NISM CERTIFICATION EXAMINATION WORK BOOK

X-A

Investment Adviser

Level-1

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An Educational Initiative of SEBI

Workbook for

NISM-Series-X-A: Investment Adviser (Level 1)

Certification Examination

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This workbook has been developed to assist candidates in preparing for the National Institute of Securities Markets Series-X-A: Investment Adviser (Level 1) Certification Examination.

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Dr. CKG Nair
Director

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About NISM Certifications

The School for Certification of Intermediaries (SCI) at NISM is engaged in developing and administering Certification Examinations and CPE Programs for professionals employed in various segments of the Indian securities markets. These Certifications and CPE Programs are being developed and administered by NISM as mandated under Securities and Exchange Board of India (Certification of Associated Persons in the Securities Markets) Regulations, 2007.

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Certification creates quality market professionals and catalyzes greater investor participation in the markets. Certification also provides structured career paths to students and job aspirants in the securities markets.

About the Level 1 Certification Examination for Investment Adviser

The examination seeks to create a common minimum knowledge benchmark for individual investment adviser or principal officer of a non-individual investment adviser and persons associated with investment advice under SEBI (Investment Advisers) Regulations, 2013.

An individual investment adviser or principal officer of a non-individual investment adviser, registered under SEBI (Investment Advisers) Regulations, 2013 is required to pass both the levels (i.e. NISM-Series-X-A: Investment Adviser (Level 1) Certification Examination and NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination to fulfill the requirements under SEBI (Investment Advisers) Regulations, 2013.

The certification aims to enhance the quality of investment advisory and related services in the financial services industry.

Examination Objectives

On successful completion of the examination, the candidate should:

- Know the basics of personal financial planning, time value of money, evaluating the financial position of clients, debt management and loans.
- Understand about the Indian Financial Markets and Indian Securities market segments
- Get oriented to different kinds of investment products— equity, debt, derivatives and managed portfolios such as mutual funds, portfolio management services and alternative investment funds.
- Know about portfolio construction, performance monitoring and evaluation.
- Understand about operational aspects of investment management, key regulations, ethical issues for investment advisers and grievance redress system.

Assessment Structure

The examination consists of 90 multiple choice questions and 9 caselets/case-based questions. The assessment structure is as follows:

Multiple Choice Questions [90 questions of 1 mark each]	90
9 Case-based Questions [6 cases (each case with 5 questions of 1 mark each)] [3 cases (with 5 questions of 2 marks each]	 6*5*1 = 30 marks 3*5*2= 30 marks
	150 marks

The examination should be completed in 3 hours. The passing score for the examination is 60 percent which is 90 marks out of total 150 marks. There shall be negative marking of 25 percent of the marks assigned to a question.

How to register and take the examination

To find out more and register for the examination please visit www.nism.ac.in

Important

- Please note that the Test Centre workstations are equipped with either Microsoft Excel or OpenOffice Calc. Therefore, candidates are advised to be well versed with both of these softwares for computation of numericals.
- The sample caselets and multiple choice questions illustrated in the book are for reference purposes only. The level of difficulty may vary in the actual examination.

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	TOTAL MARKS	**150**

MODULE 1: PERSONAL FINANCIAL PLANNING

Chapter 1: Introduction to Personal Financial Planning

Chapter 2: Time Value of Money

Chapter 3: Cash Flow Management and Budgeting

Chapter 4: Debt Management and Loans

CHAPTER 1: INTRODUCTION TO PERSONAL FINANCIAL PLANNING

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Concept of Financial Planning
- Need for financial planning
- Scope of financial planning
- Concept of asset, liabilities and net worth
- Financial Planning process
- Financial advisory and execution

1.1 Understand the concept of Financial Planning

Financial planning aims at ensuring that a household or individual has adequate income or resources to meet current and future expenses and needs. The regular income for a household or individual may come from sources such as profession, salary, business or even investments. The normal activities of a household or individual and the routine expenses are woven around the regular income and the time when this is received. However, there are other expenses that may also have to be met out of the available income.

The current income that is received must also provide for a time when there will be no or low income being generated, such as in the retirement period. There may be unexpected expenses which are not budgeted, such as a large medical expense, or there may be needs in the future that require a large sum of money, such as education of children or buying a home, all of which require adequate funds to be made available at the right time. A portion of the current income is therefore saved and applied to creating assets that will meet these requirements. Financial planning refers to the process of streamlining the income, expenses, assets and liabilities of the household or individual to take care of both current and future need for funds.

