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CA Final

Advanced Financial Management

THEORY NOTES

Relevant for May - 24 & onwards...

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Meet Adish

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His 2 core mantra for students:

- Conceptual Clarity
- Comprehensive Coverage

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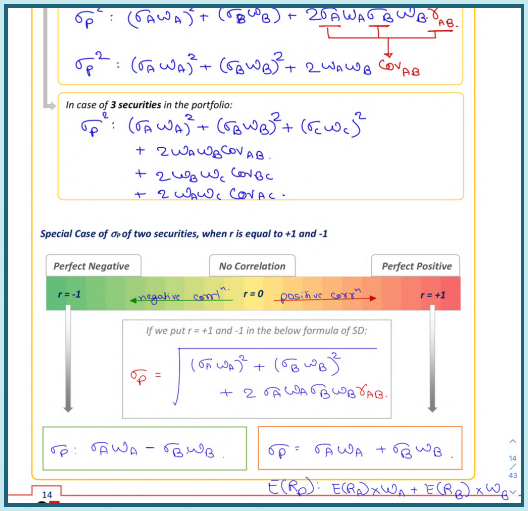
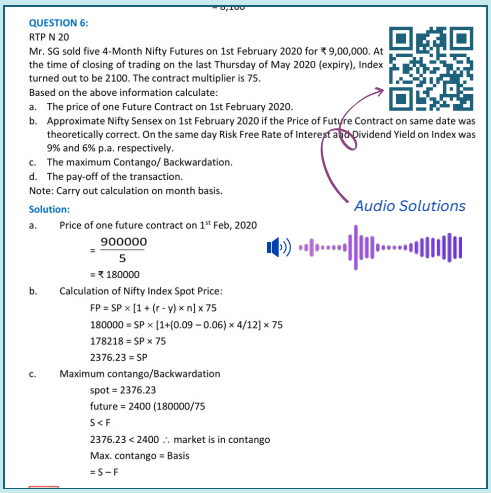
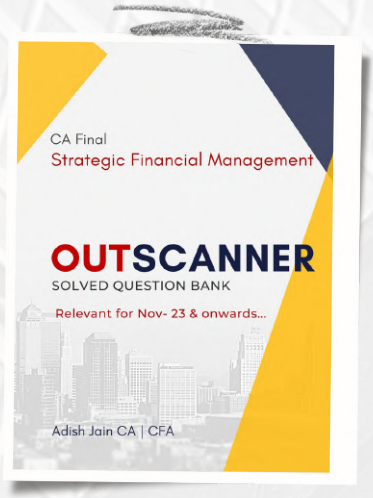
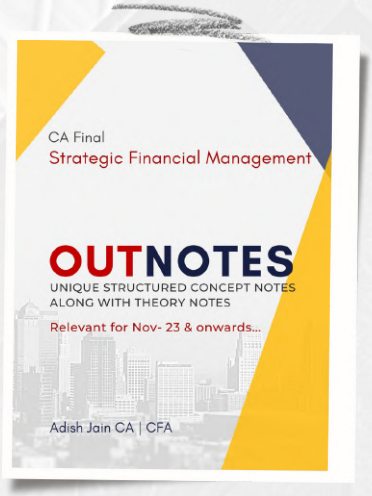
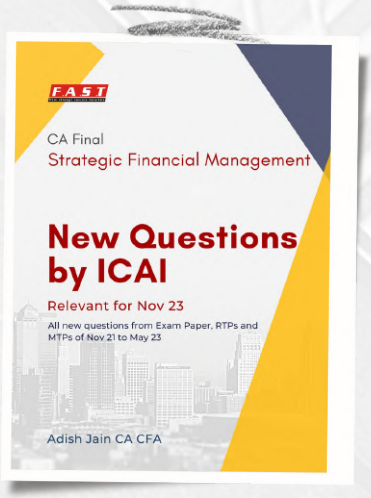




UNIQUE STRUCTURED CONCEPT NOTES







Important Instructions

before we read this book...

- This book has been creatively designed to help you understand and remember the concepts easily. For this purpose, concepts have been presented in diagrams and charts format. However, for theory topics, answers must be written in simple pointers and paragraph format in exams.
- The purpose of text in **Grey Colour** is to give you the background of the main concept, which will be more useful while reading first time. At the time of revision, you should make use of colour coding & ignore grey text.
- Below theory chapters and new topics added in SM 2024 have more importance and should be studied on priority to other chapters. Newly added theory topics have been marked as 'SM 2024'. Also, theory questions from Past Exam-papers, RTPs & MTPs from these chapters are compiled at the start of 'Theory Topics'.

1. Start-Up Finance
2. Securitization
3. Financial Policy and Corporate Strategy
4. Risk Management
5. Security Analysis

Chapters	N 23	M 23	N 22	M 22	N 21	M 21	N 20 (II)	N 20	N 19
Start-Up Finance	8	8	8	4	8	8	8	7	8
Securitization	4	4	4	4	4	4	8	4	8
Financial Policy & Corp Strat	4	4	4	4		4	4		4
Risk Management	4			4	4	4			
Security Analysis	4				4			4	
Other Chapters	4	8	12	8	4	4		4	
Total	28	24	28	24	24	24	20	19	20

All the best!

Table of content...

Theory Questions from Past Exam Papers, RTPs & MTPs

Startup Finance:

- *Write a short note on Venture Capital Fund. (Nov 22)*
- *"A limited Partnership Entity, in India, is not recognised for the purpose of Venture Capital Fund" Do you agree? Briefly explain the structure of Venture Capital Funds in India. (May 23)*
- *Discuss Bootstrapping as a mode of financing for startups and describe the various methods of bootstrapping. (RTP, MTP)*
- *What is the mode of financing is called in Startups, when a person attempts to found & build a company from personal finances or from the operating revenues of a new company. Explain briefly the methods of this mode. (Dec 21)*
- *An individual attempts to found and build a company from personal finances or from the operating revenues of the new company. What this method is called? Discuss any two methods. (Nov 20, Nov 22)*
- *Write the characteristics of Venture Capital Financing. (Nov 21)*
- *Peer - to - Peer Lending and Crowd funding are same and traditional methods of funding. Do you agree? Justify your stand. (Nov 20, MTP Nov 23)*
- *Non-bank Financial Sources are becoming popular to finance Start-ups. Discuss. (Nov 20)*
- *Explain Indicative Risk Matrix of each stage of funding for Venture Capital Financing. (July 21)*
- *Venture Capital Funding passes through various stages. Discuss. (Nov 20)*
- *State briefly the basic characteristics of venture capital financing (Nov 19)*
- *What is a startup to avail the benefits of government scheme? (May 22, Nov 19)*
- *Explain Angel Investors. (May 22, Nov 18)*
- *Explain Pitch Presentation. List the methods for approaching a Pitch Presentation. (May 21)*
- *Explain briefly the sources for funding a Start-up. (May 23, May 19)*
- *Explain the advantages of bringing venture capital in the company. (May 18)*
- *Mr. R has completed his studies and wants to start his new online business. For a successful online business there are various expenditure costs with regards to advertisement & application development, to make the business successful he wants to raise funds. Explain some of the innovative sources for funding a start-up. (RTP Nov 21)*
- *Compare and contrast start-ups and entrepreneurship. Describe the priorities and challenges which start-ups in India are facing. (RTP Nov 19)*
- *EXPLAIN Startup India Initiative. (RTP Nov 18)*
- *'Venture Capital Financing is a unique way of financing Startup'. Discuss. (Answer: Characteristics of Venture Capitals) (RTP May 21)*
- *Who are Angel Investors and how they are different from Venture Capitalists. (MTP Nov 21)*

- *Explain alternatives available to offshore investors for making investments in Venture Capital Funds in India. (MTP Nov 21)*
- *Explain the basic documents that are required to make up Financial Presentations during Pitch Presentation. (MTP May 20)*
- *During Pitch Presentation to convince the investors to put money into the proposed business how promoters deal with following points:*

  (i) Problem (ii) Solution (iii) Marketing/Sales (iv) Business Model (MTP Nov 23)
- *NIYA Healthcare is a proprietary concern engaged in the manufacture and development of pharmaceutical products since last five years. To scale up the business operations and increase the present turnover which is hovering around 500 million, the proprietor decides to convert his existing business into a Private Limited Company. He also wants to get access to various tax benefits, easier compliances under the startup India initiative and get recognized as a startup company. Advise whether NIYA Healthcare can be recognized as a startup company in view of the criteria considered eligible for the startup recognition initiated by the Government of India? (Nov 23)*
- *"In Deal Structuring, in many structures to facilitate the exit, the Venture Capital may put a tag-along clause". What do you mean by that clause? Explain Deal Structuring and Exit Plan to Venture Capital Investment Process. (Nov 23)*

Securitization

- *What are the features of Securitization? (Nov 22)*
- *Explain the pricing of the securitized instruments. (Nov 21)*
- *Distinguish between Pass Through Certificates (PTC) and Pay Through Securities (PTS) (May 23)*
- *Participants are required for the success of the securitisation process. Discuss their roles. (Nov 21)*
- *The process of securitisation can be viewed as process of creation of additional financial product of securities in the market backed by collaterals." What are the other features? Describe.*
- *Explain the benefits of Securitization from the perspective of both originator as well as the investor. (May 18, Nov 19)*
- *State the main problems faced in Securitization in India? (Nov 19, May 21)*
- *Discuss about the Primary Participants in the process of Securitization. (Nov 18)*
- *Briefly explain the steps involved in Mechanism of Securitization. (May 19, May 18)*
- *Explain the Secondary Participants involved in the process of Securitization of Instruments. (RTP May 21)*
- *Distinguish between: Primary Participants and Secondary Participants in securitization. (RTP May 18)*
- *"While pricing the securitized instruments, it is important that it should be acceptable to both originators as well as to the investors". Explain. (MTP Nov 21)*
- *"Securitisation is the process of repackaging or rebundling of illiquid assets into marketable securities". EXPLAIN. (Answer: Steps of Securitization) (MTP May 22)*
- *Beside the primary participants other parties are too involved in the process of securitization. Explain them briefly. (MTP Nov 23)*

- *Not only Bundling and Unbundling is only feature of Securitisation, there are other features too of the same. Explain. (MTP Nov 23)*
- *"Though in recent period of time the concept of securitisation has become popular in India as a source of off-balance Sheet source of financing but its level of growth is still far behind" Explain. (Answer: Problem faced by securitization in India) (MTP Nov 23)*
- *"Lack of existence of a well-developed debt market in India, is an obstacle that hinders the growth of the Secondary Market of securitized or asset backed Securities". Is it true? What are the other problems in Securitization Process (Nov 23)*

Financial Policy & Corporate Strategy

- *As a financial strategist you will depend on certain key financial decisions. Discuss. (Nov 20)*
- *Discuss briefly the key decisions which fall within the scope of financial strategy. (Nov 19)*
- *State the strategy at different hierarchy levels. (May 21)*
- *Explain the interface of Financial Policy and Strategic Management. (May 18)*
- *Explain the traits that an organisation should have to make itself financially sustainable. (May 23)*
- *How financial goals can be balanced vis-à-vis sustainable growth? (RTP May 20)*
- *Financial Resources, Financial Tools and Financial Goals are outcomes of Financial Planning. Do you agree with this statement? (MTP Nov 21)*
- *"Sustainable growth is important to enterprise long-term development". Explain this statement in context of planning healthy corporate growth. (MTP Nov 20)*
- *Explain the specific steps that make an organisation sustainable. (MTP May 21)*
- *EXPLAIN outcomes of the Financial Planning. (Nov 22)*
- *Describe the main function of corporate level strategy and state which three basic questions it should be able to answer. (Nov 23, MTP Nov 23)*

Risk Management

- *Briefly explain: (a) Compliance risk and (b) Operational risk (May 22)*
- *Which type of risk covers the default by the counterparty? List out the ways to manage this type of risk. (Nov 21)*
- *What is Financial Risk. How different stakeholders view the financial risk? (Nov 18, MTP Nov 23)*
- *Describe the main features of Value-at-Risk (VAR). (May 21)*
- *List the main applications of Value at Risk (VAR). (Mov 22, May 19)*
- *Explain how an organization interested in making investment in foreign country can assess Country Risk and mitigate this risk. (RTP May 21)*
- *EXPLAIN the main risk that can be faced by an overseas investor. (Answer: Political Risk) (MTP May 22)*
- *What do you mean by term "Counter Party Risk". Explain various hints that may provide an indicator of the same risk. (MTP Nov 23)*

- *List out the four methods for Identification and Management of Financial Risk. What are the parameters to identify the currency risk? (Nov 23, RTP Nov 19)*

Security Analysis

- *Describe briefly on which principles Technical Analysis is based. (Nov 21)*
- *In an efficient market, technical analysis may not work perfectly. However, with imperfections, inefficiencies and irrationalities, which characterises the real world, technical analysis may be helpful. Critically analyse the statement. (Nov 20)*
- *Explain various "Market Indicators". (RTP Nov 20)*
- *EXPLAIN the challenges to Efficient Market Theory. (RTP Nov 18)*
- *Explain the factors affecting economic analysis. (RTP May 20)*
- *DESCRIBE the factors affecting Industry Analysis. (RTP May 19)*
- *EXPLAIN Dow Jones theory. (MTP Nov 18)*
- *Discuss the various techniques used in economic analysis. (MTP May 19)*
- *Describe the concept of 'Evaluation of Technical Analysis'. (MTP May 19)*
- *Explain Random Walk theory. (MTP May 18)*
- *In a rational, well ordered and efficient market, technical analysis may not work very well". Is it true? List out the reasons for this statement regarding Technical Analysis. (Nov 23)*

1. FINANCIAL POLICY AND CORPORATE STRATEGY

1. Strategic Financial Management & it's Functions

SFM means application of financial management techniques to strategic decisions in order to help achieve the decision-maker's objectives. It is basically about the identification of the possible strategies capable of maximizing an organization's market value. It involves the allocation of scarce capital resources among competing opportunities.

***Investment and financial decisions* involve the following functions:**

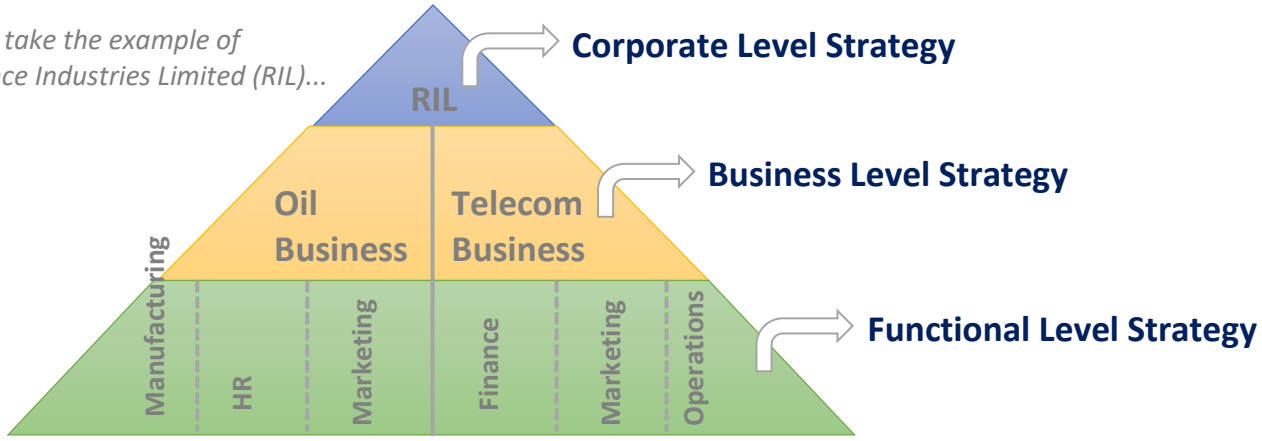
a. *Continual search for best investment opportunities;*
b. *Selection of the best profitable opportunities;*
c. *Determination of optimal mix of funds for the opportunities;*
d. *Establishment of systems for internal controls; and*
e. *Analysis of results for future decision-making.*

2. Key Decisions falling within the Scope of Financial Strategy

1. ***Financing decisions:*** *These decisions deal with the mode of financing and mix of equity and debt in the capital structure.*
2. ***Investment decisions:*** *These decisions involve the profitable and optimum utilization of firm's funds especially in long-term capital projects. Since the future benefits associated with such projects are not known with certainty, investment decisions necessarily involve risk. The projects are therefore evaluated in relation to their expected return and risk.*
3. ***Dividend decisions:*** *These decisions determine the division of earnings between payments to shareholders as dividends and retention with the company for future reinvestment.*
4. ***Portfolio decisions:*** *These decisions involve evaluation of investments based on their contribution to the aggregate performance of the entire company rather than on the characteristics of individual investments (Just like we read in portfolio management that risk & return of entire portfolio is to be considered rather than individual securities).*

3. Strategy at different Hierarchy Levels

Let us take the example of Reliance Industries Limited (RIL)...



Corporate Level Strategy:

- *Corporate level strategy fundamentally is concerned with selection of businesses in which a company should compete. It also deals with the development and coordination of that portfolio of such businesses.* *(Strategy at RIL level will come under this)*
- *Corporate level strategy should be able to answer three basic questions:*

Suitability:	*Whether the strategy would work for the accomplishment of common objective of the company.*
Feasibility:	*Determines the kind and number of resources required to formulate and implement the strategy.*
Acceptability:	*It is concerned with the stakeholders' satisfaction and can be financial and non-financial.*

Business Level Strategy

- *Strategic Business Unit (SBO) is a profit centre that can be planned independently from the other business units of a corporation. Strategies formed to accomplish objectives of SBOs are Business Level Strategies.* *(Oil Business Unit or Telecom Business Unit is an SBO)*
- *Business Level Strategy deals with practical coordination of operating units and developing and sustaining a competitive advantage for the products and services that are produced.*

Functional Level Strategy

- *Functional Level Strategies include strategies at the level of operating departments like R&D, operations, manufacturing, marketing, finance, and human resources.*
- *Functional level strategies involve the development and coordination of resources through which business unit level strategies can be executed effectively and efficiently.*

4. Financial Planning & Outcomes of Financial Planning

Financial Planning = Financial Resources + Financial Tools + Financial Goal

Financial planning is a systematic approach to maximize his existing financial resources by utilizing financial tools to achieve his financial goals. Financial planning is the backbone of the business planning and corporate planning.

Outcome of Financial Planning = Financial Objective, Financial decision-making & Financial measures

Financial objectives *are to be decided at the very beginning so that rest of the decisions can be taken accordingly. The objectives need to be consistent with the corporate mission and corporate objectives.*

Financial decision making *helps in analysing the financial problems that are being faced by the corporate and accordingly deciding the course of action to be taken by it.*

Financial measures *like ratio analysis, analysis of cash flow statement is used to evaluate the performance of the Company.*

5. Interface of Financial Policy and Corporate Strategic Management

The interface of strategic management and financial policy will be clearly understood if we appreciate the fact that the starting point of an organization is money and the end point of that organization is also money.

***Dimensions of interface between Corporate Strategic Management and Financial Policy**:*
(Interface in general means point of connection between two things. Here, 'Dimensions of interface between Corporate Strategic Management and Financial Policy' means in which all ways, Corporate Strategic Management is connected to Financial Policy)

a) Sources of Finance and Capital Structure Decisions

- *To support any expansion activity, funds may be mobilized (generated) through owner's capital (equity or preference shares) or borrowed capital (debt like debentures, public deposits, etc.).*
- *Along with mobilization of funds, policy makers must also decide on the capital structure i.e., appropriate mix of equity and debt capital. This mix varies from industry to industry.*

Investment and Fund Allocation Decisions

- *A planner must frame policies for regulating investment in fixed and current assets.*
- *Planners task is to make best possible allocation under resource constraints.*
- *Investment proposals by different business units can be divided as:*
  - *Addition of new product by the firm (i.e., diversification)*
  - *Increasing the level of operation of an existing product (i.e., expansion)*
  - *Cost reduction or efficient utilization of resource*

Dividend Policy Decisions

- *Dividend policy decision deals with the extent of earnings to be distributed as dividend and the extent of earnings to be retained for future growth of the firm.*

It may be noted from the above discussions that financial policy cannot be worked out in isolation of corporate strategy. Since, financial planning and corporate strategy are interdependent of each other, attention of the corporate strategy makers must be drawn while framing the financial plans not at a later stage.

6. Sustainable Growth Rate

The sustainable growth rate (SGR) of a firm is the maximum rate of growth in sales that can be achieved, given the firm's profitability, asset utilization, and desired dividend payout and debt (financial leverage) ratios.

SGR is a measure of how much a firm can grow without borrowing more money. After the firm has passed this rate, it must borrow funds from another source to facilitate growth.

