commitment to buy/sell.	Discretionary, providing the holder with the choice to exercise or not.
Rights and Obligations	Both parties are bound to the contract's terms.	The buyer has the right to exercise or not; the seller has the obligation if the buyer chooses to exercise.
Liquidity	Generally, more liquid due to exchange trading.	Liquidity can vary, with exchange- traded options usually more liquid than OTC options.
Flexibility	Less flexible as terms are standardized.	More flexible as terms can be customized based on the parties' preferences.
Margins	Daily settlement through margin accounts.	Premium paid upfront, no daily settlement.
Purpose	Commonly used for speculation and hedging in commodities, currencies, and financial instruments.	Used for speculation, hedging, generating income, and strategic investment strategies.

What are the differences between a forward contract and a futures contract?

Some of the key points of difference between a forward contract and futures contract are tabled below.

Category	Forward Contract	Futures Contract
Meaning	A forward contract is a private agreement between two parties to buy or sell an underlying asset	A futures contract is a standardized contract to buy and sell an asset on a future date at a fixed price.
Standardization	Forward contracts are often customized to suit the parties' needs	Futures contracts have standardized terms for consistency and pre-defined lot sizes.

Liquidity and	Forward contracts lack transparency and	Futures contracts are highly liquid and traded on
Transparency	liquidity, being private agreements.	exchanges, providing transparency.
Regulations	Forward contracts are over-the-counter contracts and therefore have minimum to no regulation.	Futures contracts are strictly regulated by exchanges and relevant authorities.
Risk	Forward contracts have higher counterparty risk.	Future contracts have lower counterparty risks
Settlement	Forward contracts are settled at the maturity date and are settled in cash or physical settlement	Future contracts are settled on a daily basis and are settled in cash as the difference between the spot price and the futures price.
Margin	A forward contract has no collateral requirement, as the parties trust each other to honour the contract.	A futures contract has a collateral requirement, as the parties have to deposit an initial margin and maintain a maintenance margin to cover potential losses.
Costs	Forward contracts usually have lower transaction costs.	Futures contracts may involve brokerage, exchange fees, and margin requirements.
Price determination	Forward contract prices are mutually agreed upon between the parties to the contract.	Futures contract prices are determined by open market forces.

Advantages of Derivatives:

- **Hedging:** Derivatives allow businesses to hedge against price fluctuations, interest rate changes, and currency movements, helping to mitigate risks associated with market uncertainties.
- **Market Efficiency:** Derivatives contribute to price discovery by reflecting the collective opinions and expectations of market participants, thereby enhancing overall market efficiency
- Enhanced Liquidity: Derivative markets often provide higher liquidity, allowing investors to enter or exit positions more easily compared to the underlying assets.
- **Increased Leverage**: Derivatives enable investors to control a larger position with a smaller upfront investment, offering the potential for amplified returns (though this comes with increased risk)
- **Income Opportunities**: Derivatives can be employed to generate income through strategies like covered call writing or selling options

Disadvantages of Derivatives:

- **Complex Instruments:** Derivatives are often complex financial instruments that require a deep understanding. Misunderstandings or misuse can lead to significant financial losses.
- **Speculative Nature:** Derivatives are often used for speculative purposes, and this can result in substantial losses if market movements are not accurately predicted
- Leverage Risks: While leverage can amplify returns, it also magnifies losses. Excessive use of leverage can lead to significant financial setbacks.