Example

Vinod is 40 years old and earns Rs.2 lakhs a month. He is able to save about Rs.40,000 a month after meeting all the routine expenses of his family, paying the loans for his house, car and other needs. His investments include those for tax savings, bank deposits, bonds and some mutual funds. He pays premiums on life insurance for himself and his wife. Vinod is the sole earning member of his family and he believes he takes care of his finances adequately to take care of his current and future needs. How would financial planning help him?

The following are a set of indicative issues that financial planning will help Vinod resolve:

a) As the sole earning member has he made provisions for taking care of his expenses by creating an emergency fund if his current income is interrupted for any reason?
b) Does he have adequate insurance cover which will take care of his family's requirements in the event of his untimely demise?
c) Does the family have adequate health insurance cover so that any medical emergency does not use up all the accumulated savings?
d) What are his specific future expenses and how will he fund them?
e) If Vinod has to create a corpus to fund large expenses in the future, what is the size of the investment corpus he should build?
f) Given his current income and expenses is he saving enough to create the corpus required?
g) Will he have to cut back on his current expense or can he increase his current income so that his expenses in the present and the savings for the future are met?
h) What is the wealth Vinod has so far built from his savings and how can he best use it to meet his needs?
i) How should his saving be deployed? What kinds of investments are suitable for Vinod to build the required corpus?
j) How much of risk is Vinod willing and able to take with his investments? How would those risks be managed?
k) How should Vinod ensure that his savings and investments are aligned to changes in his income, expenses, future needs?

A formal treatment of the issues that Vinod faces will require a financial planning process to assess the current situation; identify the current and future needs; determine the savings required to meet those needs and put the savings to work so that the required funds are available to meet each need as planned.

Financial planning is thus a process that enables better management of the personal financial situation of a household or individual. It works primarily through the identification of key goals and putting in place an action plan to realign the finances to meet those goals. It is a holistic approach that considers the existing financial position, evaluates the future needs, puts a process to fund the needs and reviews the progress.

1.2 Understand the need for financial planning

There is a large range of financial products and services that are available for investors today and these need to be linked to the specific needs and situations of the client. Not every product may be suitable to every client; nor would a client be able to identify how to choose and use products and services from the choices that are available in the market. Financial planning bridges this gap as the Investment Adviser possesses the expertise to understand the dynamics of the products on the one hand and the needs of the client on the other. This makes them best suited to use such products and services in the interest of the client.

1.2.1 Role of the Financial Planner

The Financial Planner has a significant role to play when it comes to advising clients because the needs of each person is different front that of the other.

a) The financial planner has to recognise the exact needs and goals of an individual and a household or family and then make efforts to ensure that these needs or goals are achieved.

b) Personal financial management requires time and attention to recognize income and expense patterns, estimates of future goals, management of assets and liabilities, and review of the finances.

c) Individuals do not have time to undertake all these detailed financial activities in a busy world and they need someone like a financial planner to focus on this area and help them in their efforts.

d) It is not easy to set financial goals and this requires specific expertise and skill which may not be present with most individuals.

e) Every financial goals requires finding a suitable product and a proper asset allocation to different asset classes so that this can be achieved, which is where the financial planner steps in.

f) Selecting the right investment products, choosing the right service providers and managers, selecting insurance products, evaluating borrowing options and such other financial decisions may require extensive research. A financial planner has capabilities to compare, evaluate and analyse various products which enables making efficient choices from competing products.

g) Asset allocation is a technical approach to managing money that requires evaluating asset classes and products for their risk and return features, aligning them to the investor's financial goals, monitoring the current and expected performance of asset classes and modifying the weights to each asset in the investor's portfolio periodically to reflect this. Financial planners with technical expertise enable professional management of assets.

h) Financial planning is a dynamic process that requires attention to the constantly changing market and product performances and matching these with the dynamic changes in the needs and status of the client. This kind of attention can be provided by a financial planner.

1.2.2 How is financial planning different from a typical financial advisory services?

Financial planning requires following of a specific process wherein the client along with their overall needs and goals are at the core of everything being done. Other financial advisory services would normally look at meeting just a specific need like advising on stocks or debt but the relation with other aspects might be missing.

The financial planning effort is a comprehensive process as it covers all aspects of a client's personal financial requirements including retirement, insurance, investment, estate and others. A typical financial advisory service is more likely to look at just a small part of the total financial requirements.