SGR is calculated as: ROE x (1- Dividend payment ratio)

Variables of SGR formula typically include:

1. *Net profit margin on new and existing revenues;*
2. *Asset Turnover ratio,*
3. *Assets to equity ratio (Financial Leverage Ratio)*
4. *Retention rate*

Sustainable growth models assume that the business wants to:

1. *maintain a target capital structure without issuing new equity;*
2. *maintain a target dividend payment ratio; and*
3. *increase sales as rapidly as market conditions allow.*

7. Financially Sustainability of an Organisation

To be financially sustainable, an organisation must:

- *have more than one source of income (say, multiple businesses)*
- *have more than one way of generating income (say, both online and offline sales)*
- *do strategic, action and financial planning regularly*
- *have adequate financial systems*
- *have a good public image*
- *have financial autonomy (ability to take financial decisions independently)*

2. RISK MANAGEMENT

1. Types of Risks a Business Faces

Strategic Risk

It is the risk that company's strategy might become less effective and company struggles to achieve its goals.

It could be due to technological reasons, new competitors, shift in customer's demand, etc.

Compliance Risk

Every business needs to comply with rules and regulations. If the company fails to comply with laws related to an area or industry or sector, it will pose a serious threat to its survival.

It refers to the risk that company might not be able to company with the rules and regulation applicable to the business.

Operational Risk

It refers to the risk that company might fail to manage day to day operational problems.

This type of risk relates to internal risk as risk relates to 'people' as well as 'process'.

Financial Risk

It refers to the risk of unexpected changes in financial conditions prevailing in an economy such as prices, interest rates, inflation, etc.

All these factors have direct impact on the profitability of the company.

Counter Party Risk

It refers to the risk of non-honouring of obligation by counterparty. It can be failure to deliver goods against payment already made or failure to make payment against goods delivered. This risk also covers the credit risk i.e., default by the counter party.

Hints used to identify this risk:

1. *Failure to obtain necessary resources to complete the project.*
2. *Any regulatory restrictions from the Government.*
3. *Hostile action of foreign government.*
4. *Let down by third party.*
5. *Have become insolvent.*

Techniques to manage this risk:

1. *Carrying out Due Diligence before dealing with any third party.*
2. *Do not over commit to a single entity or group or connected entities.*
3. *Know your exposure limits.*
4. *Review the limits and procedure for credit approval regularly.*
5. *Rapid action in the event of any likelihood of defaults.*
6. *Use of performance guarantee, insurance or other instruments.*

Interest Rate Risk

It refers to the risk of change in interest rates which further leads to change in assets and liabilities. This risk is more important to financial companies whose balance sheet items are sensitive to interest rates.

Hints used to identify this risk:

1. *Monetary Policy of the Government.*
2. *Any action by Government such as demonetization etc.*
3. *Economic Growth*
4. *Investment by foreign investors*
5. *Stock market changes*

Techniques to manage this risk:

1. *Traditional Methods:*
   a) *Asset and Liability Management (ALM): It is the management of liabilities and assets in the balance sheet in such a way that the net earnings from interest are maximized within the overall risk preference.*
   b) *Forward Rate Agreement (FRA): It is an agreement between two parties through which a borrower or lender protects itself from the changes to the interest rate by agreeing to a forward rate.*
2. *Modern Methods:*
   a) *Interest Rate Futures (IRF): It is a contract between the buyer and seller agreeing to the future delivery of any interest-bearing asset at a predetermined price.*
   b) *Interest Rate Options (IRO): It is a right but not an obligation and acts as insurance by allowing businesses to protect themselves against adverse interest rate movements while allowing them to benefit from favourable movements.*
   c) *Interest Rate Swaps: In this, the parties to it agree to exchange payments indexed to two different interest rates.*

Liquidity Risk

It refers to the inability of organization to meet it liabilities whenever they become due. This risk arises when a firm is unable to generate adequate cash when needed. This type of risk is more prevalent in banking business where there may be mismatch in maturities and receiving fresh deposits pattern.

Currency Risk

It refers to the risk of change in cash flows due to unfavourable changes in exchange rates. This risk mainly affects the firms dealing in foreign currency denominated transactions. This risk can be affected by cash flow adversely or favourably.

Hints used to identify this risk:

1. *Government Action: The Government action of any country has impact on its currency, because government has powers to enact laws and formulate policies that can affect flow to foreign funds in an economy.*
2. *Nominal Interest Rate: As per interest rate parity (IRP), the currency exchange rate depends on the nominal interest of that country.*
3. *Inflation Rate: As per Purchasing power parity theory, the currency exchange rate depends on the inflation of that country.*
4. *Natural Calamities: Any natural calamity can have negative impact on the exchange rates.*
5. *War, Coup, Rebellion etc.: All these actions can have far reaching impact on currency's exchange rates (Coup means sudden change in government illegally & Rebellion means organised protest against any authority).*
6. *Change of Government: The change of government and its attitude towards foreign investment also helps to identify the currency risk.*

Techniques to manage this risk:

Already covered in Foreign Exchange as Internal & External Hedging Techniques.

Political Risk

This type of risk is faced by and overseas investors, as the adverse action by the government of host country may lead to huge loses.

Hints used to identify this risk:

1. *Insistence on resident investors or labour.*
2. *Restriction on conversion of currency.*
3. *Confiscation of foreign assets by the local govt.*
4. *Price fixation of the products.*
5. *Restriction of remittance to home country.*

Techniques to manage this risk:

1. *Local sourcing of raw materials and labour.*
2. *Entering into joint ventures*
3. *Local financing*
4. *Prior negotiations*

2. Evaluation of Financial Risk from the point of view of Different Stakeholders

1. ***From Shareholder's point of view:*** *Equity shareholders view financial risk as financial gearing i.e. ratio of debt in capital structure of company since in event of winding up of a company they will be given least priority in capital repayment.*
2. ***From Lenders point of view****: Lenders view risk as existing gearing ratio since company having high gearing faces more risk of default of payment of interest and principal repayment.*
3. ***From Company's point of view:*** *A company views risk from the point of view of company's ability to exist. If a company borrows excessively or lends someone who defaults, then it can be forced to go into liquidation.*
4. ***From Government's point of view****: Government views financial risk as failure of any bank or down grading of any financial institution leading to spread of distrust among society at large.*

3. Value at Risk (VaR)

VAR is a measure of risk of investment (just like standard deviation which is also a measure of risk). Given the normal market condition, it estimates ***how much an investment might lose*** *during a* ***given time period*** *at a* ***given confidence level****.*

Main Features of VaR:

1. ***Components:*** *VaR Calculation is based on following three components:*
   - *Maximum Loss*
   - *Confidence Level*
   - *Time Period*
2. ***Statistical Method:*** *VaR is a statistical method of measuring risk since it is based on standard deviation*
3. ***Time Horizon:*** *It can be applied for different time periods say one day, week, month, etc.*
4. ***Probability:*** *It is based on assumption of normal probability distribution*
5. ***Z-Score:*** *Z-Score indicates how many standard deviation, value is away for means. Z-score multiplied with Standard deviation gives the amount of maximum loss.*
6. ***Control over Risk:*** *It helps to control risk by setting limits of maximum loss.*

4. Applications of Value at Risk

VaR can be applied:

- *to measure the maximum possible loss on any portfolio or on a trading position.*
- *as a benchmark for performance measurement of any operation or trading.*
- *to fix limits for individuals dealing in front office of a treasury department.*
- *to enable the management to decide the trading strategies.*
- *as a tool for Asset and Liability Management especially in banks.*

3. ADVANCED CAPITAL BUDGETING DECISIONS *(SM 2024)*

1. Why is it important to analyse the impacts of change in technology

1. *Change in technology can significantly alter production process.*
2. *Changes can also yield benefits such as improved quality, delivery time greater flexibility, etc.*
3. *Changed technology can also result in reduction in cost of capital*
4. *Improved cash inflows can be achieved through technological changes.*
5. *There may be need to incur additional cost in the form of additional capital expenditure.*
6. *The sale volume can be impacted as the anticipated life cycle of the product can be shortened because of change in consumer preference.*

2. Impact of changes in Government Policies on Capital Budgeting Decisions

A. Domestic Capital Budgeting Decisions

1. *The change in interest rate is decided by government through its Monetary Policy. This can affect the Cost of Capital because the Cost of Debt is normally dependent on the bank rate of interest.*
2. *The change in interest rate is decided by government through its Fiscal Policy. Since Fiscal Policy deicides the tax rate and the Annual Cash Flows are dependent on the Tax Rate, change in tax rate can change the cash flows significantly.*

B. International Capital Budgeting Decision

1. *In these decisions, the foreign exchange rate play a very important role. Since the change in bank rate and money supply is decided as per Monetary Policy, the change in any of these two impacts the rate of Foreign Exchange and ultimately the cashflows.*
2. *Change in Tax Rates relating to Foreign Income or changes in provisions of Double Tax Avoiding Agreement (DTAA) as decided in Fiscal Policy may affect cashflows.*

3. Risk Factors affecting Capital Budgeting Decisions:

A. Internal Factors:

1. *Project Specific Risk: Risks which are related to a particular project and affects the project's cash flows. It includes completion of the project in scheduled time, error of estimation in resources and allocation, estimation of cash flows etc.*
2. *Company Specific Risk: Risks which arise due to company specific factors like downgrading of credit rating, changes in key managerial persons, cases for violation of intellectual property rights (IPR) and other laws and regulations, etc.*

B. External Factors

1. *Industry-specific risk: These are the risks which effect the whole industry in which the company operates. These risks include regulatory restrictions on industry, changes in technologies etc.*
2. *Market risk: The risk which arise due to market related conditions like entry of substitute, changes in demand conditions, availability and access to resources etc.*

3. *Competition risk: These are risks related with competition in the market in which a company operates. These risks are risk of entry of rival, product dynamism and change in taste and preference of consumers etc.*
4. *Risk due to Economic Conditions: These are the risks which are related with macro-economic conditions like changes in monetary policies by central banks, changes in fiscal policies like introduction of new taxes and cess, inflation, changes in GDP, etc.*
5. *International risk: These are risk which are related with conditions which are caused by global economic conditions like restriction on free trade, restrictions on market access, recessions, bilateral agreements, political and geographical conditions etc.*

4. Differentiate Scenario Analysis vs Sensitivity Analysis

Sensitivity analysis and Scenario analysis both help to understand the impact of the change in input variable on the outcome of the project. However, there are certain basic differences between the two.

- *Sensitivity analysis calculates the impact of the change of a single input variable on the outcome of the project viz., NPV or IRR. The sensitivity analysis thus enables to identify that single critical variable which can impact the outcome in a huge way and the range of outcomes of the project given the change in the input variable.*
- *Scenario analysis, on the other hand, is based on a scenario. For example, the scenario may be recession or a boom wherein depending on the scenario, all input variables change. This analysis calculates the outcome of the project considering a particular scenario where the variables have changed simultaneously. Similarly, the outcome of the project would also be calculated for the other scenarios.*

Scenario analysis is far more complex than sensitivity analysis because in scenario analysis all inputs are changed simultaneously, considering the situation in hand while in sensitivity analysis, only one input is changed and others are kept constant.

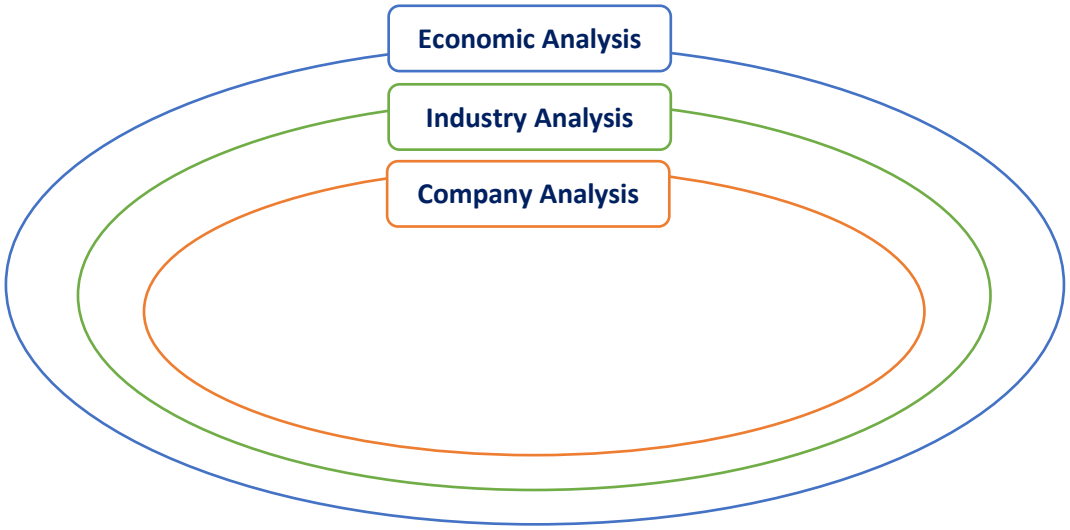
4. SECURITY ANALYSIS

1. Security Analysis and its approaches

Investment decision of securities to be bought, held or sold depends upon the return and risk profile of that security. ***Security Analysis*** *involves a systematic analysis of the risk-return profiles of various securities to help a rational investor take an investment decision.*

There are ***two approaches*** *viz.* ***fundamental analysis*** *and* ***technical analysis*** *for carrying out Security Analysis. In fundamental analysis, factors affecting risk-return characteristics of securities are looked into while in technical analysis, demand and supply position of the securities along with prevalent share price trends are examined.*

2. Fundamental Analysis and its stages



Fundamental analysis is based on the assumption that value of a share today is the present value of future dividends expected by the shareholders, discounted at an appropriate discount rate and this value is known as the 'intrinsic value of the share'(i.e., Fundamental Principal of Valuation). The intrinsic value of a share, depicts the true value of a share. A share that is priced below the intrinsic value must be bought, while a share quoting above the intrinsic value must be sold.

(Therefore, while calculating intrinsic value, we must analyse all those ***factors*** *that can impact the future revenue, earnings, cash flows or dividends of the company)*

Stages of Fundamental Analysis:

a) Economic Analysis

Factors to be considered in Economic Analysis (It includes factors at economy level (say India as an economy) that can affect the future cash flows or dividends of all the companies operating in India):

- ***Growth rate for National Income and GDP:*** *The estimates of GDP growth rate further helps to estimate growth rate of an industry and a company. For this purpose, it is also important to know Real and Nominal GDP growth rates.*
- ***Inflation:*** *Inflation is a strong determinant of demand in some industries mainly in consumer product industry. Estimating inflation in an economy helps to estimate the expected revenue from the product. Inflation can be measured either in terms of Retail prices or Wholesale prices.*
- ***Monsoon:*** *Monsoon is also a key determinant of supply and demand of many products therefore it is also of great concern to investors in stock market.*
- ***Interest Rates:*** *Interest rates in an economy helps in estimating the flow of cash and savings & consumption patterns in an economy.*

b) Industry Analysis

Factors to be considered in Industry Analysis (It includes factors at industry level (say Pharma or telecom as an industry) that can affect the future cash flows or dividends of all the companies operating in that industries):

- ***Product Life-Cycle:*** *An industry usually exhibits high profitability in the initial and growth stages, medium but steady profitability in the maturity stage and a sharp decline in profitability in the last stage of growth. Therefore, understanding the product life-cycle is important while estimating the future cash flows from any product.*
- ***Demand Supply Gap:*** *Excess supply relative to demand reduces the profitability of the industry because of the decline in prices, while insufficient supply tends to improve the profitability because of higher price.*
- ***Barriers to Entry:*** *Any industry with high profitability would attract new entrants. However, the potential entrants to the industry face different types of barriers to entry. Restriction on entry to new participants helps to analyse impact on the future revenues of the company operating in that industry.*
- ***Government Attitude:*** *The attitude of the government towards an industry is a crucial determinant of future prospects of an industry.*
- ***Technology and Research:*** *They play a vital role in the growth and survival of a particular industry. Technology is subject to very fast change leading to obsolescence.*

c) Company Analysis

Factors to be considered in Company Analysis (It includes company specific factors (say TCS or Infosys as a company) that can affect the future cash flows or dividends of that company):

- ***Net Worth and Book Value:*** *Net Worth is sum of equity & preference share capital and free reserves less intangible assets and any carry forward of losses. The total net worth divided by the number of shares is the much talked about book value of a share. Though, book value may not be a true indicator of Intrinsic Value of share.*
- ***Sources and Uses of Funds:*** *The identification of sources and uses of funds is known as Funds Flow Analysis. One of the major uses of funds flow analysis is to find out whether the firm has used short-term sources of funds to finance long term assets. Since, financing long term assets*

using short term source of finance may create liquidity crunch to the firm while making repayment of liabilities.

- ***Cross-Sectional and Time Series Analysis:*** *Analysis of financial statement is important to evaluate fundamental strength of a company. It involves comparing a firm against some benchmark figures for its industry (Cross-sectional) and analysing the performance of a firm over time (time-series). The techniques that are used to do such proper comparative analysis are: common-sized statement, and financial ratio analysis.*
- ***Growth Record:*** *The growth in sales, net income, net capital employed and earnings per share of the company in the past few years should be examined. Historical growth numbers are also important to determine expected growth.*
- ***Quality of Management:*** *Quality of management has to be seen with reference to the experience, skills and integrity (ethics) of the people involved at board and managerial level. Quality of management decides the confidence of investors on the decisions and action of management. Shares will good management quality trades at premium as compared to shares with low management quality.*

3. Techniques used in Economic Analysis

a) Anticipatory Surveys:

Anticipatory Surveys help investors to form an opinion about the future state of the economy. It involves taking expert opinion on certain parameters that helps estimating the level of expected economic activities. It involves construction activities, expenditure on plant and machinery, levels of inventory.

b) Barometer/Indicator Approach

Various indicators are used to find out how the economy shall perform in the future. The indicators have been classified as under:

1. ***Leading Indicators****: They lead the economic activity in terms of their outcome. They relate to the time series data of the variables that reach high or low points in advance of economic activity. (It means, these indicators lead the economic event i.e., first they take place and then economic event occurs. It means with the help of occurrence of such indicator, future economic event which is going to take place can be estimated.)*
2. ***Roughly Coincidental Indicators:*** *They reach their peaks and troughs (i.e., high and lows) at approximately the same time in the economy.*
3. ***Lagging Indicators:*** *They are time series data of variables that lag behind as a consequence of economy activity. They reach their turning points after the economy has reached its own already.*

All these approaches suggest direction of change in the aggregate economic activity but nothing about its magnitude. The various measures obtained from such indicators may give conflicting signals about the future direction of the economy.

c) Economic Model Building Approach

A precise and clear relationship between dependent and independent variables is determined under this approach (This process is called as building Economic Model). It is the most scientific and complex way of economic analysis requiring high skill set, time, data and efforts.

4. Technical Analysis | Assumptions | Principles

Technical Analysis is a method of estimating share price movements based on a study of price charts on the assumption that share price trends are repetitive, that since investor psychology follows a certain pattern, what has happened before is likely to be repeated.

Technical Analysis is based on the following FOUR assumptions:

1. *The market value of stock depends on the supply and demand for a stock*
2. *The supply and demand is actually governed by several factors in the market. For instance, recent initiatives taken by the Government to reduce the NPA of banks may actually increase the demand for banking stocks.*
3. *Stock prices generally move in trends which continue for a substantial period of time. And there is possibility that there will soon be a substantial correction which will provide an opportunity to the investors to buy shares at that time.*
4. *Technical analysis relies upon chart analysis which shows the past trends in stock prices rather than the information in the financial statements.*

Technical analysis is based on the following THREE principals:

1. ***The market discounts everything:*** *Many experts criticize technical analysis because it only considers price movements and ignores fundamental factors. The argument against such criticism is based on the Efficient Market Hypothesis, which states that a company's share price already reflects everything that has or could affect a company.*
2. ***Price moves in trends:*** *Technical analysts believe that prices move in trends. In other words, a stock price is more likely to continue a past trend than move in a different direction.*
3. ***History tends to repeat itself:*** *Technical analysts believe that history tends to repeat itself. Technical analysis uses chart patterns to analyse subsequent market movements to understand trends.*

5. Theories of Technical Analysis:

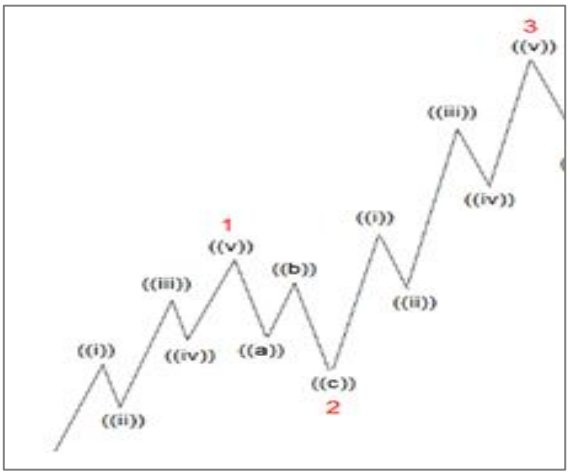
a) The Dow Theory

- *It is one of the oldest and most famous technical theories. It can also be used as a barometer of business.*
- *The Dow Theory is based upon the movements of two indices, Dow Jones Industrial Average (DJIA) and Dow Jones Transportation Average (DJTA). These averages reflect the aggregate impact of all kinds of information on the market.*

- *The movements of the market (or these indices) are divided into **three classifications** (all happening at the same time):*
  - ***The primary movement:** It is the main trend of the market, which lasts from 1 year to 36 months or longer. This trend is commonly called bear or bull market.*
  - ***The secondary movement:** It is shorter in duration than the primary movement, and is opposite to primary movement in direction. It lasts from 2 weeks to 1 month or more.*
  - ***The daily fluctuations:** They are the narrow day-to-day movements. These fluctuations are also required to be studied thoroughly since they ultimately form the secondary and primary movements.*
- *The Dow Theory's purpose is to determine where the market is and where is it going. The theory states that if the highs and lows of the stock market are successively higher, then the market trend is up and a bullish market exists. Contrarily, if the successive highs and successive lows are lower, then the direction of the market is down and a bearish market exists.*

b) Elliot Wave Theory

- *This theory was based on analysis of 75 years' stock price movements and charts. Elliot found that the markets exhibited certain repeated patterns or waves.*
- *He defined price movements in terms of waves. As per this theory wave is a movement of the market price from one change in the direction to the next change in the direction.*
- *As per this theory, waves can be classified into two parts:*
  - ***Impulsive Patterns (Basic Waves):** In this pattern, there will be 3 or 5 waves ((i) to (v) in figure 1) in a given direction (going upward or downward). These waves shall move in the direction of the basic movement. This movement can indicate bull phase or bear phase.*
  - ***Corrective Patterns (Reaction Waves):** These 3 waves (a, b & c in figure 1) are against the direction of the basic waves. Correction involves correcting the earlier rise in case of bull market and fall in case of bear market.*



c) Random Walk Theory

- *This theory states that the behaviour of stock market prices is unpredictable and that there is no relationship between the present prices of the shares and their future prices.*
- *This theory says that the peaks and troughs in stock prices are just are statistical happening and successive peaks and troughs are unconnected.*
- *In the layman's language, it may be said that prices on the stock exchange behave exactly the way a drunk would behave while walking in a blind lane, i.e., up and down, with an unsteady way going in any direction he likes (i.e., without following a fixed pattern and in a totally unpredictable manner).*

6. Charting Techniques

Technical analysts use three types of charts for analysing data

1. ***Bar Chart:*** *In a bar chart, a vertical line (bar) represents the lowest to the highest price, with a short horizontal line protruding from the bar representing the closing price for the period. Since volume and price data are often interpreted together, it is a common practice to plot the volume traded, immediately below the line and the bar charts.*
2. ***Line Chart:*** *In a line chart, lines are used to connect successive day's prices. The closing price for each period is plotted as a point. These points are joined by a line to form the chart. The period may be a day, a week or a month.*
3. ***Japanese Candlestick Chat:*** *Like Bar chart this chart also shows the same information i.e., Opening, Closing, Highest and Lowest prices of any stock on any day but this chart more visualizes the trend as change in the opening and closing prices is indicated by the colour of the candlestick. While Black candlestick indicates closing price is lower than the opening price the white candlestick indicates its opposite i.e., closing price is higher than the opening price.*
4. ***Point and Figure Chart:*** *Point and Figure charts are more complex than line or bar charts. They are used to detect reversals in a trend. For plotting a point and figure chart, we have to first decide the box size and the reversal criterion.*

7. Market Indicators

1. ***Breadth Index:*** *It is an index that covers all securities traded. It is computed by dividing the net advances or declines in the market by the number of securities traded (‘advances’ & ‘declines’ means number of securities whose price has moved up & down respectively during the relevant period & ‘net’ means net of up & down). The breadth index either supports or contradicts the movement of the Dow Jones Averages. If it supports the movement of the Dow Jones Averages, this is considered sign of technical strength and if it does not support the averages, it is a sign of technical weakness*
2. ***Volume of Transaction:*** *The volume of shares traded in the market provides useful clues on how the market would behave in the near future. A rising index/price with increasing volume would signal buy behaviour because the situation reflects an unsatisfied demand in the market. Similarly, a falling market with increasing volume signals a bear market and the prices would be expected to fall further.*
3. ***Confidence Index:*** *It is supposed to reveal how willing the investors are to take a chance in the market It is the ratio of high-grade bond yields to low-grade bond yields. rising confidence index is expected to precede a rising stock market, and a fall in the index is expected to precede a drop in stock prices.*
4. ***Relative Strength Analysis:*** *The relative strength concept suggests that the prices of some securities rise relatively faster in a bull market or decline more slowly in a bear market than other securities i.e. some securities exhibit relative strength. Investors will earn higher returns by investing in securities which have demonstrated relative strength in past.*
5. ***Odd - Lot Theory:*** *This theory is a contrary - opinion theory. It assumes that the average person is usually wrong and that a wise course of action is to pursue strategies contrary to popular opinion. The odd-lot theory is used primarily to predict tops in bull markets, but also to predict reversals in individual securities.*

8. Evaluation of Technical Analysis

Advocates of technical analysis *offer the following interrelated argument in their favour:*

a. *Under influence of crowd psychology, trend persist for some time. Tools of technical analysis help in identifying these trends early and help in investment decision making.*

b. *Shift in demand and supply are gradual rather than instantaneous. Technical analysis helps in detecting this shift rather early and hence provides clues to future price movements.*

c. *Fundamental information about a company is observed and assimilated by the market over a period of time. Hence price movement tends to continue more or less in same direction till the information is fully assimilated in the stock price.*

Detractors of technical analysis *believe that it is a useless exercise; their arguments are:*

a. *Most technical analysts are not able to offer a convincing explanation for the tools employed by them.*

b. *Empirical evidence in support of random walk hypothesis cast its shadow over the usefulness of technical analysis.*

c. *By the time an up-trend and down-trend may have been signalled by technical analysis it may already have taken place.*

In a nutshell, it may be concluded that ***in a rational, well ordered and efficient market, technical analysis may not work very well. However, with imperfection, inefficiency and irrationalities that characterizes the real world market, technical analysis may be helpful****.*

9. Efficient Market Theory or Efficient Market Hypothesis

- *As per this theory, at any given point in time, all available price sensitive information is fully reflected in share's prices. Thus, this theory implies that no investor can consistently outperform the market as every stock is appropriately priced based on available information.*
- ***Level of market efficiency*** *(i.e., how efficient is the market)****:***
  - ***Weak form efficiency:*** *Price of a share reflect all information found in the record of past prices and volumes.*
  - ***Semi-strong form efficiency:*** *Price reflects not only all information found in the record of past prices and volumes but also all other publicly available information.*
  - ***Strong form efficiency:*** *Price reflects all available information public as well as private.*

10. Challenges to Efficient Market Theory

1. ***Information Inadequacy:*** *Information is neither freely available nor rapidly transmitted to all participants in the stock market. There is a calculated attempt by many companies to circulate misinformation.*

2. ***Limited information processing capabilities****: Human information processing capabilities are sharply limited. According to great economist, every human organism lives in an environment which generates millions of new bits of information every second, but we are able to take as input and process very less of it.*

3. ***Irrational Behaviour:*** *It is generally believed that investors' rationality will ensure a close correspondence between market prices and intrinsic values. But in practice this is not true. The market seems to function largely on hit or miss tactics rather than on the basis of informed beliefs about the long-term prospects of individual enterprises.*
4. ***Monopolistic Influence:*** *A market is regarded as highly competitive. No single buyer or seller is supposed to have undue influence over prices. But in reality, powerful institutions and big operators have influence over the market. The monopolistic power enjoyed by them diminishes the competitiveness of the market.*

11. Difference between Fundamental & Technical Analysis

Basis	*Fundamental Analysis*	*Technical Analysis*
Method	*It involves forecasting future cashflows of the company by analysing:* ***Economy's Macro factors:*** *GDP, Interest rates, Inflation, etc.* ***Company's Micro factors:*** *Profitability, Solvency position, Operational efficiency, etc.*	*Predicts future price & its direction using purely historical data of share price, its volume, etc.*
Rule	*Price of share discounts everything.*	*Price captures everything.*
Usefulness	*For Long-term investing.*	*For short term investing.*

5. SECURITY VALUATION

1. Immunization

- *We know that when interest rate (or yield) goes up, value of bond falls but return on re-investment (of coupon receipts) improves and vice versa. Thus, an investor in bonds has to face two types of interest rate risks (i.e., change in interest rates affects an investor in two ways):*
  - ***Price Risk:** Risk that price of bond will fall with the increase in interest rates and rise with its decrease.*
  - ***Reinvestment Risk:** Risk that coupon receipts will be reinvested at a lower rate if interest rate falls and at higher rate if interest rate rise.*
- *We can see that, with the change in interest rates, two risks move in the opposite direction. Through the process of immunization selection of bonds shall be in such manner that the effect of above two risks shall offset each other. Duration of the bonds is that point where these two risks exactly offset each other. If the duration of a bond is equal to its holding period, then we ensure immunization of the same and hence, the bond is not having interest rate risk. It means that immunization takes place when the changes in the YTM in market has no effect on the promised rate of return on a bond.*
- *It means that if a bond is bought today and rate of interest in the market changes, then, value of bond portfolio (including the reinvested coupons) at the end of its duration (not maturity; duration here means Macaulay's Duration) will not change. This is because the decrease (increase) in value of bond due to increase (decrease) in interest rates will be equal to the increase (decrease) in income on reinvested coupons received till the end of duration.*
- *Therefore, when a liability (say future planned cash outflow) is planned to be funded through the sale of bond portfolio, duration of that bond portfolio (asset) should be made equals to the duration of liability, so that even if the interest rates change, value of portfolio will not change and liability can be fully funded through the sale of bond portfolio as planned.*

2. Term Structure Theories

The term structure theories explain the relationship between interest rates or bond yields and different terms or maturities.

1. ***Expectation Theory:** As per this theory, the long-term interest rates can be used to forecast short-term interest rates in the future as long-term interest rates are assumed to unbiased estimator of the short term interest rate in future.*
2. ***Liquidity Preference Theory:** As per this theory, investors are risk averse and they want a premium for taking risk. Long-term bonds have higher risk due to longer maturity. Hence, long-term interest rates should have a premium for such a risk. Further, people prefer liquidity and if they are forced to sacrifice the same for a longer period, they need a higher compensation for the same. Hence, longer term bonds have higher interest rates and the normal shape of a yield curve is Positive sloped one.*
3. ***Preferred Habitat Theory (Market Segmentation Theory):** This theory states that different investors may have different preference for shorter and longer maturity periods and therefore, they have their own preferred habitat. Hence, the interest rate structure depends on the demand and*

supply of fund for different maturity periods for different market segments. Accordingly, shape of yield curve can be sloping upward, falling or flat.

3. Reverse Stock Split and its reasons

- *Reverse Stock Split is a process whereby a company decreases the number of shares outstanding by combining the shares into lesser number of shares. It can be also understood as opposite of stock split.*
- *Although, reverse stock split does not result in change in Market value or Market Capitalization of the company but it results in increase in price per share.*
- *Reasons for Reverse Split Up:*
  1. ***Avoid Delisting:*** *Sometimes, as per the regulation of stock exchange, if the price of shares of a company goes below a limit it can be delisted. To Avoid such delisting company may resort to reverse stock split up.*
  2. ***To avoid tag of Penny Stock:*** *If the price of shares of a company goes below a limit it may be called as penny stock. In order to improve that image, company may opt reverse stock split.*
  3. ***To attract Institutional Investors:*** *It might be possible that institutional investors may be shying away from acquiring low value shares. To attract these investors, the company may adopt the route of Reverse Stock Split.*

4. Role of Valuers *(SM 2024)*

The role of Valuers has increased a lot due to increased statutory and information requirements. The valuations made by a Valuers are required statutorily for the following purposes:

1. ***Mergers/Acquisitions/ De-Mergers/Takeovers:*** *Valuation is mandated in cases of Mergers/ Acquisitions/ De-Mergers/ Takeovers by the Income Tax Act, 1961 for the purpose of determining the tax payable in such cases.*
2. ***Slump Sale/ Asset Sale/ IPR Sale:*** *Valuation is required by Insolvency and Bankruptcy Code, 2016 in case of liquidation of company and sale of assets of corporate debtor for the purpose of ascertaining fair value or liquidation value.*
3. ***Conversion of Debt/ Security:*** *Valuation is a necessitated by RBI for Inbound Foreign Investment, Outbound Foreign Investment and other business transactions.*
4. ***Capital Reduction:*** *SEBI regulations such as ICDR/ LODR/ Preferential Allotment etc. also require valuations to be made for listed securities for various purposes on a period basis.*
5. ***Strategic Financial Restructuring:*** *Various statutes such as Companies Act, 2013, SARFAESI Act, 2002, Arbitration and Conciliation Act 1996 etc., warrant valuations to be made for meeting various statutory requirements.*

5. Precautions for Valuer before accepting Valuation Assignment *(SM 2024)*

1. *A good valuation does not provide a precise estimate of value. A valuation by necessity involves many assumptions and is a professional estimate of value. The quality and veracity of a good valuation model does not depend just on number crunching. The quality of a valuation will be*

directly proportional to the time spent in collecting the data and in understanding the firm being valued.

2. *Valuing a company is much more than evaluating the financial statements of a company and estimating an intrinsic value based on numbers. This concept is getting more and more critical in today's day and age where most emerging business are valued not on their historical performances captured in the financial statement but rather on a narrative driven factors like scalability, growth potential, cross sell opportunities etc.*
3. *A lot of times, investors/users tend to focus on either numbers or the story without attempting to reach a middle ground. In both these cases, investors will fail to capture opportunities that could have been unlocked had they been willing to reach some middle ground between the two concepts.*
4. *While it is true that a robust intrinsic value calculation using financial statements data and an error-free model makes investing a more technical subject, in reality, emotions play a massive role in moving stocks higher or lower.*

6. PORTFOLIO MANAGEMENT

1. Objectives of Portfolio Management

4. ***Security of Principal:*** *Security of principal not only involves keeping the principal sum intact but also its purchasing power (i.e., value of portfolio should increase atleast by the percentage of inflation so that purchasing power of portfolio is maintained)*
5. ***Capital Growth:*** *It can be attained by investing in growth securities or by reinvesting the income received on securities in the portfolio.*
6. ***Stability of Income*** *is important to facilitate planning of reinvestment or consumption of income accurately and systematically.*
7. ***Diversification (risk minimisation):*** *The basic objective of building a portfolio is to reduce the risk of loss by investing in various types of securities and over a wide range of industries.*
8. ***Liquidity*** *is desirable for the investor so as to take advantage of attractive opportunities upcoming in the market.*
9. ***Favourable Tax Status:*** *The effective yield, an investor gets from his investment, depends on tax to which it is subjected to. By minimising the tax burden, yield can be effectively improved.*

2. Discretionary and Non-Discretionary Portfolio Management

1. *Under* ***Discretionary Portfolio Management:***
   - ✓ *The portfolio manager has the full discretion and freedom of investment decisions of portfolio of the client.*
   - ✓ *Scope of discretion and freedom of portfolio manager is agreed and noted in Investment Policy Statement.*
   - ✓ *Degree of freedom is more as compared to non-discretionary portfolio management.*
2. *Under* ***Non-Discretionary Portfolio Management****:*
   - ✓ *The portfolio manager manages the funds in accordance with the directions and instruction of the client.*
   - ✓ *He advices client based on available information and analysis but final decision is of client.*
   - ✓ *Degree of freedom is less as compared to discretionary portfolio management.*

3. Active and Passive Portfolio Strategy for Equity Portfolio

a) Active Portfolio Strategy

APS is followed by most investment professionals and aggressive investors, who strive to earn superior return after adjustment for risk. This strategy involves finding investment opportunity to beat the overall market. It involves researching individual companies, gathering extensive data about financial performance, business strategies and management of the companies.

There are four principles of on active strategy:

1. ***Market Timing:*** *This involves departing for normal long run strategy and forecast market movement in near future. This involves taking entry and exit from the market at the right*

time by estimating market movements. A variety of tools are employed for market timing analysis namely business cycle analysis, moving average analysis, advance-decline analysis, Econometric models.

2. ***Sector Rotation:*** *It involves shifting funds from one sector to another based on sector outlook. If a sector is expected to perform well in future, the portfolio manager might overweigh that sector relative to market and under-weigh if the sector is expected to perform poor. (For example, if an index has 25% value of stock in technology sector and portfolio on the other hand, has invested 28% of the funds in stock of technology sector, then portfolio is overweight on technology sector.)*
3. ***Security Selection:*** *Security selection involves a search for under-priced security. If one has to resort to active stock selection, he may employ fundamental and technical analysis to identify stocks which seems to promise superior return relative to risk.*
4. ***Use of Specialised Investment Concept:*** *To achieve superior return, one has to employ a specialised concept with respect to investment in stocks. The concept which have been exploited successfully are growth stock, neglected stocks, asset stocks, technology stocks, etc.*

b) Passive Portfolio Strategy

Passive strategy, on the other hand, rests on the belief that the capital market is fairly efficient with respect to the available information. Basically, passive strategy involves creating a well-diversified portfolio at a predetermined level of risk and holding the portfolio relatively unchanged over time unless it became adequately diversified or inconsistent with the investor risk-return preference.

4. Active and Passive Portfolio Strategy for Fixed Income Portfolio

a) Passive Portfolio Strategy

As mentioned earlier Passive Strategy is based on the premise that securities are fairly priced commensurate with the level of risk. Though investor does not try to outperform the market but it does not imply they remain totally inactive.

Common strategies by passive investors of fixed income portfolio:

1. ***Buy and Hold Strategy:*** *This technique is do nothing technique and investor continues with initial selection and do not attempt to churn bond portfolio to increase return or reduce the level of risk. However, sometime to control the interest rate risk, the investor may set the duration of fixed income portfolio equal to benchmarked index.*
2. ***Indexation Strategy:*** *This strategy involves replication of a predetermined benchmark well known bond index as closely as possible.*
3. ***Immunization:*** *This strategy cannot exactly be termed as purely passive strategy but a hybrid strategy. This strategy is more popular among pension funds. Since pension funds promised to pay fixed amount to retired people, any inverse movement in interest may threaten fund's ability to meet their liability timely.*

4. ***Matching Cash Flows:*** *Another stable approach to immunize the portfolio is Cash Flow Matching. This approach involves buying of Zero Coupon Bonds to meet the promised payment out of the proceeds realized.*

b) Active Portfolio Strategy

As mentioned earlier Active Strategy is usually adopted to outperform the market.