Goal setting becomes the central part of the financial planning process and all efforts are then directed towards meeting the goals. Overall goals might not be given too much importance in a normal financial advisory activity, where some specific target is sought to be achieved.

Financial planning looks to ensure that all the financial activities are not at cross purposes with each other. As against this, a typical financial advisory service might not even realise that some steps suggested would be working against some other goal or requirement. For example, financial planning would ensure that the asset allocation for an older individual meets their risk taking ability and that their equity exposure across asset classes is kept in check. This might not happen when normal advise is taken just for say equity mutual funds investment without knowing the equity exposure elsewhere.

Monitoring the situation and then taking action to ensure that things remain on track is a key part of the financial planning process. It is inbuilt to the entire effort, so this becomes a natural part of the activity. This might not happen with respect to a normal financial advisory where the individual might have to take the initiative themselves and see that things are going according to plan.

Financial planning looks to select what is right for an individual and this would differ from person to person. This takes into account both the returns as well as the risk which is vital. This might not happen for a normal financial advise, where the goal might be completely different like earning higher return and where risk might be ignored.

There has to be continuity in financial planning efforts which sets it apart from other financial advisory wherein this could be a short one time exercise or even piecemeal efforts at different periods of time.

1.3 Scope of financial planning

Financial planning enables a household or individual to manage its personal finances efficiently in line with their short and long-term objectives. The following are elements of financial advisory and planning services:

1.3.1 Personal financial analysis:

- **Goal setting with prioritizing of goals**

The financial planning process starts with the goal setting process. Goals refer to what has to be achieved. This gives a clear target that has to be reached. There are several features that are important when the goals are set. There should be some specific detail with respect to the goal. For example, saying that I want to be rich is a vague term because it can mean different things to different people. Saying that I want to earn an income of Rs. 50 lakh a year is specific. The goals have to be measurable, so that a person knows the exact amount that will help them reach the goal. At the same time the goals have to be realistic. If an individual is able to save around Rs 20,000 a month, then a goal which requires an investment of Rs 50,000 a month is not realistic. Finally, goals also have to be time bound so the individual has a clear idea of when they need to be reached. A goal of wanting to retire in 20 years with Rs 5 crore as corpus is clear because there is a time period attached to it which will help in planning to reach the goal.

Once all these features are considered in the goal setting process there will be a list of goals that will be available. However, every individual has restrictions in terms of the income earned and amount saved. This will require that the goals be ranked in order of priority. Important goals need to be put first. So, things like children's education and retirement should come in front of something like spending on a luxury car or other expense that does not create an asset. It is easy to look at short term needs but this can come at the cost of long term disruption of the goals. This is why there has to be priority to goals that improve the financial health of the individual. For example, there might be a large credit card outstanding and some extra income is earned by the individual. In such a situation, instead of spending the amount, it should be used to pay off the credit card debt. This might not add to an asset but it still improves the financial condition of the individual.

- **Focus on important goals**

Goals such as retirement and education of children are important financial goals for which adequate provision of funds have to be made. Long-term goals such as retirement often get lower priority for allocation of savings because it has time on its side. The urgent, shorter-term goals often get higher claim on the available savings. While this may be acceptable for shorter-term goals that are also important, such as accumulating funds for down payment on a home, it may not be right to prioritize consumption goals, such as holidays and large purchases, over long-term important goals. The delay in saving for such goals will affect the final corpus, since it loses the longer saving and earning benefits including that of compounding.

Clients often believe that the provident fund, superannuation and gratuity corpus they will receive on retirement will be adequate to ensure a comfortable living during the retirement years. In many cases, it turns out to be inadequate. Therefore, every client needs a retirement plan.

The Investment Adviser needs to go through the numbers and demonstrate the inadequacy. The objective is to ensure that the client saves enough during the earning years for a comfortable retired life.

- **Staggering the timing of certain goals**

The financial situation of an individual may not allow all the financial goals to be provided for. Some financial goals may have to be deferred to ensure that the critical financial goals are not compromised. There are situations when it is not possible to achieve a financial goal in a specific time period. An example could be a person wanting to buy a house within the next year, which would require a down payment of Rs 20 lakh plus an Equated Monthly Instalment (EMI) of Rs 30,000 a month. It could be that the current income situation is not able to support such a situation. Instead of cancelling the goal there is another route available. This is to push back the goal by some time, which will enable the individual to get the required finances in order. Instead of 1 year, if the goal is sought to be achieved after 3 years, then there is a good chance that the desired financial position will be achieved by then.

For instance, around the time that the family proposes to buy a house, the annual holiday may need to be reviewed. The holiday may be shorter or planned at a less expensive location. Some financial goals need to be fulfilled within a specified time frame. For instance, education of the child has to happen as per the normal age and progression. Prudent use of debt in the form of loans can be used to tide over any shortage of funds.

1.3.2 Cash flow management and budgeting

There is a certain income that is earned by an individual along with the expenses made.
Having a plan to ensure that there are savings and these are invested is one part of the process. It is also vital that there is a cash flow match so that the household or the individual does not run into any cash flow problems. This happens when the inflows and outflows of cash do not match. There can be a situation wherein a person spends less than what they earn but still run into cash flow problems. For example, if there is a large expense made at the start of a month it can lead to a cash crunch if there is a delay in the receipt of income unless there is a reserve present. In fact, it could lead to short term borrowings which are extremely costly in terms of interest rates. This could lead to a part of the amount that is being finally saved to be directed towards paying off the debt incurred due to the cash flow mismatch.

One of the ways to ensure that there is no cash flow problem is to have a budget. A budget is nothing but a list of the inflows and outflows that an individual will witness along with the time period when this will take place. A monthly budget will help a person to know whether they are managing their income properly. A budget has a list of all the items of income and expenses along with their amounts. This ensures that with a single look it is possible to know what the exact financial position is and whether there is adequate savings taking place. Every person should make their own personal budget. A lot of people pay attention to the Union Budget but fail to do budgeting for their ownselves.

1.3.3 Insurance Planning

Several unexpected expenses that can cause an imbalance in the income and expenses of a household can be managed with insurance. Insurance is a risk transfer mechanism where a small premium payment can result in payments from the insurance company to tide over risks from unexpected events. The temporary loss of income from disabilities and permanent loss of income from death can be covered with life insurance products. Health and accident insurance covers help in dealing with unexpected events that can impair the income of a household, while increasing its expenses on health care and recuperation. General insurance can provide covers for loss and damage to property and other valuables from fire, theft and such events. Insurance planning involves estimating the losses to the household from unexpected events and choosing the right products and amounts to cover such losses.

1.3.4 Debt management and counselling

Investment Advisers help households plan their liabilities efficiently. It is common for households to borrow in order to fund their homes, cars and durables. Several households also use credit cards extensively. To borrow is to use tomorrow's income today. A portion of the future income has to be apportioned to repay the borrowings. This impacts the ability to save in future and in extreme cases can stress the ability to spend on essentials too. The asset being funded by borrowing may be an appreciating asset such as property, which is also capable of generating rental income. Or the loan could be funding a depreciating asset such as a car, which may require additional expenses on fuel and maintenance, but provide better lifestyle and commuting conveniences.

Evaluating which assets or expenses can be funded by borrowings is a function Investment Advisers can perform. They can advise households about how to finance their assets, how much to borrow, how to provide for repayment, how to ensure that credit scores are not unfavourably impacted. Sometimes, excessive borrowings may lead a household into a debt trap. Such borrowers need counselling and handholding to be able to get out of debt. Sometimes assets may have to be liquidated to pay off debts. Advisers help households to deal with their borrowings taking into account their need and ability to repay debt.

1.3.5 Investment Planning and Asset Allocation

A crucial component in financial planning and advisory is the funding of financial goals of a household. Investment planning involves estimating the ability of the household to save and choosing the right assets in which such saving should be invested. Investment planning considers the purpose, or financial goals for which money is being put aside. These goals can be short-term such as buying a car, taking a holiday, buying a gift, or funding a family ceremony or can be long-term such as education for the children, retirement for the income earners, or high-expense goals such as marriage of children. An Investment Adviser helps with a plan to save for these goals, and suggests an appropriate asset allocation to pursue.

The Investment Adviser does not focus on the selection of stocks or bonds, but instead takes a top down approach of asset allocation. The focus is on how much money is invested in which particular asset class in order to deliver the expected return within the risk preference of the investor. The adviser's job is to construct a portfolio of asset classes, taking into account the goals, the savings, the required return, and the risk taking ability of the investor. This is one of the core functions of the adviser and many specialise in asset allocation and investment planning.