Common strategies by active investors of fixed income portfolio:

1. ***Forecasting Returns and Interest Rates:*** *This strategy involves the estimation of return on basis of change in interest rates. Since interest rate and bond values are inversely related, if portfolio manager is expecting a fall in interest rate of bonds, he should buy with longer maturity period. On the contrary, if he expected a fall in interest then he should sell bonds with longer period.*

   *Based on **short term yield movement**, three strategies can be followed:*

   a. ***Bullet Strategy:*** *This strategy involves concentration of investment in one particular bond. This type of strategy is suitable for meeting the fund after a point of time such as meeting education expenses of children etc. For example, if 100% of fund meant for investing in bonds is invested in 5-years Bond.*
   b. ***Barbell Strategy:*** *As the name suggests this strategy involves investing equal amount in short term and long term bonds. For example, half of fund meant for investment in bonds is invested in 1-year Bond and balance half in 10-year Bonds.*
   c. ***Ladder Strategy:*** *This strategy involves investment of equal amount in bonds with different maturity periods. For example if 20% of fund meant for investment in bonds is invested in Bonds of periods ranging from 1 year to 5 years.*

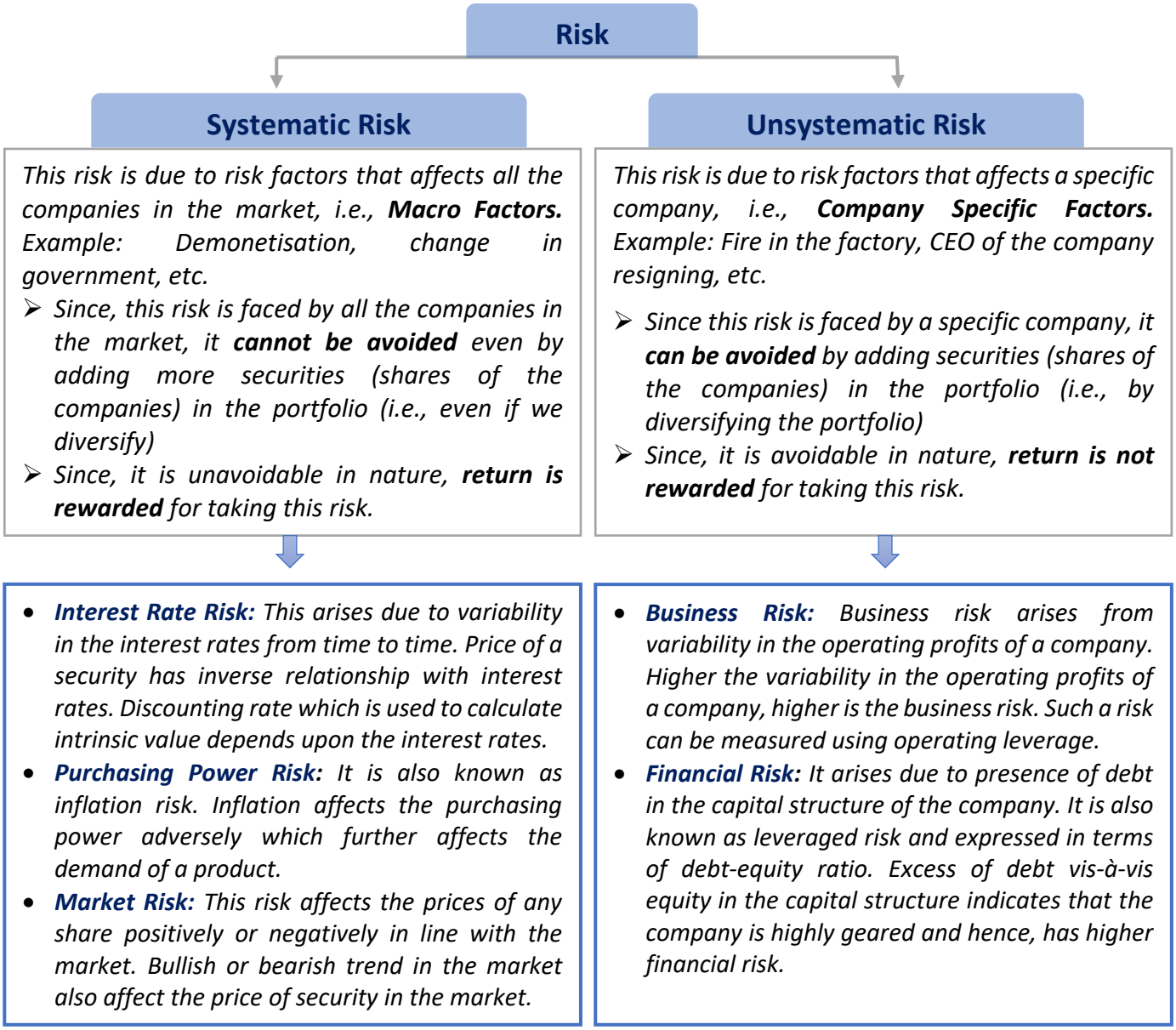
2. ***Bond Swaps:*** *This strategy involves regularly monitoring bond process to identify mispricing and try to exploit this situation.*

   Some of the popular swap techniques are as follows:

   a. ***Pure Yield Pickup Swap -*** *This strategy involves switch from a lower yield bond to a higher yield bonds of almost identical quantity and maturity. This strategy is suitable for portfolio manager who is willing to assume interest rate risk as in switching from short term bond to long term bonds to earn higher rate of interest, he may suffer a capital loss.*
   b. ***Substitution Swap -*** *This swapping involves swapping with similar type of bonds in terms of coupon rate, maturity period, credit rating, liquidity and call provision but with different prices. This type of differences exits due to temporary imbalance in the market.*
   c. ***International Spread Swap –*** *In this swap portfolio manager is of the belief that yield spreads between two sectors is temporarily out of line and he tries to take benefit of this mismatch. Since the spread depends on many factor and a portfolio manager can anticipate appropriate strategy and can profit from these expected differentials.*
   d. ***Tax Swap –*** *This is based on taking tax advantage by selling existing bond whose price decreased at capital loss and set it off against capital gain in other securities and buying another security which has features like that of disposed one.*

3. ***Interest Rate Swap:*** *Interest Rate Swap is another technique that is used by Portfolio Manager.*

5. Risk in holding a Security



6. Risk Aversion, Risk Appetite & Risk Premium

1. ***Risk Aversion*** *is an inherent attribute (behavioural feature) of investor makes him avoid risk unless adequate return is awarded for taking that risk.*
2. ***Risk Appetite*** *is willingness and ability to take risk. It helps an investor to decide the securities in which funds* ***can*** *be invested based of the risk involved in the securities.*
3. ***Risk premium*** *is the additional return for taking the additional risk by investing into a risky security rather than risk-free security.*

How does investor's expectation vary with variation in level of risk appetite?

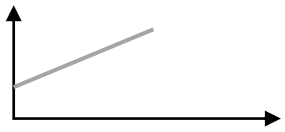
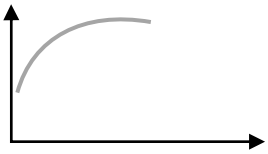
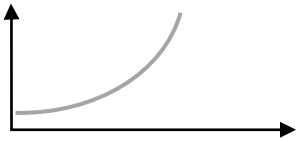
- *Investor with **high-risk appetite** will invest in riskier securities such as Equity or Alternative Investments and therefore they will seek higher returns.*
- *Similarly, investor with **low-risk appetite** invest in low risky securities such as debt instruments. Therefore, they expect lower rate of return.*
- *Investor who wants to **take moderate risk** will invest in balanced funds and accordingly the return they will expect will also be between the above two categories.*

7. Assumptions of CAPM

1. ***Efficient market** is the first assumption of CAPM. Efficient market refers to the existence of competitive market where securities are bought and sold with full information of risk and return available to all participants.*
2. *Investor has **rational investment goals**. Investors desire higher return for any acceptable level of risk or the lowest risk for any desired level of return.*
3. *CAPM assumes that all **assets are divisible and liquid**.*
4. *Investors are able to **borrow at a risk free rate** of interest*
5. *Securities can be exchanged at **no transaction cost** like payment of brokerage, commissions or taxes.*
6. *Securities or capital **assets face no bankruptcy or insolvency**.*

8. Portfolio Rebalancing Strategies

Particulars	Buy & Hold Policy	Constant Mix	Constant Proportion Insurance Policy
Meaning	Also called as 'Do nothing policy', under this strategy, an investor does not rebalance the portfolio.	Also called as 'Do something policy', under this strategy, an investor maintains the proportion of stock as a constant % of total portfolio.	Under this strategy, an investor sets the floor value below which he does not what the value of his portfolio to fall.
Balancing?	No	Yes	Yes
Suitability to investor	Whose ability to take risk increases (decreases) linearly with the increase (decrease) in the value of portfolio.	Whose ability to take risk decreases (increases) with the increase (decrease) in the value of portfolio.	Whose ability to take risk increases (decreases) with the increase (decrease) in the value of portfolio.

PF dependency on stock price *(**x axis**: value of share portfolio)* ***y axis:*** *Value of total portfolio)*	 *Payoff Line: Linear*	 *Payoff Line: Concave*	 *Payoff Line: Convex*

9. Alternative Investment and its Features

Plainly speaking, Alternative Investments (AIs) are investments other than traditional investments (stock, bond and cash). Over the time various types of AIs have been evolved but some of the important AIs are Mutual Funds, Real Estates, Private Equity, Hedge Funds, Distressed Securities, Commodities, etc.

Common Features of AIs:

1. ***High Fees:*** *Being a specific nature product the transaction fees on AIs is quite high.*
2. ***Limited Historical Rate:*** *The data for historic return and risk is verity limited where data for equity market for more than 100 years in available.*
3. ***Illiquidity:*** *The liquidity of AIs is not good as next buyer not be easily available due to limited market.*
4. ***Less Transparency:*** *The level of transparency is not adequate due to limited public information available about AIs.*
5. ***Extensive Research Required:*** *Due to limited availability of market information, the extensive analysis is required by the Portfolio Managers.*
6. ***Leveraged Buying:*** *Generally, investment in alternative investments is highly leveraged.*

10. Important Alternative Investments

1. Real Estates

Real estate is a tangible form of assets which can be seen or touched. Real Assets consists of land, buildings, offices, warehouses, shops etc. Real Estate Funds invest in Real Assets.

Following characteristics of Real Estate make valuation of Real Estate Funds complex:

- *Inefficient market**:** Information may not be as freely available as in case of financial securities.*
- *Illiquidity: Real Estates are not as liquid as that of financial instruments.*
- *Comparison: Real estates are only approximately comparable to other properties.*
- *High Transaction cost**:** In comparison to financial instruments, the transaction and management cost of Real Estate is quite high.*
- *No Organized market**:** There is no such organized exchange or market as for equity shares and bonds.*

2. Gold *(SM 2024)*

Being a real asset Gold is an attractive alternative form of investment by various categories of investors. The most common avenue of making investment in the gold has been buying the jewellery. However, with the passage of time other forms have been evolved some of which are as follows:

1. ***Gold Bars:*** *Investors can buy physical gold coins or bar of different denominations. However, similar to jewellery this form of investment suffers from the limitation of cost of physical storage.*
2. ***Sovereign Gold Bonds (SGBs):*** *SGBs are government securities denominated in grams of gold. They are substitutes for holding physical gold. Investors have to pay the issue price in cash and the bonds will be redeemed in cash on maturity. The quantity of gold for which the investor pays is protected, since he receives the ongoing market price at the time of redemption. The risks and costs of storage are eliminated.*
3. ***Gold Exchange Traded Funds (ETFs):*** *Gold ETFs can be considered as an investment avenue which is a hybrid of flexibility of stock investment and the simplicity of gold investments. Like any other company stock, they can be bought and sold continuously at market prices on Stock Exchanges. Prices of Gold ETFs are based on gold prices and investment of fund amount is made in gold bullion.*
4. ***E-gold:*** *Started in 2010 in India, E-gold is offered by the National Spot Exchange Ltd (NSEL). Each unit of e-gold is equivalent to one gram of physical gold and is held in the Demat account. Like Gold ETFs, e-gold units are fully backed by an equivalent quantity of gold kept with the custodian and have less storage cost compared to physical gold. These units can be traded on the exchange.*

7. SECURITIZATION

1. Concept and Mechanism of Securitisation

The process of securitization typically involves the creation of pool of assets from the illiquid financial assets, such as receivables or loans and their repackaging or rebundling into marketable securities. These securities are then issued to investor. Example of such illiquid financial assets can be automobile loans, credit card receivables, residential mortgages or any other form of future receivables.

Mechanism or steps involved in Securitisation process:

Step 1: Creation of Pool of Assets

The process of securitization begins with creation of pool of assets by originator (originator is the entity who owns the illiquid financial assets). This involves segregating the assets backed by similar type of mortgages in terms of interest rate, risk, maturity, etc.

Step 2: Transfer to Special Purpose Vehicle/Entity

Once the assets have been pooled, they are transferred by originator to SPV/SPE for consideration. SPV/SPE is the entity especially created for the purpose of securitization.

Step 3: Sale of Securitized Papers

SPV designs the instruments (marketable securities) based on interest rate, risk, tenure etc. of pool of assets. These instruments can be Pass Through Security or Pay Through Certificates. These certificates or securities are issued to investors against consideration. (The amount raised through the issue is used by SPV to pay the originator for the pool of asset bought from him.)

Step 4: Administration of Assets

The administration of assets in subcontracted back to originator which collects principal and interest from underlying assets and transfer it to SPV.

Step 5: Recourse to Originator

Performance of securitized papers depends on the performance of securitised assets unless specified that, in case of default, such illiquid assets will go back to originator from SPV.

Step 6: Repayment of funds

SPV will repay the amount to the investors in form of interest and principal, that are recovered by originator and passed on to SPV.

Step 7: Credit Rating to Instruments

Sometime, before the sale of securitized instruments, credit rating can be done to help investors assess the risk of the issuer.

2. Participants in Securitisation Process and their Role

Role of Primary Participants:

1. ***Originator/Securitiser:***

   He is the initiator of the securitisation deal and also termed as Securitiser. It the entity that sells the financial assets to the SPV and receive the funds from SPV. It transfers both legal and beneficial interest in those assets to SPV. (The purpose of initiation of securitisation deal is to release the amount blocked in illiquid financial assets).

2. ***SPV/SPE***

   SPVs are created especially for the purpose of deal i.e., converting illiquid financial assets into marketable securities. For this purpose, it buys the financial assets to be securitised from the originator by making an upfront payment. Then, they issue securities to the investors. SPV could be in the form of company, firm or trust.

3. ***Investors***

   Investors are the buyer of securitized papers. They can be an individual or an institutional investor like mutual funds, provident fund or insurance company. They acquire the securitised papers initially and receive their money back at redemption in the form of interest and principal as per the agreed terms.

Role of Secondary Participants:

1. ***Obligors***

   Actually, they are the main root of the whole securitization process. They are the parties who owe money to the originators and are assets in the Balance Sheet of Originator. The amount due from the obligor is transferred to SPV and hence they form the basis of securitization process.

2. ***Rating Agency***

   Since the securitization is based on the pools of assets rather than the originators, the assets have to be assessed in terms of its credit quality and credit support available.

3. ***Receiving and Paying agent***

   Also, called Servicer or Administrator, it collects the payment due from obligors and passes it to SPV. It also follows up with defaulting borrower and if required initiate appropriate legal action against them.

4. ***Credit Enhancer***

   Since investors in securitized instruments are directly exposed to performance of the underlying financial assets, they seek additional comfort in the form of credit enhancement.

5. ***Structurer***

   It brings together the originator, investors, credit enhancers and other parties to the deal of securitization. Normally, these are investment bankers also called arranger of the deal.

6. ***Agent or Trustee***

   They take care of interest of investors who acquires the securities. They also make sure that all the parties perform in true spirit.

3. Features of Securitisation

1. ***Creation of Financial Instruments*** *– The process of securities can be viewed as process of creation of additional financial instruments in the market backed by collaterals.*
2. ***Bundling and Unbundling –*** *When all the assets are combined in one pool it is bundling and when these are broken into instruments of fixed denomination it is unbundling.*
3. ***Tool of Risk Management –*** *In case of assets are securitized on non-recourse basis, then securitization process acts as risk management as the risk of default is shifted from originator to investor.*
4. ***Structured Finance –*** *In the process of securitization, financial instruments are structured in such a way that they meet the risk and return profile of investors, and hence, these securitized instruments are considered as best examples of structured finance.*
5. ***Tranching –*** *Portfolio of different receivable or loan or other illiquid asset is split into several parts based on risk and return they carry, called 'Tranche'.*
6. ***Homogeneity –*** *Under each tranche the securities issued are of homogenous nature and even meant for small investors who can afford to invest in small amounts.*

4. Benefits of Securitisation

From the point of ***Originator***	*From the point of* ***Investor***
✓ ***Off-Balance Sheet Financing:*** *When receivables are securitized, it releases a portion of capital blocked in these assets resulting in off Balance Sheet financing & improving liquidity position.* ✓ ***More specialization in main business:*** *By transferring the assets, the entity could concentrate more on core business as servicing of loan is transferred to SPV. Further, in case of non-recourse arrangement even the burden of default is shifted.* ✓ ***Helps to improve financial ratios:*** *Especially in case of Financial Institutions and Banks, it helps to manage financial position related ratios effectively.* ✓ ***Reduced borrowing Cost:*** *Since securitized papers are rated due to credit enhancement, they can also be issued at reduced rate in case of debts resulting in reduced cost of borrowings.*	✓ ***Diversification of Risk:*** *Purchase of securities backed by different types of assets provides the diversification of portfolio resulting in reduction of risk.* ✓ ***Regulatory requirement:*** *Acquisition of asset backed belonging to a particular industry say micro industry helps banks to meet regulatory requirement of investment of fund in industry specific.* ✓ ***Protection against default:*** *In case of recourse arrangement if there is any default by any third party, then originator shall make good the least amount.*

5. Risks in Securitization *(SM 2024)*

1. ***Credit risk or Counterparty risk:*** *It is the prime risk wherein investors are prone to the risk of bankruptcy and non-performance of the servicer.*
2. ***Legal risks:*** *Since in the Indian context it is a recently developed concept there is an absence of conclusive judicial precedent or explicit statutory provisions on securitization transactions.*
3. ***Market risks:*** *It represent risks external to the transaction and include market-related factors that impact the performance of the transaction.*
   a) *Macroeconomic risks: The performance of the underlying loan contracts depends on macroeconomic factors, such as industry downturns or adverse price movements of the underlying assets. For example, downturn in economy will affect the production and revenue generation in any industry which will affect the ability of a company to repay the loan.*
   b) *Prepayment risks: A change in the market interest rate represents a difficult situation for investors because it is a combination of prepayment risk and volatile interest rates. With a reduction in interest rates generally prepayment of retail loans increases, resulting in reinvestment risk for investors.*
   c) *Interest rate risks: This risk is prominent where the loans in the pool are based on a floating rate and investor pay-outs are based on a fixed rate or vice versa. It results in an interest rate mismatch and can lead to a situation where the pool cash inflow, even at 100% collection efficiency, is not sufficient to meet investor pay-outs.*

6. Types of Securitization Instruments

1. Pass Through Certificate (PTC):

- *As the title suggests, originator transfers (pass through) to SVP the entire receipt of cash in the form of interest or principal repayment from the securitized assets. SPV further distributes it to the investors.*
- *PTC securities represent direct claim of the investors on all the assets that has been securitized through SPV and the investors carry proportional beneficial interest in the asset held in the trust by SPV. (Just like how unitholders of any mutual fund have direct claim on the assets owned by mutual fund).*
- *It should be noted that since it is a direct route, any prepayment of principal is also proportionately distributed among the securities holders.*

2. Pay Through Security (PTS)

- *In case of PTS, securities are backed by financial asset of SVP (rather than having a direct claim on the assets, these securities are secured these assets.)*
- *This structure permits desynchronization of 'servicing of securities issued' from 'cash flow generating from the financial asset'.*
- *Hence, it can restructure different tranches from varying maturities of receivables.*
- *Further, this structure also permits the SPV to reinvest surplus funds for short term as per their requirement.*

3. Stripped Securities

- *Stripped Securities are created by dividing the cash flows associated with underlying securities into two or more new securities. Those two securities are as follows:*
  - *i. Interest Only (IO) Securities*
  - *ii. Principle Only (PO) Securities*
- *As each investor receives a combination of principal and interest, it can be stripped into two portions as Principal and Interest.*
- *Accordingly, the holder of IO securities receives only interest while PO security holder receives only principal. Being highly volatile in nature these securities are less preferred by investors.*

7. Pricing of the Securitized Instruments

Pricing of securitized instruments in an important aspect of securitization. While pricing the instruments, it is important that it should be acceptable to both originators as well as to the investors. On the same basis pricing of securities can be divided into following two categories:

1. From Originator's Angle

From originator's point of view, the instruments can be priced at a rate at which originator has to incur an outflow and if that outflow can be amortized over a period of time by investing the amount raised through securitization.

2. From Investor's Angle

From an investor's angle security price can be determined by discounting best estimate of expected future cash flows using rate of yield to maturity of a security of comparable security with respect to credit quality and average life of the securities. This yield can also be estimated by referring the yield curve available for marketable securities, though some adjustments is needed on account of spread points, because of credit quality of the securitized instruments.

8. Problems Faced in Securitisation

1. ***Stamp Duty:*** *Stamp Duty is one of the obstacle in India. Mortgage debt stamp duty which even goes upto 12% in some states of India has impeded the growth of securitization in India.*
2. ***Taxation:*** *Taxation is another area of concern in India. In the absence of any specific provision relating to securitized instruments in Income Tax Act, experts' opinion differs a lot. Some are of opinion that, SPV, as a trustee, is liable to be taxed in a representative capacity. While, others are of view that instead of SPV, investors will be taxed on their share of income.*
3. ***Accounting:*** *Accounting and reporting of securitized assets in the books of originator is another area of concern. Although, securitization is designated as an off-balance sheet instrument but in true sense receivables are removed from originator's balance sheet. Problem arises especially when assets are transferred without recourse.*
4. ***Lack of Standardisation:*** *Every originator following his own format for documentation and administration having lack of standardization is another obstacle in the growth of securitization.*

5. ***Inadequate Debt Market:*** *Lack of existence of a well-developed debt market in India is another obstacle that hinders the growth of secondary market of securitized assets.*
6. ***Ineffective Foreclosure laws:*** *For many years efforts are on for effective foreclosure but still foreclosure laws are not supportive to lending institutions and this makes securitized instruments less attractive.*

9. Blockchain *(SM 2024)*

Blockchain, or Distributed Ledger Technology (DLT) is a shared, peer-to-peer and decentralized open ledger of transactions system with no trusted third parties in between. This ledger database has every entry as permanent as cannot be altered. All transactions are fully irreversible with any change in the transaction being recorded as a new transaction. The decentralised network refers to the network which is not controlled by any bank, corporation, or government.

A. Applications of Blockchain

a) ***Financial Services:*** *Blockchain can be used to provide an automated trade lifecycle in terms of the transaction log of any transaction of asset or property such as shares, automobiles, real estate, etc. from one person to another.*
b) ***Healthcare:*** *Blockchain provides secure sharing of data in healthcare industry by increasing the privacy, security, and interoperability of the data by eliminating the interference of third party.*
c) ***Government:*** *There are instances where the technical decentralization is necessary but politically should be governed by governments like land registration, vehicle registration and management, e-voting etc. Blockchain improves the transparency and provides a better way to monitor and audit the transactions in these systems.*
d) ***Travel Industry:*** *Blockchain can be applied in money transactions and in storing important documents like passports, reservations and managing travel insurance, etc.*
e) ***Economic Forecasts:*** *Blockchain makes possible the financial and economic forecasts based on decentralized prediction markets, decentralized voting, and stock trading, thus enabling the organizations to plan their businesses.*

B. Risks associated with Blockchain

1. *With the use of blockchain, organizations need to consider risks with a wider perspective because different members of a particular blockchain may have different risk tolerances. There may be questions about who is responsible for managing risks if no one party is in-charge, and how proper accountability is to be achieved in a blockchain.*
2. *The reliability of financial transactions is dependent on the underlying technology and if this underlying consensus mechanism has been tampered with, it could render the financial information stored in the ledger to be inaccurate and unreliable.*
3. *In the absence of any central authority to administer, there could be a challenge in the development and maintenance of process control activities and in such case, users of public blockchains find difficult to obtain an understanding of the IT controls.*
4. *As blockchain involves humongous data getting updated frequently, risk related to information overload could potentially challenge the level of monitoring required. Furthermore, to find*

competent people to design and perform effective monitoring controls may again prove to be difficult.

C. Tokenization and its similarities with Securitization

Tokenization is a process of converting tangible and intangible assets into blockchain tokens. Digitally representing anything has recently acquired a lot of traction. It can be effective in conventional industries like real estate, artwork etc.

Since tokenization of illiquid assets attempts to convert illiquid assets into a product that is liquid and tradable and hence to some extent it resembles the process of Securitization. Hence, following are some similarities between Tokenization and Securitization:

a) ***Liquidity:*** *First and foremost, both Securitization and Tokenization inject liquidity in the market for the assets which are otherwise illiquid assets.*

b) ***Diversification:*** *Both help investors to diversify their portfolio thus managing risk and optimizing returns.*

c) ***Trading:*** *Both are tradable hence helps to generate wealth.*

d) ***New Opportunities:*** *Both provide opportunities for financial institutions and related agencies to earn income through collection of fees.*

8. MUTUAL FUNDS

1. Classification of Mutual Funds:

On the basis of:

1. Functions

Open ended funds: *Investor can make entry and exit any time directly with mutual fund. The capital of the fund is unlimited and redemption period is indefinite.*

Close ended Funds: *Investor can buy directly from MF during IPO or from the stock market after listing. Similarly, redeem from MF at maturity or sell it in the stock market before maturity. Capital is limited and redemption is finite.*

Interval Funds *(SM 2024)**:** It is a combination of an Open-Ended and a Close-Ended funds which can be purchased or redeemed during pre-specified intervals at prevailing NAVs. They are not required to be listed on the stock exchanges. They can make fresh issue of units during the specified interval period. Maturity period is not defined.*

2. Portfolio

Equity Funds: *means the mutual funds that invest in stocks.*

Debt Funds: *means the mutual funds that invest in debt securities.*

Special Funds: *discussed below*

3. Ownership

Public Sector MF: *are sponsored by companies of Public Sector.*

Private Sector MF: *are sponsored by companies of Private Sector.*

Foreign Mutual Funds *are sponsored by foreign companies for raising funds in India, operate from India and invest in India.*

A. Equity Funds

Growth Funds: *invest in securities which have long term capital growth. These MF provide long term capital appreciation to the investors.*

Income Funds *seek to maximize present income of investors by investing in safe stocks paying high cash dividends.*

Aggressive Funds *look for super normal returns for which investment is made in start-ups, IPOs and speculative shares.*

B. Debt Funds

Bond Funds: *They invest in fixed income securities e.g., government bonds, corporate debentures, etc. Bond funds are less volatile than stock funds and often produce regular income. It has following risk:*

Interest Rate Risk: Risk of fluctuation in market value of bond due to change in interest rate.

Credit Risk: Risk of default in repayment of loans or interest by the borrowers.

Prepayment Risk: Risk of repayment of money by the issuer of Bonds before its maturity date.

Reinvestment Risk: Risk of investing the bond proceeds at a lower rate of interest.

Gilt Funds *invest in Govt Securities.*

C. Special Funds

Index Funds: *Every market has a stock Index that measures the movement of the market. Index funds follows the stock index and are low-cost funds. The investor will receive whatever the market delivers.*

International Funds *are located in India to raise money in India for investing globally.*

Offshore Funds *is a mutual fund located in India to raise money globally for investing in India.*

Sector Funds: *They invest their entire fund in a particular sector say Technology, Pharma, etc.*

Quant Funds: *works on a data-driven approach for stock selection and investment decisions based on a pre-determined rules using statistics or mathematics-based models. (discussed in details below)*

2. Benefits or Advantages of Mutual Fund

1. ***Professional Management**: The funds are managed by skilled and professionally experienced managers with a back-up of a Research team.*
2. ***Diversification:** Mutual Funds offer diversification in portfolio by investing in large number of securities which reduces the risk.*
3. ***Economies of Scale:** The "pooled" money from a number of investors ensures that mutual funds enjoy economies of scale. It is cheaper compared to investing directly in the capital markets which involves higher charges.*
4. ***Transparency:** The SEBI Regulations now compel all the Mutual Funds to disclose their portfolios on a half-yearly basis. However, many Mutual Funds disclose this on a quarterly or monthly basis to their investors.*
5. ***Flexibility:** There are a lot of features in a mutual fund scheme, which imparts flexibility to the scheme. An investor can opt for Systematic Investment Plan (SIP), Systematic Withdrawal Plan etc. to plan his cash flow requirements as per his convenience.*
6. ***Highly Regulated:** Mutual Funds all over the world are highly regulated and in India all Mutual Funds are registered with SEBI and are strictly regulated as per the Mutual Fund Regulations which provide high level of investor protection.*

3. Drawback of Mutual Funds

1. ***No guarantee of Return:** There may be some Schemes who may underperform against the benchmark index. A mutual fund may perform better than the stock market but this does not necessarily lead to a similar gain for every investor. This is because of the different entry & exit points for each investor.*
2. ***Diversification** – A mutual fund helps to create a diversified portfolio. Though diversification minimizes risk, it does not ensure maximizing returns. The returns that mutual funds offer is at times lesser than what an investor can earn from a single stock.*
3. ***Selection of Proper Fund** – It may be easy for someone to select the right share rather than the right mutual fund scheme. For stocks, one can rely his selection on the parameters of economic, industry and company analysis. In case of mutual funds, past performance is generally the criteria but past does not guarantee future.*
4. ***Cost Factor** – Every Mutual Fund Scheme charges some fund management fees as a part of Annual Recurring Expenses. This fees in no way related to performance of the funds. There might also be entry & exit loads if the funds are withdrawn before specified time.*

4. Short note of certain types of funds:

A. Exchange Traded Funds or Index Shares

- *An ETF is a hybrid product that combines the features of an Index Mutual Fund and Shares, therefore also called as Index Shares. Like Index Funds (see Mutual Fund Chapter), these funds also follow (i.e., track) underlying index. Like Shares, these can be traded.*

- *ETFs are listed on the stock exchanges and their prices are linked to underlying index. They can be bought or sold any time during the market hours at a price which may be more or less than its NAV. NAV of an ETF is the value of components of the benchmark index (i.e., the index that ETF tracks).*
- *There is no paper work involved for investing in ETF and they can be bought and sold just like any other stock. They are attractive as investments because of their low cost tradability and stock-like features.*
- *Following types of ETF products are available:*
  a. *Index ETFs - Most ETFs are index funds that hold securities and attempt to replicate the performance of a stock market index.*
  b. *Commodity ETFs - Commodity ETFs invest in commodities, such as precious metals and futures.*
  c. *Bond ETFs - Exchange-traded funds that invest in bonds are known as bond ETFs. They thrive during economic recessions because investors pull their money out of the stock market and into bonds.*
  d. *Currency ETFs - The funds are total return products where the investor gets access to the FX spot change, local institutional interest rates and a collateral yield.*

B. Hedge Funds:

- *Hedge fund is a lightly regulated investment fund that escapes most regulations by being a private investment vehicle being offered to selected clients.*
- *It does not reveal anything about its operations and also charges performance fees.*
- *Hedge funds are aggressively managed portfolio of investments which use advanced investment strategies such as leveraged, long & short and derivative positions in both domestic and international markets with the goal of generating higher returns.*
- *Risk involved under hedge funds in higher than that under Mutual Funds*
- *It is important to note that hedging is actually the practice of attempting to reduce risk, but the goal of most hedge funds is to maximize return on investment.*

C. Quant Funds:

Quant Fund works on a data-driven approach for stock selection and investment decisions based on a pre-determined rules or parameters using statistics or mathematics-based models.

While an active fund manager selects the volume and timing of investments (entry or exit) based on his\her analysis and judgement, in this type of fund, complete reliance is placed on an automated programme that decides making decision for volume and timings of investments and concerned manager has to act accordingly.

However, it is to be noted it does not mean that in this type of Fund there is no human intervention at all, because the Fund Manager usually focuses on the robustness of the Models being used and also monitors their performance on continuous basis and if required some modification is done in the same.

The prime advantage of Quant Fund is that it eliminates the human biasness and subjectivity and using model-based approach also ensures consistency in strategy across the market conditions.

Sometime the term 'Quant Fund Manager' is confused with the term 'Index Fund Manager' but it should be noted that both terms are different. While the Index Fund Manager entirely hands off the investment decision purely based on the concerned Index, the Quant Fund Manager designs and monitors models and makes decisions based on the outcomes.

D. Fixed Maturity Plans

Fixed maturity plans (FMPs) are a debt mutual funds that mature after a pre-determined time period. FMPs are closely ended mutual funds in which an investor can invest during a New Fund Offer (NFO). FMPs, which are issued during NFO, are later traded on the stock exchange where they are listed. But, the trading in FMPs is very less. So, basically FMPs are not liquid instruments.

FMPs usually invest in Certificates of Deposits (CDs), Commercial Papers (CPs), Money Market Instruments and Non-Convertible Debentures over fixed investment period. Sometimes, they also invest in Bank Fixed Deposits.

Presently, most of the FMPs are launched with tenure of three years to take the benefit of indexation.

The main advantage of Fixed Maturity Plans is that they are free from any interest rate risk because FMPs invest in debt instruments that have the same maturity as that of the fund. However, they carry credit risk, as there is a possibility of default by the debt issuing company. So, if the credit rating of an instrument is downgraded, the returns of FMP can come down.

5. Direct Plan in Mutual Funds

Direct plan means plans where an investor can directly invest in the mutual funds without involving distributor or broker. This helps mutual funds to save the distribution charges they have to pay to distributors. Mutual funds pass on this benefit to the investor by keeping the NAV of direct plan higher than NAV of a distributor plan (plans that involve distributor, also called as regular plan) by the amount of distribution charges.

Mutual Funds have been permitted to take direct investments in mutual fund schemes even before 2011. But there were no separate plans for these investments. These investments were made in distributor plan itself and were tracked with single NAV i.e., NAV of the distributor plans. Therefore, even when an investor bought direct mutual funds, he had to buy it based on the NAV of the distributor plans.

However, things changed with introduction of direct plans by SEBI on January 1, 2013. Mutual fund direct plans are the plans in which Asset Management Companies or mutual fund Houses do not charge distributor expenses, trail fees and transaction charges. NAV of the direct plan are generally higher in comparison to a regular plan. Studies have shown that the 'Direct Plans' have performed better than the 'Regular Plans' for almost all the mutual fund schemes.

6. Tracking Error

- *Tracking error can be defined as the divergence or deviation of a fund's return from the return of benchmark it is tracking (following). In other words, it is the error made by MF while tracking an index, i.e., difference between 'return from fund' and 'return from index which it was following'.*
- *The passive fund managers design their investment strategy to closely track the benchmark index. However, often it may not exactly replicate the index return. In such situation, there is possibility of deviation between the returns.*
- *Higher the tracking error, higher is the risk profile of the fund. Whether the funds outperform or underperform their benchmark indices, it clearly indicates that of fund managers are not following the benchmark indices properly. In addition to the same, other primary reason for tracking error are Transaction cost, Fees charged by AMCs, Fund expenses and Cash holdings.*

7. Side Pocketing

Understanding the lengthy yet simple concept:

- *Suppose, a mutual fund (say XYZ) has total investment of ₹1000 in the bonds of different companies, out of which ₹200 is invested in a particular company (say Bad Ltd.). Now, if Bad Ltd defaults in making the coupon payment or principal repayment on its bond, then, as per SEBI norms, XYZ will have to write down such investment in its books and consequently NAV of the fund will fall and also its credit ratings. Due to such event and out of fear, the unitholders might sell or redeem their units at the reduced NAV which may be less than its true NAV because even if investment in Bad Ltd is fully written down, there is possibility of recovering some amount from Bad Ltd.*
- *In such a situation, both XYZ and its unitholders will suffer. XYZ might suffer liquidity issue, if large number to unit holders come to redeem their units. And, unitholders might sell their units at a NAV lower than its true NAV.*
- *To avoid such situations, XYZ will separate investment of ₹200 in Bad Ltd.'s bonds (now onwards referred as risky or illiquid assets) from its other good investments of ₹800 and shift it in the **SIDE POCKET**. So, now there are two categories of assets lying with XYZ- Good or liquid assets (of ₹800) and risky or illiquid assets (of ₹200).*
- *Note that, since XYZ has side-pocketed illiquid investments, the NAV of the fund will now reflect the value of only liquid assets of ₹800. Therefore, for illiquid assets, unitholders are issued units of a new scheme of mutual fund (now onwards referred as 'new units') in addition to original units already held by them. This new scheme will represent the claim of unitholders in the risky assets of ₹200.*
- *Hence, we can say that, unitholders will now have two types of units- original units (which represent the claims in good or liquid assets) and new units (which represent the claim in risky assets)*
- *Original units of the fund can be bought and sold normally as they were done earlier, but investors are not interested to sell them, since, now they represent only liquid assets. Whereas, with respect to new units, there are certain restrictions its sale imposed by SEBI due to which, they cannot be redeemed for some period.*

- *Hence, side pocketing will help both XYZ and its unitholders to not suffer on the event of default by any company.*

Answer from exam point of view from Study Material:

- *Side Pocketing in Mutual Funds means separation of risky or illiquid assets from other investments and cash holdings.*
- *Whenever, the rating of a mutual fund decreases, the fund shifts the illiquid assets into a side pocket so that unitholders can be benefitted atleast from the liquid assets held by the fund. Consequently, the NAV of the fund will now reflect the value of only liquid assets.*
- *The purpose is to also make sure that money invested in MF, which is linked to illiquid asset, gets locked, until the MF recovers the money from the company.*
- *Side Pocketing is beneficial for those investors who wish to hold the units of the original scheme for long term. Therefore, the process of Side Pocketing ensures that liquidity is not the problem with MF even in the circumstances of frequent allotments and redemptions of units.*
- *In India, recent case of IL&FS has led to many discussions on the concept of side pocketing as IL&FS and its subsidiaries have failed to fulfil its repayments obligations due to severe liquidity crisis. The MF had given negative returns because they have completely written off their exposure to IL&FS instruments.*

8. Evaluation of Mutual Funds *(SM 2024)*

A. Quantitative Parameters

1) ***Risk Adjusted Returns:*** *Basically, it is the return of a Mutual Fund relative to the risk it assumed as benchmarked against the market and industry risk.*
2) ***Benchmark Returns:*** *Benchmark can be defined as the quality or set of standards against which performance of Mutual Fund can be measured. A good Mutual Fund performs over and above its benchmark during all phases of market.*
3) ***Comparison to Peers:*** *The comparison of relative performance of fund with its peers (of same category) is another quantitative method because evaluation of performance in isolation does not have any meaning.*
4) ***Comparison of Returns across different economic and market cycles:*** *At the time of evaluating performance of any Mutual Fund, it is not just looking across short term but performance during different economic and market cycles also needs to be evaluated.*
5) ***Financial Measures:*** *There are some financial measures that help in evaluation of performance of any Mutual Fund which are as follows:*
    - *Expense Ratio: It is the percentage of the assets that were spent to run a mutual fund. Paying close attention to the expense ratio is important as high ratio can seriously undermine the performance of a mutual fund scheme.*
    - *Sharpe Ratio: this ratio measures the Mutual Fund's performance measured against the total risk (both systematic and unsystematic) taken.*

- *Treynor Ratio: Beta of a mutual fund measures volatility of a fund's return to return from its Benchmark i.e., systematic risk. Treynor Ratio measures performance of a mutual fund against the systematic risk it has taken.*
- *Sortino Ratio: A variation of Sharpe Ratio that considers and uses downside deviation instead of total standard deviation in denominator.*

B. Qualitative Parameters

1) ***Quality of Portfolio:*** *Quality of securities in the portfolio of the Mutual Funds is an important qualitative parameter. The reason is that the quality of the portfolio plays a big role in achieving superior returns.*
   - *In **Equity Funds**, the quality of the portfolio is measured on the basis of allocation of funds in top Blue-chip companies, how diversified is the portfolio or the style followed being followed.*
   - *In **Debt Funds**, the quality of portfolio is measured on the basis of credit quality, average maturity and modified duration of the securities.*

   Not only that it is necessary that Mutual Fund should hold good quality stocks or securities, but it is also necessary the investment should be as per the objective of the Fund.
2) ***Track record and competence of Fund Manager:*** *Since Fund Manager takes investment decisions, his competence and conviction play a very big role. The competence of a Fund Manager is assessed from his knowledge and ability to manage in addition to past performance.*
3) ***Credibility of Fund House Team:*** *Team of the mutual fund also plays a big role towards the investors' interest. There are some other administrative tasks such as redemption of units, crediting of dividend, providing adequate information etc. which play a crucial role in qualitative assessment of any mutual fund.*

9. Role of Fund Managers in Mutual Funds *(SM 2024)*

*A portfolio manager manages individual's fund. Similarly, a fund manager is a gatekeeper of funds of any Mutual Fund. While, the main responsibility is to ensure good performance of the fund, but there are other roles as well. The exact **Primary Role** also depends on the fact that whether Fund is an Actively Managed or a Passively Managed Fund.*

1) *Actively Managed Funds: In these funds, Fund Manager's role is more crucial because with use of his extensive research, judgement and due diligence, he has to outperform the market and generate positive alpha. Right stock picking can help him to outperform.*
2) *Passively Managed Funds: In these funds, Fund Manager's role is to match the return of the underlying benchmark index with the minimum Tracking Error.*

*In addition to the abovementioned primary role, following are **Other key roles of a Fund Manager**:*

1) ***Compliances:*** *Because of numerous regulations in the Capital Market, the number of Regulatory Compliances has increased multi-fold. Fund Manager must ensure that:*
   - *Compliance of various Guidelines as laid down by SEBI, AMFI etc.*
   - *Ensuring various reporting such as Expenses Ratio, redemption of funds etc.*
   - *Ensuring that investors are aware of various required details and rules.*

2) ***Constant Monitoring the Fund Performance:*** *The role of a Fund Manager is not only to select the securities, but also to evaluate them on a continuous basis. It is Fund Manager's decision to enter or exit market that maximises the wealth of unit holders. The performance of a Fund Manager is not only judged on the basis of return but also on growth achieved above inflation and interest rate.*