1.3.6 Tax Planning

Income is subject to tax and the amount an individual can save, the return they earn on their investment and therefore the corpus they are able to build for their future goals, are all impacted by the tax regime they fall under. An investment adviser should be able to assess the impact of taxes on the finances of the individual and advice appropriate saving and investment options. The post-tax return of financial products will have to be considered while choosing products and estimating holding periods. The taxability of various types of investment income such as dividends, rents and interest differ. The treatment of return if accumulated, rather than paid out periodically, varies. The taxability of gains differs based on the holding period. An investment adviser should bring in these aspects while constructing a plan for the household.

1.3.7 Retirement Planning

Providing for retirement is one of the primary financial goals that all people have to plan for. Given its complexity and nature of well-being in the future, many people tend to ignore it until it may be too late thereby compromising the quality of their retirement. To be able to plan for retirement it is important to understand the concept of time value of money and inflation and how it would impact the cost of meeting expenses in the future. Saving and investing for retirement requires understanding of how compounding benefits investors saving for long-term goals. It is important to select the right financial products that are best suited to the long-term nature of the retirement goal as well as to the ability of the individual

to take risks. In the pre-retirement stage, rebalancing the portfolio to less volatile assets is an important activity. As retirement approaches, the process of planning should shift focus to the expenses in retirement, the adequacy of the income from investments and pension benefits to meet these expenses and strategies to meet the shortfall, if any. While investing the retirement corpus for income, the taxability of different sources should be considered. The retirement portfolio has to be monitored and rebalanced through the term of retirement too since the needs do not remain the same. Investment Advisers bring the skills required to design and execute a retirement plan.

1.3.8 Estate Planning

Wealth is passed on across generations. This process of inter-generational transfer not only involves legal aspects with respect to entitlements under personal law, but also documentation and processes that will enable a smooth transition of wealth in a tax-efficient way. Estate planning refers to all those activities that are focused on transfer of wealth to heirs, charity, and other identified beneficiaries. There are several tools and structures to choose from, in estate planning. Some choices such as gifts can be exercised during one's lifetime, while choices such as wills come into play after death. Investment Advisers help households make these choices after considering all the implications, and help them complete the legal and documentation processes efficiently.

1.4 Concept of asset, liabilities and net worth

The income of a household or individual is at the base of all financial activities that are undertaken. The income is used to meet current expenses and a portion is set aside to meet expenses in the future. The portion of current income earmarked for future needs is called savings. The adequacy of the income of a household or individual is always relative to its expenses. If the expenses are managed within the income and there is surplus to save, then the household's or individual's finances are seen as stable. Short-term imbalances in income and expenses can be managed by loans and advances. The loans are a liability and come at a cost which may further strain the future income. The option of loans to fund expenses must be used with discretion since it weakens the financial situation of the household.

The savings of a household or individual are put to work by investing them in assets. Assets are broadly classified as physical assets and financial assets. Assets may be appreciating in value or depreciating. All assets have a resale value. Investors hold assets for the returns they provide. The nature of return that an asset provides classifies them as growth-oriented, income-oriented or a combination of the two.

Physical assets are tangible assets and include real estate, gold and other precious metals. Physical assets have an intrinsic value though the actual price at which they trade is impacted by demand and supply. They are usually seen as natural hedges against inflation since their

price show a positive correlation with inflation. Physical assets are more growth investments that are bought for the appreciation in value rather than the income they generate. Some such as real estate provide both income and growth while others such as gold are pure growth-oriented assets. The primary drawbacks of physical assets are illiquidity, lack of regulation/limited regulation and the need for specific skills to identify investment opportunities, assess the merits of the investment, arrange for the purchase of the asset and its management and sale of the asset when required. The other limitation of physical assets as an investment is that they are typically large ticket investments and require substantial savings or a combination of savings and loan to acquire.

Financial assets represent a claim that the investor has on benefits represented by the asset. For example, a bank deposit gives the benefit of periodic interest and repayment of principal amount to the holder of the asset, an equity share provides periodic dividend paid, if any, and the appreciation or depreciation in its value is also to the account of the holder. These assets may be structured as growth-oriented assets, such as equity investments, or as income-oriented, such as deposits, or a combination of the two, such as all listed securities. Financial assets are typically standardized products and controlled by the regulations in force at the point in time. They may differ on liquidity features, with some such as listed securities enjoying high liquidity, while others such as privately placed instruments featuring low liquidity. The standardization of financial assets and the mandatory information made available makes evaluation and comparisons more efficient. These assets lend themselves to investment in small amounts and units.

Together, the physical and financial assets represent the investments made by the investor. While these assets represent financial benefits and returns to the holder, the financial strength of the household depends upon how the assets are acquired. Loans and borrowings used to buy assets create a liability and impose a repayment obligation on the buyer and a charge on the future income of the household. Loans taken to buy appreciating assets add to the long-term wealth. Loans taken to buy financial assets, also called leveraging, is risky because of the higher volatility in the price of such assets. Assets acquired with savings and without taking on a liability add to the financial strength of the household.

An assessment of the financial well-being of the household can be made by calculating the Networth. The networth is calculated as Assets – Liabilities. Higher this number better is the financial position of the household. Networth should be calculated periodically, and the progress tracked to bring the financial situation to the desired stage.

1.5 Financial Planning process

Financial planning requires Investment Advisers to follow a process that enables acquiring client data and working with the client to arrive at appropriate financial decisions and plans,

within the context of the defined relationship between the planner and the client. The following is the six-step process that is used in the practice of financial planning.

a. **Establish and define the client-planner relationship:** The planning process begins when the client engages an Investment Adviser and describes the scope of work to be done and the terms on which it would be done.
b. **Gather client data, including goals:** The future needs of a client require clear definition in terms of how much money will be needed and when. This is the process of defining a financial goal.
c. **Analyse and evaluate financial status:** The current financial position of a client needs to be understood to make an assessment of income, expenses, assets and liabilities. The ability to save for a goal and choose appropriate investment vehicles depends on the current financial status.
d. **Develop and present financial planning recommendations:** The adviser makes an assessment of what is already there, and what is needed in the future and recommends a plan of action. This may include augmenting income, controlling expenses, reallocating assets, managing liabilities and following a saving and investment plan for the future.
e. **Implement the financial planning recommendations:** This involves executing the plan and completing the necessary procedure and paperwork for implementing the decisions taken with the client.
f. **Monitor the financial planning recommendations:** The financial situation of a client can change over time and the performance of the chosen investments may require review. An adviser monitors the plan to ensure it remains aligned to the goals and is working as planned and makes revisions as may be required.

1.6 Financial advisory and execution

Investment Advisers may engage with their clients at various levels and the scope of services they offer may vary depending on their skills, capabilities and business model. In several countries, including India, there has been regulatory action in defining the role of various intermediaries that deal with investors. When a relationship manager, financial adviser, wealth manager or other entity, irrespective of the nomenclature used, sells financial products to a client as part of his defined role or business, and earns a commission from the producer of the financial product, there is a potential conflict of interest. The seller of the product may not act in the interest of the client, but may push products that earn a higher commission. This may lead to mis-selling, where a product not suitable to the client's needs, or not in line with the client's risk preference may be sold in a manner harmful to the customer's interest.

One of the regulatory initiatives to prevent such mis-selling is to differentiate between providers of advice and distributors of financial products, and to ask advisers to earn their

revenue from the client, and not from the producer. The distributor who executes the transactions in financial products may earn a commission from the producer. The current regulatory regime for financial advisers in India requires that anyone offering financial advice for a consideration should be registered with SEBI, and should not earn any income from the producer. There are specific exemptions provided for those that offer advice incidental to a product they may sell.

The following are the various business models in the delivery of financial advice to clients:

a. **Fee-only financial planners and advisers:** Some Investment Advisers choose to earn a primary component of their income from enabling clients to plan their finances in a comprehensive manner. They engage closely with the client, offer advice on most if not all aspects of their personal finance, and charge a fee for their services. The fee may be of various types and a combination of the following:

    - One-time fee for a financial plan
    - Fee for on-going review and periodic revisions
    - Asset-based fee charged as a percentage of assets being advised
    - Referral fee for engaging experts to take care of specific aspects of the plan
    - Referral fee for execution of plan through other agencies
    - Selection and portfolio construction fees
    - Fees for assessment and analysis of financial position

Fee only Investment Advisers usually do not take on the execution of the plan or advice. They refer the client to other agencies who may enable execution of the recommended investment transactions. This is to ensure that the commissions earned on selling financial products, does not influence their advice to their clients.