3) ***Creation of Wealth and Protection:*** *This role is a fundamental role of a Fund Manager. Though wealth creation for investors is very important but reckless assumption to risk should be avoided. The investments should be made after thorough Fundamental Analysis and Technical Analysis.*

4) ***Control over the works outsourced to third parties:*** *In many cases some of the works of the Funds are required to be outsourced to any third party. In such cases, it is the duty of the Fund Manager to exercise proper control over functioning of the third party to ensure error free operations.*

10. Role of Foreign Institutional Investors in Mutual funds *(SM 2024)*

The FIIs plays an important role for Indian Economy through their investment in Mutual Funds because:

1. ***Enhanced Corporate Governance:*** *Before making investment in any Mutual Fund, FII carries out thorough due diligence of Corporate Governance. Hence, Corporate Governance is improved to a great extent.*
2. ***Improved Competition in Market:*** *With the investment of FIIs in Mutual Funds, improvement in the capital market takes place.*
3. ***Improved Inflow of Capital in the economy:*** *With the investment of funds in Mutual Funds in the economy not only employment is generated but the position of Foreign Exchange also improves.*

9. DERIVATIVES ANALYSIS AND VALUATION

1. Difference between Spot/Cash Market and Derivatives Market

Basis	Spot Or Cash Market	Derivatives Market
Meaning	Market where assets itself are traded for immediate delivery.	Financial market where contracts based on such assets are traded.
Quantity	Even one share can be purchased	Futures and options has minimum lot size
Investment	Full amount is required to be paid	Only margin or premium is to be paid
Risk	More risky than derivatives market	Less risky than cash market
Purpose	Consumption or investment	Hedging, Arbitrage or Speculation
Example	Example: shares, forex, commodity	Example: stock futures, currency options

2. Difference between Futures and Forwards

Basis	Forward	Future
Contract type	Forward are entered into on personal basis through phone or meeting.	Futures are entered into by buying or selling on exchange.
Standardised	Fully tailored. Not standardised about quality, quantity or time.	Standardised in term of quality, quantity and time.
Market	Over the counter market	Exchange traded
Margin	Not required	Required
Credit Risk	Risk of default	Guarantee of performance
Liquidity	Less Liquidity	More liquidity

3. Difference between Futures or Forwards and Options

Basis	Forwards / Futures	Options
Performance of contract	**Obligation** to buy or sell the asset under the contract.	In case of long position, **choice** to buy or sell the asset under the contract.
Initial investment	Forwards: **No investment** Futures: **Margin** is paid	**Premium** is paid to buy the option
Gain or Loss	**Unlimited** gain/loss on the contract	In case of long position: **Limited** gain/loss
Duration of the contract	Generally, **longer** than option	Generally, **shorter** than futures/forwards

4. Physical Settlement and Cash Settlement of Derivatives Contract

- *The **physical settlement** in case of derivative contracts means that underlying assets are **actually delivered** on the specified delivery date. In other words, traders will have to take delivery of the shares against position taken in the derivative contract.*
- *In case of **cash settlement**, the seller of the derivative contract does not deliver the underlying asset but transfers the amount of gain or loss on the contract **in cash**. It is similar to Index Futures where the trader, who wants to settle the contract in cash, will have to pay or receive the difference between the Spot price of the asset on the settlement date and the Futures price agreed to.*
- *The main advantage of cash settlement in derivative contract is high liquidity because of more derivative volume in cash settlement option, since traders can trade in derivatives segment without taking position in spot market.*
- *Also, a liquid derivative market facilitates the traders to do speculation. The speculative trading may worry the regulators but it is also true that without speculative trading, it will not be possible for the derivative market to stay liquid.*

5. Greeks- Factors affecting value of an option

<table>
<tr><th>Factors that affect the value of an option and how they affect it...</th><th>Change in the value of option due to these factors is measured by Greeks:</th></tr>
<tr><td>1. PRICE: If price of the underlying asset:
<table>
<tr><td>Value of</td><td>Call Option</td><td>Put Option</td></tr>
<tr><td>Rises</td><td>Increases</td><td>Decreases</td></tr>
<tr><td>Falls</td><td>Decreases</td><td>Increases</td></tr>
</table></td><td>DELTA
It is the ratio by which value of an option will change due to change in price of underlying asset. It is used for hedging through options.
• Delta of call option is Positive.
• Delta of put option is Negative.</td></tr>
<tr><td>2. VOLATILITY: If volatility of price of underlying asset:
• Increases: Value of option increases.
• Decreases: Value of option decreases.</td><td>VEGA
It indicates the change in value of option for a one percent change in volatility. Like delta, Vega is also used for hedging.</td></tr>
<tr><td>3. TIME: As the time passes and time period till expiry of the option reduces, price of call and put option falls.</td><td>THETA
It indicates the change in the value of option for one day decrease in period till expiration. It is a measure of time decay.</td></tr>
<tr><td>4. RISK FREE RATE: If risk free rate of interest:
• Increases: Value of option decreases.
• Decreases: Value of option increases.</td><td>RHO
It indicates the value of option for one percent change in risk free rate of interest.</td></tr>
</table>

(there are only four factors, Gamma is an additional Greek used in calculations related to options)	***GAMMA*** *Measures how fast delta change due to small change in price of underlying asset.*

6. Intrinsic Value and Time Value of an Option

Intrinsic Value

- *It is the value that an option would fetch **if** it is exercised today.*
- *It means, for call option it is the value by which today's spot price is higher than exercise price and for put option it is the value by which exercise price is higher than today's spot price.*
- *The minimum intrinsic value of any option can be zero (i.e., it cannot be negative), since in case of negative value, option will not be exercised.*

Time Value

- *It is the value of premium over and above the Intrinsic Value.*
- *It is the risk premium that option writer requires to give buyer the right to exercise the option.*

7. Exotic Options *(SM 2024)*

Exotic options are the types of option contracts having a different structure and features from plain vanilla options i.e. American and European options. We know that an American option can be exercised at any time on or before expiry date whereas a European option can be exercised only on expiry date. Exotic option is a type of hybrid of American and European options and hence falls somewhere in between these options.

*The most common **types of Exotic options** are as follows:*

1. ***Chooser Options:** This option provides a right to the buyer of option after a specified period of time to decide whether purchased option is a call option or put option. It is to be noted that the decision can be made within a specified period prior to the expiration of contracts.*
2. ***Compound Options:** Also called split fee option or 'option on option'. As the name suggests this option provides a right or choice not an obligation to buy another option at specific price on the expiry of first maturity date. Thus, it can be said in this option the underlying is an option. Further the payoff depends on the strike price of second option.*
3. ***Barrier options:** Though it is similar to plain vanilla call and put options, but unique feature of this option is that contract will become activated only if the price of the underlying reaches a certain price during a predetermined period.*
4. ***Binary Options:** Also known as 'Digital Option', this option contract guarantees the pay-off based on the happening of a specific event. If the event has occurred, the pay-off shall be pre-decided amount and if event it has not occurred then there will be no pay-off.*
5. ***Asian Options**: These are the option contracts whose pay off are determined by the average of the prices of the underlying over a predetermined period during the lifetime of the option.*

6. ***Bermuda Option:*** *It is somewhat a compromise between a European and American options. Contrary to American option where it can be exercised at any point of time, the exercise of this option is restricted to certain multiples dates on or before expiration.*
7. ***Basket Options:*** *In this type of contracts the value of option instead of one underlying depends on the value of a portfolio i.e., a basket. Generally, this value is computed based on the weighted average of underlying constituting the basket.*
8. ***Spread Options:*** *As the name suggests the payoff of these type of options depend on difference between prices of two underlying.*
9. ***Look back options:*** *Unlike other type of options whose exercise prices are pre-decided, in this option on maturity date the holder of the option is given a choice to choose a most favourable strike price depending on the minimum and maximum price of an underlying achieved during the life time of option.*

8. Credit Derivatives *(SM 2024)*

Credit Derivatives is summation of two terms, Credit + Derivatives. As we know that derivative derives its value from an underlying which can be stock, share, currency, interest etc.

Financial instruments are subject to following two types of risks:

a. *Market Risk: Due to adverse movement of the stock market, interest rates and foreign exchange rates.*
b. *Credit Risk: Also called counter party or default risk, this risk involves non-fulfilment of obligation by the counter party.*

While, financial derivatives can be used to hedge the market risk, credit derivatives emerged out to mitigate the credit risk.

Types of credit derivatives: Collateralized Debt Obligation and Credit Default Swap.

A. Collateralized Debt Obligations

CDOs are similar to securitization. While, in securitization the securities issued by SPV are backed by the loans and receivables, the CDOs are backed by pool of bonds, asset backed securities, REITs, and other CDOs.

Types of CDOs:

1. ***Cash Flow CDOs:*** *It is a CDO which is backed by cash market debt or securities which normally have low risk weight. This structure mainly relies on the collateral's risk weight and collateral's ability to generate sufficient cash to pay off the securities issued by SPV.*
2. ***Synthetic CDOs:*** *It is similar to Cash Flow CDOs but with the difference that instead of transferring ownerships of collateral to SPV (a separate legal entity), synthetic CDOs are structured in such a manner that credit risk is transferred by the originator without actual transfer of assets.*
3. ***Arbitrage CDOs:*** *In this CDOs, the issuer captures the spread between the return realized by collateral underlying the CDO and cost of borrowing to purchase these collaterals. In addition to this issuer also collects the fee for the management of CDOs.*

Risks involved in CDOs

1. ***Default Risk:*** *Also called 'credit risk', it arises from the default of underlying party to the instruments.*
2. ***Interest Rate Risk:*** *Also called Basis risk, it arises due to different basis of interest rates. For example, asset may be based on floating interest rate but the liability may be based on fixed interest rates. Commonly used techniques such as swaps, caps, floors, etc. can be used to mitigate such risk.*
3. ***Liquidity Risk:*** *Another major type of risk by which CDOs are affected is liquidity risks as there may be mismatch in coupon receipts and payments.*
4. ***Prepayment Risk:*** *This risk results from unscheduled or unexpected repayment of principal amount underlying the security. Generally, this risk arises in case of falling interest rates as the borrowers may pay back the money early.*
5. ***Reinvestment Risk:*** *This risk is generic in nature as the CDO manager may not find adequate opportunity to reinvest the proceeds when allowed for substitutions.*
6. ***Foreign Exchange Risk:*** *Sometimes CDOs are comprised of debts and loans from countries other than the country of issue. In such a case, in addition to above mentioned risks, CDOs are also subject to the foreign exchange rate risk.*

B. Credit Default Swaps

It is a combination of following 3 words:

Credit: *Loan given*

Default: *Non payment*

Swap: *Exchange of Risk*

Accordingly, CDS can be defined as an insurance (not in stricter sense) against the risk of default on a debt security. Under this arrangement, one party (called buyer) needing protection against the default pays a periodic premium to another party (called seller), who in turn takes the default risk if there is any default on such debt security.

Main Features of CDS

1. *CDS is a non-standardized private contract between the buyer and seller. Therefore, it is covered in the category of Forward Contracts.*
2. *They are normally not traded on any exchange and hence remains free from the regulations of Governing Body.*
3. *CDS can be purchased from third party to protect itself from default of borrowers.*
4. *An individual investor who is buying bonds from a company can purchase CDS to protect his investment from insolvency of that company.*
5. *The cost or premium of CDS has a positive relationship with risk attached with loans. Therefore, higher the risk attached to Bonds or loans, higher will be premium or cost of CDS.*
6. *If an investor buys a CDS without being exposed to credit risk of the underlying bond issuer, it is called "naked CDS".*

9. Difference between real option & financial option *(SM 2024)*

Basis	Financial Options	Real Options
Underlying	Have underlying assets that are normally traded in the market i.e. shares, stocks, bonds, commodity etc.	Have underlying the projects that are not traded in the market.
Pay-off	In most of the cases it is specified in the contracts and hence is fixed.	It is estimated from the project cash flows and hence can be varied.
Exercise Period	Mostly the period of these options is short and can go maximum upto 1 year.	The period of these options mostly starts with 1 year or more.
Approach	Since these options are normally traded in the market they are "Priced".	Since these options are used to make decisions, they are "Valued".

10. Weather Derivatives & Electricity Derivatives *(SM 2024)*

Weather Derivatives: *Like other derivatives a Weather derivative is a contract between a buyer and a seller wherein the seller of a weather derivative receives a premium from a buyer with the understanding that the seller will provide a monetary amount in case the buyer suffers any financial loss due to adverse weather conditions. In case no adverse weather condition occurs, then the seller makes a profit through the premium received.*

Pricing a Weather Derivative is quite challenging as it cannot be stored and following issues are involved:

a. *Data: The reliability of data is a big challenge as the availability of data quite differs from one country to another and even agency to agency within a country.*
b. *Forecasting of weather: Though various models can be used to make predictions about evolving weather conditions but it is difficult to predict the future weather behaviour. Generally, forecasts address seasonal levels but not the daily levels of temperature.*
c. *Temperature Modelling: Temperature is one of the important underlying for weather derivatives. The temperature normally remains quite constant across different months in a year. Hence, there is no such Model that can claim perfection and universality.*

Electricity Derivatives: *Since electricity spot prices in India, are generally volatile, due various factors such as change in fuel supply positions, weather conditions, transmission congestion and other physical attributes of production and distribution, there is a need for hedging instruments that reduces price risk exposures. Derivative contracts linked with spot electricity prices as underlying can help market participants to hedge from price risk variations. This will help the buyer to pay a fixed price irrespective of variation in spot electricity prices as variations are absorbed by derivative instruments.*

a. *Electricity Forward contracts represent the obligation to buy or sell a fixed amount of electricity at a pre-specified contract price, known as the forward price, at a certain time in the future.*
b. *Electricity Futures are similar to forwards with the difference that Electricity futures contracts are standardized contracts in terms of underlying quantity, trading locations, transaction requirements and settlement procedures.*

c. *Electricity Swaps are financial contracts that enable their holders to pay a fixed price for underlying electricity, regardless of the floating electricity price, or vice versa, over the contracted time.*

11. Explain Co-Location Facility or Proximity Hosting

- *The co-location or proximity hosting is a facility which is offered by the stock exchanges to stock brokers and data vendors, whereby, their trading or data-vending systems are allowed to be located within or at close proximity to the premises of the stock exchanges. They are allowed to connect to the trading platform of stock exchanges through direct and private network.*
- *Stock exchanges are advised to allow direct connectivity between co-location facility of one recognized stock exchange and the co-location facility of other recognized stock exchanges.*
- *Stock exchanges are also advised to allow direct connectivity between servers of a stock broker placed in colocation facility of a recognized stock exchange and servers of the same stock broker placed in colocation facility of another recognized stock exchange.*
- *In order to facilitate small and medium sized members, who otherwise find it difficult to own and maintain a co-location facility due to cost or other reasons, SEBI has directed the stock exchanges to introduce **'Managed Co-location Services'**.*
- *Under this facility, some space in co-location facility shall be allotted to eligible vendors by the stock exchange along with arrangement for receiving market data for its further dissemination to their clients.*

10. FOREIGN EXCHANGE EXPOSURE AND RISK MANAGEMENT

1. Interest Rate and Purchase Power Parity Theorem

1. Interest Rate Parity Theorem (IRPT)

- *IRP Theorem defines the relationship between exchange rate between currencies of two countries and interest rates of those countries.*
- *Interest rate parity is a theory which states that the forward premium (or discount) of any currency with respect to another currency should be equal to the interest rate differential of the two countries.*
- *According to IRPT,* ***Forward rate*** *:* ***Spot rate*** $\times \frac{\textbf{(1 + interest rate of price currency)}}{\textbf{(1 + interest rate of base currency)}}$
- *Hence, currency of the country with higher interest rate will trade at forward discount and currency of the country with lower interest rate will trade at forward premium.*
- *When IRPT holds true, covered interest arbitrage is not feasible.*

2. Purchase Power Parity Theorem (PPPT)

- *PPP is based on "Law of one price". It says that price of same product in two different countries should be equal when measured in common currency.*
- *Similar to IRP Theorem, PPPT defines the relationship between exchange rate between currencies of two countries and inflation rates of those countries.*
- *According to PPPT, expected appreciation (or depreciation) of any currency with respect to another currency should be equal to the inflation differential between the two countries.*
- *According to PPPT,* ***Expected Spot rate*** *:* ***Spot rate*** $\times \frac{\textbf{(1 + inflation rate of price currency)}}{\textbf{(1 + inflation rate of base currency)}}$
- *Hence, currency of the country with higher inflation rate is expected to depreciate and currency of the country with lower inflation rate is expected to appreciate.*

2. Non-Deliverable Forward Contract

- *As name says, NDFC is a forward contract where the profit/loss on the contract is settled in cash.*
- *Profit is calculated by taking the difference between the agreed upon exchange rate (i.e., the forward rate) and the spot rate at the time of settlement, for an agreed upon notional amount of currency. NDFs are commonly quoted for time periods of one month up to one year.*

3. Types of currency exposures

A. Translation Exposure*: Also known as 'Accounting Exposure', it refers to the gain/loss caused by the* ***translation*** *of foreign currency asset or liability. It arises because 'the exchange rate on the*

date when transaction was recorded' was different from 'the exchange rate on the date when financial statements are reported.

*Example: An exporter has sold goods worth $500 and exchange rate is ₹/$ 65. Now, at year end, if exchange rate changes to ₹/$ 60. Loss due to Translation Exposure is (65-60)*500= ₹2,500.*

B. ***Transaction Exposure:*** *It refers to the gain/loss which arises due to difference in the exchange rates on 'the date when transaction was entered into' and 'the date when the transaction is settled'. It deals with the higher or lower cash flows in home currency required to settle any obligation in foreign currency.*

Example: An importer purchased goods worth $100 and exchange rate is ₹/$ 55. Now, at the time of payment, if exchange rate changes to ₹/$ 60. Loss due to Transaction Exposure is ₹500.

C. ***Economic Exposure:*** *It refers to the extent to which economic value of a company can decline due to change in exchange rates. Even if the company is not directly dealing in transactions denominated in foreign currency, it is exposed to economic risk. The exposure is on account of macro level factors such as:*

- *Change in the prices of inputs used or output sold by competitors (giving them advantage)*
- *Reduction in demand by the foreign importer due increased prices in his HC (if invoicing is done in exporter's HC, then importer will have to pay more in his HC to by same amount of FC)*

Difference between Transaction and Economic Exposure:

Transaction Exposure	*Economic Exposure*
▪ *Is direct in Nature*	▪ *Is indirect in Nature*
▪ *Amount of exposure is known*	▪ *Amount of exposure in unknown*
▪ *Faced by only firms who have entered into FC transactions*	▪ *Faced by all the firms whether they have entered into FC transactions or not*
▪ *Easy to hedge*	▪ *Difficult to hedge*

4. Techniques of hedging transaction exposure or currency risk

Internal Hedging Techniques

- ✓ **Invoicing**
- ✓ **Leading & Lagging**
- ✓ **Netting**
- ✓ **Matching**
- ✓ **Price Variation**
- ✓ **Asset & Liability Management**

External Hedging Techniques

- ✓ **Forward Cover**
- ✓ **Money Market Cover**
- ✓ **Future Cover**
- ✓ **Options Cover**
- ✓ **Swap Cover**

- ***Invoicing:*** *Companies engaged in export and import are concerned with decisions relating to the currency in which goods and services are to be traded (invoiced). Trading in a foreign currency*

gives rise to transaction exposure whereas, trading purely in a company's home currency has no currency risk.

- ***Leading & Lagging:*** *Leading and Lagging refer to adjustments in the times of payments in foreign currencies. Leading means advancing the timing of payments and receipts. Lagging means postponing (delaying) the timing of payments and receipts. These techniques are aimed at taking advantage of expected appreciation or depreciation of relevant currencies.*
- ***Settlement Netting or*** *(only)* ***Netting:*** *Netting means adjusting receivable and payables. Under this technique, group companies merely settle inter affiliate indebtedness for the net amount owing. The reduced number and amount of transaction leads to savings in transaction cost (such as buy/sell spreads in the spot and forward markets) and administrative cost resulting from currency conversion.*
- ***Matching:*** *Although, 'netting' and 'matching' are used interchangeably, there is a difference between the two. Netting is a term applied to potential cash flows within group companies whereas matching can be applied to both inter-company and to third-party balancing. Matching is a mechanism whereby a company matches its foreign currency inflows with its foreign currency outflows in respect of amount and approximate timing. Receipts in a particular currency are used to make payments in that currency thereby reducing the need for a group of companies to go to the foreign exchange markets only for the unmatched portion of foreign currency cash flows.*
- ***Price Variation:*** *Price variation involves increasing selling prices to counter the adverse effects of exchange rate change.*
- ***Asset and liability management:*** *can involve aggressive or defensive postures. In the aggressive attitude, the firm increases exposure of inflows denominated in strong currencies or increases exposure of outflows denominated in weak currencies. The defensive approach involves matching cash inflows and outflows according to their currency of denomination, irrespective of whether they are in strong or weak currencies.*

5. Exposure Netting

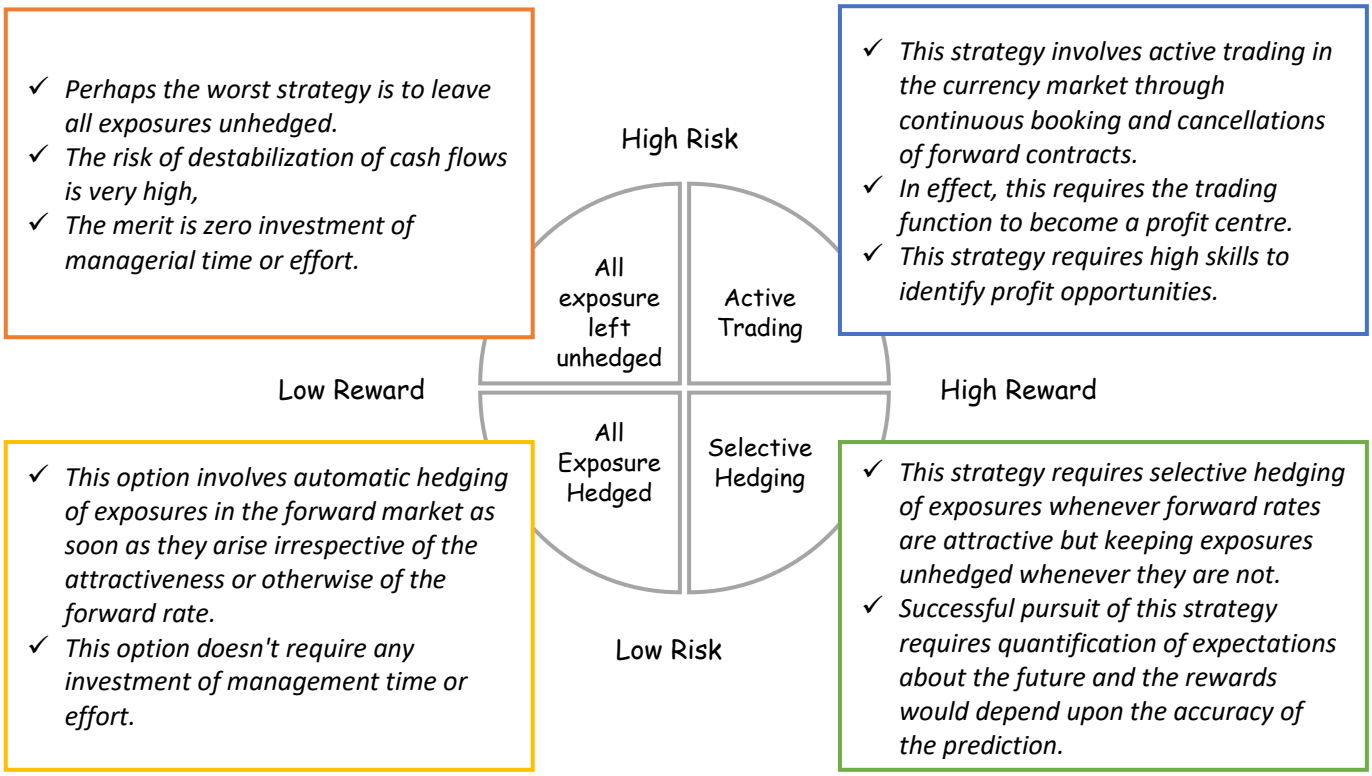
- *Exposure Netting refers to offsetting exposure in one currency with exposure in the same or another currency, where exchange rates are expected to move in such a way that loses (or gains) on the first exposed position are offset by gains (or losses) on position in the second currency.*
- *The objective of the exercise is to offset the likely loss in one exposure by likely gain in another.*
- *This is a method of hedging foreign exchange exposure is different from forward and option contracts. This method is similar to portfolio approach in handling systematic risk. (Recollect that to reduce the beta of the portfolio, position on index futures was taken such that loss (gain) on portfolio is offset by gain (loss) on index futures).*

6. Strategies for Exposure Management

There are four strategies of foreign exchange exposure management:

1. *High risk – High reward*
2. *Low risk – Reasonable reward*
3. *Low risk – Low reward*
4. *High risk – Low reward*

These strategies can be remembered easily by understanding below graph showing different combinations of risk and reward.

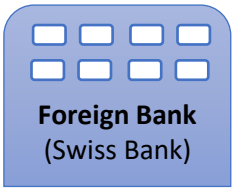


7. Foreign Currency Accounts

Nostro (Our account with you): *This is a current account maintained by a domestic bank with a foreign bank in foreign currency.*

HDFC will call its account with Swiss Bank as **Nostro Account**.

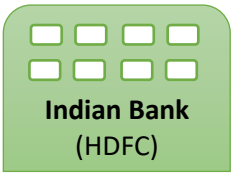
Vostro (Your account with us): *This is a current account maintained by a foreign bank with a domestic bank in home currency.*

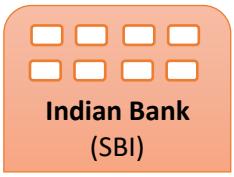


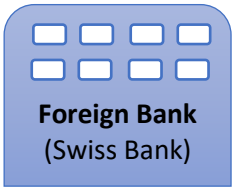
HDFC will call, the account of Swiss Bank maintained with it, as **Vostro Account**.

We can say that, in the given case, the same account, if seen, from HDFC's point of view, is Vostro account, whereas, from Swiss Bank's point of view, it is Nostro account.

Loro Account (Their account with you): *This is a current account maintained by one domestic bank on behalf of other domestic bank in foreign bank in a foreign currency.*







SBI will call, the Nostro account of HDFC maintained with Swiss bank, as **Loro Account**.

11. INTERNATIONAL FINANCIAL MANAGEMENT

1. International or Multinational Cash Management

Cash Management Systems (CMS) in case of companies operating in multiple countries includes:

Centralized CMS: *Each branch's cash position is managed by single centralized authority.*

There is a Cash Management Centre.
Local borrowings & investments are not allowed.
Net cash requirement is lower.
Involves flow of excess or deficit cash among branches.

Decentralized CMS: *Each branch is viewed as separate undertaking and cash positions are managed separately.*

There is no Cash Management Centre.
Local borrowings & investments are allowed.
Net cash requirement is higher.
No such flows are involved.

2. Sources of International Finance

1. ***Foreign Bonds:***
2. ***Euro Bonds:***

Bond issued by any company in a currency which is: →	*native to the company*	*not native to the company*
native to the country where the bond is issued	***Domestic Bond***	***Foreign Bond***
not native to the country where the bond is issued	***Eurobond***	

Hence, we can say that:

Domestic Bond: *Though, we can understand meaning of domestic bond from the above table, but it is not a source of international finance, hence won't form part of the answer here.*

Foreign bonds *are debt instrument denominated in a currency not native to borrower (borrower means the company issuing the bonds) but native to the country where the bonds are issued. For example: Rupee denominated bonds of Apple Inc. issued in India or Dollar denominated bonds of TCS Ltd. issued in USA. These bonds have restrictions placed by government of the country where they are issued.*

Euro bonds *are debt instrument denominated in a currency which is not native to the country where the bonds are issued. For example: Dollar denominated bond of any company issued in India or Yen denominated bond issued in USA. (Note that, its name 'Euro Bond' has no relation with Europe or Euro currency).*

3. ***Foreign Currency Convertible Bonds (FCCBs):*** *Foreign bonds are debt instrument denominated in a currency not native to borrower but native to the country where the bonds are issued.* ***FCCB*** *is*

a type of foreign bond which gives the bondholder an option to convert the bond into the stocks of the company. It is a mix of debt and equity instrument, as it acts like a bond by making regular coupon and principal payments and also gives the bondholder an option to convert it into stock.

- ***Benefit to investor:*** *Buyer of this bond is benefitted by appreciation in the price of company's stock.*
- ***Benefit to issuer:*** *Due to attached equity option, coupon rate on such bonds is relatively lower.*

4. ***Euro Convertible Bond:*** *Euro bonds are debt instrument denominated in a currency which is not native to the country where the bonds are issued.* ***Euro Convertible bond*** *is a type of euro bond which has an option, attached to it, to convert it into the equity shares of the company. Euro option may carry two options:*
   - ***Call option:*** *Issuer has the option to call (buy) the bonds before redemption and issue equity shares.*
   - ***Put option:*** *Investor (holder) has the option to put (sell) the bonds before redemption and get equity shares against such bonds.*

5. ***ADR and GDR:*** *Since ADR and GDR are similar instruments and also because it becomes easy to remember, they have been explained together. But these concepts may be asked individually in exams, in which case below answer to be made specific.* *Depository receipt is a negotiable certificate denominated in currency not native to the company issuing it, representing its one or more local currency equity shares publicly traded in its home country. When such receipt is issued in:*

in US	→	it is called ADR
Outside of USA	→	it is called GDR

Mechanism of DRs:

Company issues local currency equity shares

↓

Such shares are kept with depository bank or depository's local custodian

↓

Against which, ADRs/GDRs are issued to foreign investors.

Other Important Points:

- *ADR is denominated in USD whereas, GDR can be denominated in USD, EUR or GBP.*
- *ADR and GDR trade in the same way as any other security, either on stock exchange or OTC market.*
- *Holders of ADR & GDR participate in the same economic benefits as an ordinary shareholder; however, they do not have voting rights.*

3. International Financial Centre *(SM 2024)*

IFC is the financial centre that caters to the needs of the customers outside their own jurisdiction. Broadly, speaking IFC is a hub that deals with flow of funds, financial products and financial services even though in own land but with different set of regulations and laws.

A. Benefits of IFC

1. *Opportunity for qualified professionals working outside India come here and practice their profession.*
2. *A platform for qualified and talented professionals to pursue global opportunities without leaving their homeland.*
3. *Stops Brain Drain from India.*
4. *Bringing back those financial services transactions presently carried out abroad by overseas financial institutions/entities or branches or subsidiaries of Indian Financial Market.*
5. *Trading of complicated financial derivative can be started from India.*

B. Constituents of IFC

1. *Highly developed Infrastructure: A leading edge infrastructure is a prerequisite for creating a platform to offer internationally competitive financial services.*
2. *Stable Political Environment: Destabilized political environment brings country risk for investment by foreign nationals. Hence, to accelerate foreign participation in growth of financial centre, stable political environment is a prerequisite.*
3. *Strategic Location: The geographical location of the finance center should be strategic such as near to airport, seaport and should have friendly weather.*
4. *Quality Life: The quality of life at the center should be good as center retains highly paid professionals from own country as well from outside.*
5. *Rationale Regulatory Framework: Rationale legal regulatory framework is another prerequisite of international finance center as it should be fair and transparent.*
6. *Sustainable Economy: The economy should be sustainable and should possess capacity to absorb all the shocks as it will boost investors' confidence.*

4. Sovereign Funds *(SM 2024)*

A Sovereign Wealth Fund (SWF) is a state-owned investment fund comprised of money generated by the government. This money is generally derived by Government from country's own surplus reserves. SWFs provide a benefit for a country's economy and its citizens. Since it is created by the Government the legal basis on which these are created varies from Government to Government.

*The popular **Sources for funding the SWF** are:*

- *Surplus reserves from state-owned natural resource revenues and trade surpluses,*
- *Bank reserves that may accumulate from budgeting excesses,*
- *Foreign currency operations,*
- *Money from privatizations, and*
- *Governmental transfer payments.*

*Some **Common Objectives of a SWF** are:*

- *Protection & Stabilization of the budget and economy from volatility in revenues or exports*
- *Diversify from non-renewable commodity exports*
- *Earn better returns than returns on foreign exchange reserves*

- *Assist monetary authorities dissipate unwanted liquidity*
- *Increase savings for future generations*
- *Fund social and economic development*
- *Ensuring Sustainable long term capital growth for target countries*
- *Political strategy*

12. INTEREST RATE RISK MANAGEMENT

1. Interest Rate Swaps

Interest Rate Swap is an agreement to exchange cash flows linked to different interest rates.

Types of interest rate swaps:

1. ***Plain Vanilla Swap:*** *Also called as Generic Swap, it involves the exchange of interest on fixed rate loan for interest on floating rate loan. Floating rate can be LIBOR, MIBOR, Prime Lending Rate etc. Fixed interest payments are calculated on 30 days/360 days basis whereas, Floating interest payment is calculated on actual number of days/360 days basis.*
2. ***Basis Rate Swap****: Also called as Non-Generic Swap, it is similar to plain vanilla swap with the difference that payments to be exchanged under the swap are based on the two different variable rates (variable rates means floating rates only). For example, 1 month LIBOR may be exchanged for 3-months LIBOR. In other words, Both the legs of swap are floating but are measured against different benchmarks.*
3. ***Asset Swap:*** *It is also like plain vanilla swaps, with the difference that it is an exchange of fixed rate investments such as bonds which pay a guaranteed coupon rate with floating rate investments such as an index.*
4. ***Amortising Swap:*** *It is an interest rate swap in which the notional principal, on which interest payments are calculated, declines during the life of the swap. They are particularly useful for borrowers who have issued redeemable bonds or debentures. It enables them to hedge interest payments based on the redemption profile of bonds or debentures.*

2. Swaption

An interest rate swaption is simply an option on interest rate swap. It gives the holder the right but not the obligation to enter into an interest rate swap at a specific date in the future, at a particular fixed rate and for a specified term.

- *A 3-month into 5-year swaption would mean an option to enter into a 5-year interest rate swap after 3 months.*
- *The swaption premium is expressed as basis points.*
- *There are two types of swaption contracts: -*
  - *A **fixed rate payer swaption** gives the owner of the swaption the right but not the obligation to enter into a swap where they pay the fixed leg and receive the floating leg.*
  - *A **fixed rate receiver swaption** gives the owner of the swaption the right but not the obligation to enter into a swap in which they will receive the fixed leg, and pay the floating leg.*

3. Benchmark Rates *(SM 2024)*

Benchmark interest is an interest rate that are used to determine other interest rates. These rates are also known as 'Reference Rates'. These rates are very important in any in financial transactions as

they form the basis of financial contracts such as bank overdrafts, loans, mortgages and are also used in other complex financial transactions.
The benchmark rates are widely used in interest rate derivative transactions such as Forward, Future, Option or Swap Contracts. The Benchmark rate also forms the basis for floating rate loans.

13. BUSINESS VALUATION

1. Enterprise Value

- *Enterprise value is the true economic value of a company. It is the theoretical value of business of target company under the takeover.*
- *It is calculated as:*

  Market Capitalization + Long Term Debt + Minority Interest - Cash and Cash Equivalents
- *Enterprise value considers both equity and debt in its valuation of the firm, and therefore it is least affected by the capital structure of the firm.*
- *Enterprise Value based multiples (such as EV/sales, EV/EBITDA, etc.) are more reliable than Equity Value based multiples (such as P/E, P/B Ratio, etc.) because Equity Value based multiples focus only on equity claim.*

2. Impact Of ESG on Valuation *(SM 2024)*

Environmental, Social, Governance (ESG) is a framework designed to be embedded into an organization's strategy that considers ways in which value should be generated for all organizational stakeholders (such as employees, customers and suppliers and financiers).

The ESG performance and linked ratings have begun to play an influencing role for companies going to market to raise funds for future growth.

Traditional belief was that ESG was 'good to have' in the area of business ethics, sustainability, diversity and community. However, with the increased interests from different stakeholders groups, it is now moving into the 'must-to-have' territory.

14. MERGERS, ACQUISITIONS AND CORPORATE RESTRUCTURING

1. Rationale behind Mergers | Benefits of Mergers

1. ***Synergy:***
   - *Synergy means the combined value of two firms or companies is more than their individual value.*
   - *Cost saving due to non-duplication of functions and economics of large scale are few reasons for synergy benefits.*
   - *These economies can be **real economies,** which means reduction in factor input per unit of output (means per unit fixed cost will reduce), or **pecuniary economics** which means actually paying lower prices for factor inputs for bulk transactions.*
2. ***Diversification:*** *Merger between two unrelated companies would lead to reduction in business risk, which in turn will increase the market value consequent upon the reduction in discount rate/ required rate of return. (meaning to say lower the risk, lower is the required rate of return).*
3. ***Taxation:*** *The provisions of set off and carry forward of losses as per Income Tax Act may be another strong season for the merger and acquisition. Thus, there will be Tax saving or reduction in tax liability of the merged firm.*
4. ***Growth:*** *Growth of any company by way of acquiring companies is called as inorganic growth. Merger and acquisition mode enables the firm to grow at a rate faster than the other mode like organic growth mode. The reason being the shortening of 'Time to Market'.*
5. ***Consolidation of Production Capacities and increasing market power****: Due to reduced competition, marketing power increases. Further, production capacity is increased by combining of two or more plants.*

2. Types of Mergers

1. ***Horizontal Merger:*** *The two companies that merge, are in the same industry selling similar or competing products. Normally the market share of the new consolidated company would be larger and it is possible that it may move near monopoly to avoid competition.*
2. ***Vertical Merger:*** *This merger happens when two companies having buyer-seller relationship come together to merge.*
3. ***Conglomerate Mergers:*** *Such mergers involve firms engaged in unrelated type of business operations. In other words, the business activities of acquirer and the target are related neither horizontally nor vertically.*
4. ***Congeneric Merger:*** *In these mergers, the acquirer and the target companies are related through basic technologies, production processes or market. The acquired company represents an extension of product-line or technologies of the acquirer.*
5. ***Reverse Merger:*** *Next question...*

3. Reverse Merger or Takeover by Reverse Bid

Normally, the company taken over is the smaller company than acquirer. But, in a 'reverse merger', a smaller company gains control of a larger one.

*Below **three tests** should be fulfilled before an arrangement can be termed as a reverse takeover:*

1. *the assets of the target company are greater than acquirer company,*
2. *equity capital to be issued by acquirer against acquisition exceeds its existing issued capital **and***
3. *the change of control in the acquirer company through the introduction of a minority holder or group of holders.*

*Such mergers normally involve acquisition of a public by a private company, as it helps private company to by-pass lengthy and complex process required for public issue. This type of merger is also known as **back door listing**.*

4. Demerger or Disinvestment or Divestitures: Meaning and Reasons

It means a company selling one of its divisions or undertakings to another company or creating an altogether separate company. It has following advantages:

- ✓ *Attention on core areas of business*
- ✓ *Division not contributing to revenues*
- ✓ *Size of the firm may be too big to handle*
- ✓ *Need cash in for other investment opportunity*

5. Types of Demerger

1. ***Sell-off:** A sell off is the sale of an asset, factory, division or subsidiary by one entity to another for a purchase consideration payable either in cash or in the form of securities.*
2. ***Split-up:** This involves breaking up of the entire firm into separate legal entities for each business division. The parent firm no longer legally exists and only the newly created entities survive individually.*
3. ***Spin-off:** In this case, a part of the business is separated and created as a separate firm. The existing shareholders of the firm get proportionate ownership. So, there is no change in ownership and the same shareholders continue to own the newly created entity.*
4. ***Equity Carve Outs:** This is like spin off, however, some shares of the new company are sold in the market by making a public offer. This brings cash in the company.*

6. Management Buy-outs (MBO) & Leveraged Buy-out (LBO)

1. ***Management Buy Outs:** Since, management of the company has better understanding of the business and operations of the company, they sometimes consider buying out a company facing financial difficulties. Buyouts initiated by the management team of a company are known as a management buyout. In this type of acquisition, the company is bought by its own management team.*
2. ***Leveraged Buyout:***
   - *An acquisition of a company or a division of that company which is financed entirely or partially (50% or more) using borrowed funds is termed as a leveraged buyout.*

- *The target company no longer remains public after the leveraged buyout, hence the transaction is also known as **going private**.*
- *After an LBO, the target entity is managed by private investors, which makes it easier to have a close control of its operational activities. The intention behind LBO transaction is to improve operational efficiency of a firm and increase sales volumes, which leads to improved cash flows.*
- *The extra cash flow generated will be used to pay back the debts in LBO transaction.*
- *The LBO does not stay permanent. Once the LBO is successful in increasing profit margins & cash flows and debt is paid back, it will go public again.*

7. Special Purpose Acquisition Companies *(SM 2024)*

It is an entity is set up with the objective to raise funds through an IPO to finance a merger or acquisition of an unidentified target within a specific time. It is commonly known as a blank cheque company.

The main objective of SPAC is to raise money, despite not having any operations or revenues. The money raised from the public is kept in an escrow account, which can be used while making the acquisition. Shareholders have the option to redeem their shares if they are not interested in participating in the proposed merger.

Finally, if the merger is approved by shareholders, it is executed, and the target private company or companies become public entities. However, in case the acquisition is not made within stipulated period of the IPO, the SPAC is delisted, and the money is returned to the investors.

The current SPAC transactions are not supported by regulatory framework in India like the Companies Act 2013 or SEBI Act.

SPAC approach offers several advantages over traditional IPO, such as providing companies access to capital, even when market volatility and other conditions limit liquidity.

It is typically more expensive for a company to raise money through a SPAC than an IPO.

15. Start-up Finance

1. Innovative ways of financing or Sources of funding a Start-up

1. ***Personal financing:*** *Personal financing means investing one's own money. It is important because most of the investors will not put money in your start-up if they see that you have not contributed any money from your personal sources.*
2. ***Personal credit lines:*** *One qualifies for personal credit line based on one's personal credit efforts. However, banks are very cautious while granting personal credit lines. They provide this facility only when the business has enough cash flow to repay the line of credit.*
3. ***Family and friends.*** *These are the people who generally believe in you, without even thinking that your idea works or not. However, the loan obligations to friends and relatives should always be in writing as a promissory note.*
4. ***Crowdfunding.*** *Crowdfunding is the use of small amounts of capital from a large number of individuals to finance a new business. Crowdfunding makes use of vast networks of people on social media and crowdfunding websites to bring entrepreneurs and investors together.*
5. ***Microloans.*** *Microloans are small loans given by individuals at a lower interest to new business ventures. These loans can be issued by a single individual or group of individuals who in aggregate contribute to the total loan amount.*
6. ***Peer-to-peer landing:*** *In this process group of people come together and lend money to each other. Many small and ethnic business groups having similar faith or interest generally support each other in their start up endeavours.*
7. ***Vendor Financing.*** *Vendor financing is the form of financing in which a company lends money to its customers so that he can buy products from the company itself. Vendor financing also takes place when many manufacturers and distributors are convinced to defer payment until the goods are sold. However, this depends on one's credit worthiness.*
8. ***Factoring accounts receivables.*** *In this method, a facility is given to the seller who has sold the good on credit to fund his receivables till the amount is fully received. So, when the goods are sold on credit, the factor will pay most of the amount up front and rest of the amount later.*
9. ***Purchase order financing:*** *The start-ups not able to find a large new order because they don't have the necessary cash to produce and deliver the product. Purchase order financing companies often advance the required funds directly to the supplier. This allows the transaction to complete and profit to flow up to the new business.*

2. Modes of Financing a Start-up

1. Angel Investors

- ✓ *Angel investors are **affluent individuals who inject capital** for start-ups in exchange for ownership equity or convertible debt.*
- ✓ *Angel investors invest in small start-ups. The capital that angel investors provide may be a one-time investment to **help the business propel or an ongoing injection of money** to support and carry the company through its difficult early stages.*

- ✓ *Angel investors are focused on **helping start-ups take their first steps**, rather than the possible profit they may get from the business.*
- ✓ *Angel Investors typically **invest their own money**, unlike venture capitalists who invest money pooled from many investors.*
- ✓ *Angel investors are also called informal investors, angel funders, private investors, seed investors or business angels. Angel Investors **usually represent individuals**, but the entity that actually provides the funds may be an LLP, trust, an investment fund or some kinds of vehicle.*

2. Venture Capital Funds

- ***Venture capital** is the money provided by professionals who invest in young and rapidly growing companies that have the potential to develop into significant economic contributors.*
- ***Venture Capital Fund** (just like a mutual fund) means investment vehicle that manage funds of investors seeking to invest in startup and small businesses with exceptional growth potential. Venture Capital funds invest in equity and debt instruments of these businesses.*
- *Venture Capital Funds generally*
  - *Finance new and rapidly growing companies*
  - *Purchase equity securities*
  - *Assist in the development of new products or services*
  - *Add value to the company through active participation.*
- *Investors in Venture Capital Funds include Financial Institutions, Banks, Pension Funds, HNIs, etc.*

3. Bootstrapping

English word 'Bootstrap' means 'get oneself out a situation using existing resources'. Bootstrapping means when an individual attempt to found and build a company from personal finances or from the operating revenues of the new company.

Methods in which a start-up firm can bootstrap:

A. Trade Credit

- *When a person is starting his business, suppliers are reluctant to give trade credit. They insist to make upfront payment for the goods supplied.*
- *Preparing a well-crafted financial plan and convincing supplier about it can help to get credit. For small business organization, the owner can be directly contacted and for big firm, the Chief Financial Officer (CFO) can be contacted.*
- *Along with financial plan, the owner or the CFO has to be explained about the business and the need to get the first order on credit in order to launch the venture.*

B. Factoring

- *This is a financing method where accounts receivable of a business organization is sold to a commercial finance company to raise capital.*
- *Factoring frees up the money that would otherwise be tied to receivables. This money can be used to generate profit through other avenues of the company.*

- *It can also reduce costs associated with maintaining accounts receivable such as bookkeeping, collections and credit verifications*

C. Leasing

- *This method of bootstrapping involves taking the equipment on lease rather than purchasing.*
- *It reduces the amount of capital to be employed in the business along with reducing the risk of incurring fixed capital expenditure.*
- *Both lessor and lessee enjoy the tax benefit, respectively on depreciation on fixed asset and lease rentals under the agreement.*

3. Pitch Presentation and its Approach

While raising funds from the investors like Angel Investors or Venture Capital Funds, a presentation is required to be made to them; called as Pitch Presentation. *Pitch deck presentation is a short and brief presentation to investors explaining about the prospects of the company and why they should invest into the start-up business. It is a quick overview of business plan and convincing the investors to put some money into the business.*

How to approach a pitch presentation?

1. ***Introduction:*** *First step is to give a brief account of yourself i.e. who are you? What are you doing? Use this opportunity to get your investors interested in your company.*
2. ***Team:*** *The next step is to introduce the team to the investors. The reason is that the investors will want to know the people who are going to make the product or service successful.*
3. ***Problem:*** *In a pitch presentation, the promoter should be able to explain the problem he is going to solve.*
4. ***Solution:*** *It is very important to describe how the company is planning to solve the problem and the investors should be convinced that the newly introduced product or service will solve it.*
5. ***Marketing or Sales:*** *The market size of the product must be communicated to the investors. Marketing strategy of the start-up is also required to be explained.*
6. ***Projections or Milestones:*** *Projected financial statements give a brief idea about where is the business heading. It tells us that whether the business will be making profit or loss. Financial projections include three basic documents that make up a business's financial statements. (covered specifically in the next heading...)*
7. ***Competition:*** *Every business organization has competition even if the product or service offered is new and unique. It is necessary to highlight in the pitch presentation as to how the products or services are different from their competitors.*
8. ***Business Model:*** *The term business model is a wide term denoting core aspects of a business including operational process, offerings, target customers, strategies, infrastructure, organizational structures, etc. It is important to explain investors about the business model to generate revenues.*
9. ***Financing:*** *If a start-up has already raised money, it is preferable to talk about how much money has been raised, who invested money into the business and what they did about it. If no money*

has been raised till date, an explanation can be made regarding how much work has been accomplished with the help of limited funds available with the company.

4. Documents for Financial Projections during Pitch Presentation

1. ***Income statement:*** *A projected income statement shows much money the business will generate by projecting income and expenses, such as sales, cost of goods sold and expenses. For your first year in business, you'll want to create a monthly income statement. For the second year, quarterly statements will suffice. For the following years, you'll just need an annual income statement.*
2. ***Cash flow statement:*** *A projected cash flow statement will depict how much cash will be coming into the business and out of that cash how much cash will be utilized into the business. At the end of each period (e.g., monthly, quarterly, annually), one can tally it all up to show either a profit or loss.*
3. ***Balance sheet:*** *The balance sheet shows the business's overall finances including assets, liabilities and equity. Typically, one will create an annual balance sheet for one's financial projections.*

5. Characteristics of Venture Capital Financing

1. ***Long time horizon:*** *The VC fund would invest with a long-time horizon in mind. Minimum period of investment would be 3 years and maximum period can be 10 years.*
2. ***Lack of liquidity****: When VC fund invests, it takes into account the liquidity factor. It assumes that there would be less liquidity on the equity shares of business it invested in. They adjust this liquidity premium against the price and required return. It will plan its investments into different businesses accordingly.*
3. ***High Risk:*** *VC fund would not hesitate to take risk. It works on principle of high risk and high return. So, high risk would not eliminate the investment choice for a venture capital, if it is commensurately rewarded for taking high risk.*
4. ***Equity Participation:*** *Most of the time, VC fund would be investing in the form of equity of a company. This would help the Venture Capitalist participate in the management and help the company grow. This would also help them to supervise a lot of board decisions.*

6. Advantages of bringing Venture Capital in the company:

1. *VC brings long- term equity capital into the company which provides a* ***solid capital base for future growth****.*
2. *The venture capitalist is a* ***business partner, sharing both, the risks and rewards****. Venture capitalists are rewarded with business success and capital gain.*
3. *The venture capitalist is able to* ***provide practical advice and assistance*** *to the company based on past experience with other companies which were in similar situations.*
4. *The venture capitalist also has* ***a network of contacts in many areas*** *that can add value to the company.*
5. *The venture capitalist may be capable of* ***providing additional rounds of funding*** *which the company would require to finance the growth.*

6. *Venture capitalists are experienced in the process of **preparing a company for an initial public offering** (IPO) of its shares onto the stock exchanges.*

7. Stages of Venture Capital Funding

Stage of Funding	Risk	Activity to be Financed
Seed Money	Extreme	Low level financing needed to prove a new idea.
Start-up	Very High	Early stage firms that need funding for expenses associated with marketing and product development.
First-Round	High	Early sales and manufacturing funds.
Second-Round	Sufficiently High	Working capital for early stage companies that are selling product, but not yet turning in a profit.
Third Round	Medium	Expansion of a newly profitable company (also called as Mezzanine financing)
Fourth-Round	Low	Finance the "going public" process (also called as bridge financing)

8. Venture Capital Investment Process

Deal Origination

VC operates directly or through intermediaries who get them deal. Start-up would give a detailed business plan to VC, called as Investment Memorandum which consists of business model, financial plan and exit plan.

Screening

Screening process would help to select the company for further processing. The screening decision would take place based on the information provided by the company.

Due Diligence

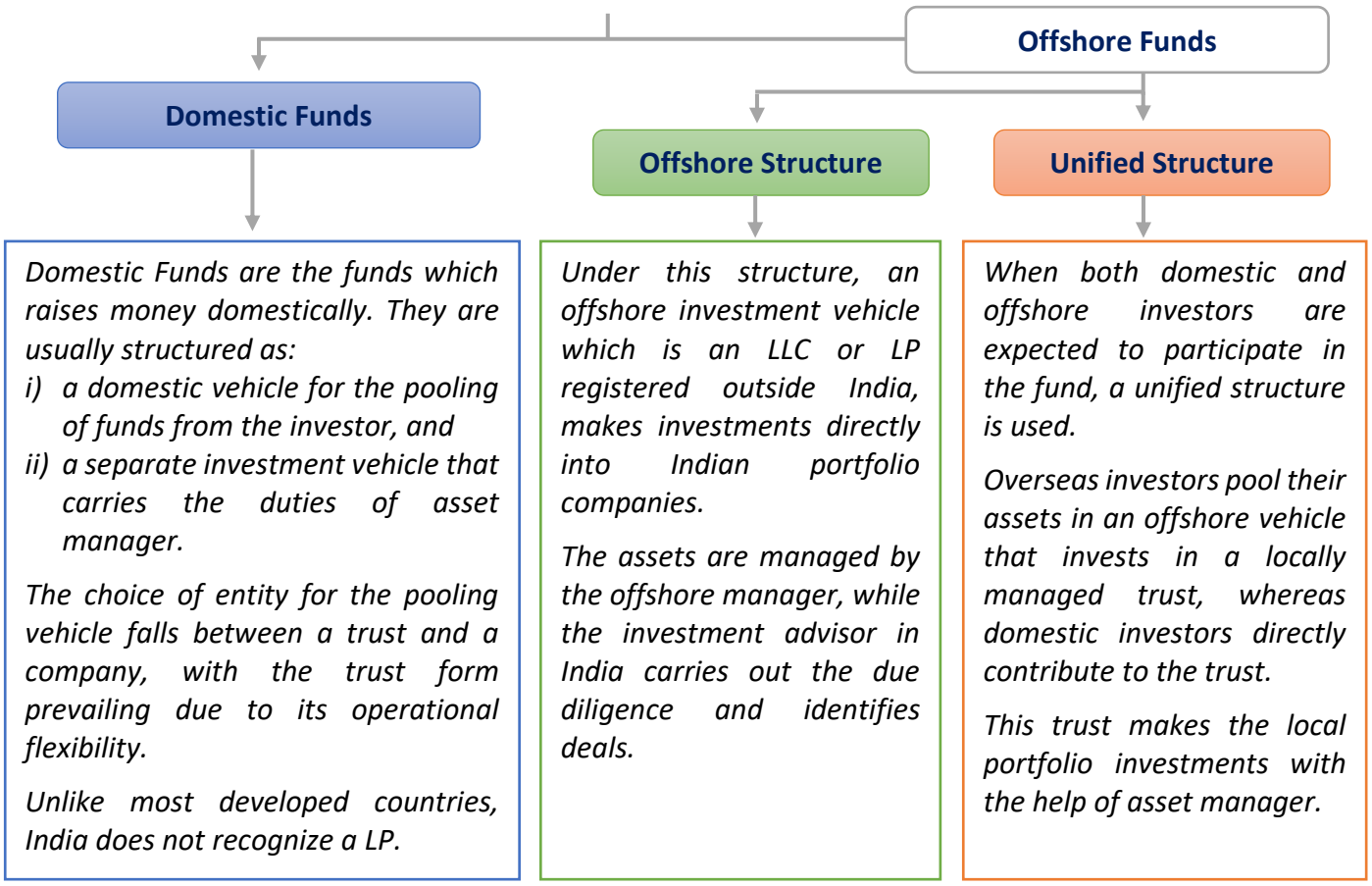
Due diligence is the process by which the VC would try to verify the correctness of the documents taken. This is generally handled by external bodies, mainly renowned consultants.

Deal Structuring

*The deal is structured in such a way that both parties win. In many cases, the convertible structure is brought in to ensure that the promoter retains the right to buy back the share. Besides, in many structures to facilitate the exit, the VC may put a condition that promoter must sell a part of his stake along with the VC. Such a clause is called **tag-along** clause.*

Post Investt Activity	*In this section, the company has to adhere to certain guidelines like strong MIS, strong budgeting system, strong corporate governance and other covenants of the VC and periodically keep the VC updated about certain milestones.*
Exit plan	*Exit happens in two ways: one way is 'sell to third party'. This sale can be in the form of IPO or Private Placement to other VCs. The second way to exit is that promoter would give a buy back commitment at a pre agreed rate.*

9. Structure of Venture Capital Fund in India



10. Difference between start-ups and entrepreneurship. Priorities and challenges which start-ups in India are facing

Start-ups are different from entrepreneurship in the following way:

1. *Start- up is a part of entrepreneurship. Entrepreneurship is a broader concept and it includes a start-up firm.*
2. *The main aim of start-up is to build a concern and conceptualize the idea into a reality and build a product or service. On the other hand, the major objective of an already established*

entrepreneurship concern is to attain opportunities with regard to the resources they currently control.

3. *A start-up generally does not have a major financial motive whereas an established entrepreneurship concern mainly operates on financial motive.*

Priority related to start-ups in India:

- *The priority is on bringing more and more smaller firms into existence. The objective is to encourage self-employment rather than large, scalable concerns.*
- *The focus is on need based, instead of opportunity based entrepreneurship.*

Challenges related to start-ups in India:

- *The main challenge with the start-up firms is in getting the right talent. Lack of skilled workforce can hinder the chances of a start-up succeeding.*
- *Further, start-ups had to comply with numerous regulations which escalate its cost.*

11. Definition of Start-up under Start-up India Initiative to avail benefits

Startup India scheme was initiated by the Government of India on 16th of January, 2016. As per GSR Notification 127 (E) dated 19th February 2019, an entity shall be considered as a Startup:

1. *Upto a period of ten years from the date of incorporation/ registration, if it is incorporated as a private limited company (as defined in the Companies Act, 2013) or registered as a partnership firm (registered under section 59 of the Partnership Act, 1932) or a limited liability partnership (under the Limited Liability Partnership Act, 2008) in India.*
2. *Turnover of the entity for any of the financial years since incorporation/ registration has not exceeded ₹ 100 crores.*
3. *Entity is working towards innovation, development or improvement of products or processes or services, or if it is a scalable business model with a high potential of employment generation or wealth creation.*

Provided that an entity formed by splitting up or reconstruction of an existing business shall not be considered a 'Startup'.

*Apart from the support from government, there are **Other reasons why India has become a sustainable environment for start-ups**: (SM 2024)*

1. ***The Pool of Talent:** Our country has a big pool of talent. There are millions of students graduating from colleges and B-schools every year. Many of these students use their knowledge and skills to begin their own ventures, and that has contributed to the startup growth in India.*
2. ***Cost Effective Workforce:** India is a young country with over 10 million people joining the workforce every year. The workforce is also cost effective. So, compared to some other countries, the cost of setting up and running a business is comparatively lower.*
3. ***Increasing use of the Internet:** India has the world's second-highest population, and after the introduction of affordable telecom services, the usage of internet has increased significantly. It*

has even reached the rural areas. India has the second-largest internet user base after China, and companies as well as start-ups are leveraging this easy access to the internet.

4. ***Technology:*** *Technology has made the various processes of business very quick, simple and efficient. There have been major developments in software and hardware systems due to which data storage and recording has become an easy task. Indian startups are now increasingly working in areas of artificial intelligence and blockchain technologies which is adding to the growth of businesses.*
5. ***Variety of Funding Options Available:*** *Earlier there were only some very traditional methods available for funding a startup. Now, there are numerous options and opportunities available. Start-up owners can approach angel investors, venture capitalists, seed funding stage investors, etc.*

12. Succession Planning in Business *(SM 2024)*

Succession planning is the process of identifying the critical positions within an organization and developing action plans for individuals to take the charge of those positions. A succession plan identifies future need of people with the skills and potential to perform leadership roles.

A. Need for succession planning

1. ***Risk mitigation:*** *If existing leader quits, then searches can take six-nine months for suitable candidate to close. Keeping an organization without leader can invite disruption, uncertainty, conflict and endangers future competitiveness.*
2. ***Cause removal:*** *If the existing leader is culpable of gross negligence, fraud or misconduct while discharging duties and has been barred from undertaking further activities by court, arbitral tribunal, management, stakeholders or any other agency.*
3. ***Talent pipeline:*** *Succession planning keep employees motivated and determined as it can help them obtaining more visibility around career paths expected, which would help in retaining the knowledge bank created by company over a period of time and leverage upon the same.*
4. ***Conflict Resolution Mechanism:*** *This planning is very helpful in promoting open and transparent communication and settlement of conflicts.*
5. ***Aligning:*** *In family-owned business succession planning helps to align with the culture, vision, direction and values of the business.*

B. Business succession strategy

Step 1. Evaluate key leadership positions: To evaluate which roles are critical, risk or impact assessment can be performed. Generally, these are such positions which would bring transformation to the entire business or create strategic direction for the organization.

Step 2. Map competencies required for above positions: In this step, one needs to identify qualifications, behavioural and technical competencies required to perform the role successfully.

Step 3. Identify competencies of current workforce: Identifying what are possible internal options that can deliver results as expected in Step-2, and also if there is a need for training and

development of certain skills required. The organization should also place weight on whether is there a need to search outside the organization.

Step 4. Bridge Leader: In family-owned business appointment of an outsider as 'bridge leader' will help to develop the business and prepare young family members for leadership role.

C. Challenges in implementing Succession Planning

1. *Founder mindset might be different than the corporate mindset: The way founder's brains are wired is different from the way that a traditional corporate manager thinks, and this puts off seasoned corporate leaders from joining even matured start-ups.*
2. *Premature for startups to implement business succession: Certain startups are at early growth stage and too much of processes would lead to growth slow-down and hence they are not in a current stage for implementing business succession planning.*
3. *Founders are the face of startups: One cannot imagine a startup without a founder who initiated the idea and executed it and in his/ her absence succession planning can become difficult.*