Under the amendments to the Investment Adviser Regulations, SEBI has said that individual Investment advisers cannot undertake both advisory and distribution. They have the choice to register as either of the two. A non-individual investment adviser will have client level segregation at the group level for these services. It also has to maintain an arm's length relationship by providing the advisory services through a separate division or department.

Individual Investment advisers are allowed to provide execution services but through direct schemes or products in the securities market. However, no consideration can be received at the investment advisers group or family level for these services.

b. **Execution only services:** Some Investment Advisers do not charge their clients for advice as their core function is distributing financial products. Their income comes from the commissions from selling the product. They may also execute transactions advised by

another financial adviser. Such advisers may also distribute a range of products including investment products, insurance products, banking and loan products, which are subject to regulations by multiple regulators apart from SEBI.

Some firms may organise the execution only services into an aggregation model. The aggregating entity has several distributors associated with it, who take a range of financial products to clients. In this case, the company shortlists the products it would offer, based on its selection criteria. It may also have a central advisory team that selects products after research and data analysis. Those that like to offer these products to their clients, may associate with such company, and share their revenue with the company for using their research services, or execution platforms. Many aggregators offer a range of support services to their associates, including training, development, customer relationship management software, execution platforms and facilities that may be expensive to set up on a standalone basis. The shared facility helps the distributors to scale up their business, and pay the aggregator a share of revenue for the benefits offered.

c. **Wraps and Platforms:** Wraps and platforms are technology-based advisory solutions that are standardised for execution. A client or an adviser associates with the platform, and can offer its financial products as model portfolios that investors can buy. Investment Advisers may also choose these platforms to execute transactions in standardised model portfolios. Clients can view how their portfolios are performing. Advisers can monitor and review the portfolios and holistically manage the money of clients across multiple products. Wraps and platforms may charge the client a fee and share this fee with the adviser who executes the transactions using it. They may also enable the adviser to access clients using their platforms, to sell financial advice to such clients, and charge a fee and share it with the platform provider.

CHAPTER 2: TIME VALUE OF MONEY

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Time Value of Money
- Concept of Annuity
- Concept of Perpetuity

2.1 Time Value of Money

The value of money does not remain the same at all points of time. The money available at the present time is worth more than the same amount in the future since it has the potential to earn returns (or interest as the case may be). Consider the following options, assuming there is no uncertainty associated with the cash flow:

- Receiving Rs.100 now
- Receiving Rs.100 after one month

All investors would prefer to receive the cash flow now, rather than wait for a month, though the amount to be received has the same value. This preference is attributed to the following reasons:

- Instinctive preference for current consumption over future consumption.
- Ability to invest the Rs.100 for a month like a bank account or deposit and earn a return so that it grows in value to more than Rs. 100 after one month.

Clearly, Rs.100 available now is not equivalent to Rs.100 received after a month. The value associated with the same sum of money received at various points on the timeline is called the time value of money (popularly known as TVM). The time value of money received in earlier periods as compared to that received in later time periods will be higher. Since most decisions in finance involve cash flows spread over more than one period (monthly, quarterly, yearly etc.) the time value of money is a key principle in financial decision-making.

Box 1.1 Did You Know ?

Records dating as far back as 5000 BC indicate that the Mesopotamians, Hittites, Phoenicians, and Egyptians charged interest when they loaned such items as olives, dates, seeds, and animals. The time value of any loaned item was perhaps easiest to see with the loaning of seeds because any successfully planted seed would yield a plant that would produce more additional seeds. Thus, it was wise to get seeds in the ground, both to yield a healthy crop and to have more seeds for future plantings.*

Since money has time value, it is not possible to compare cash flows received in different time periods. Consider the above example: suppose the Rs.100 received now is placed in a one-month bank deposit yielding 6 % p.a. After a month, the value would grow to Rs.100.50. If an investor has to opt for receiving Rs.100 after a month, then he needs to be compensated by Rs.0.50, the amount that has been foregone by waiting for a month. The two options will be equivalent from the investor's point of view if the option is to receive Rs.100 now or Rs.100.50 after one month.

When time values are taken into account, the following points need to be noted:

- Future inflows are discounted by a relevant rate to reach their present value; this rate is known as the discount rate or return rate or interest rate.
- Present inflows are increased at a relevant rate to reach their future values: this rate is known as the compound interest rate.
- The later in the future a cash flow is likely to be received, the lower its value at the current time. Rs.100 available after one month is more valuable today than Rs.100 available after one year, which has a better value today than Rs.100 available after 5 years.
- The higher the discount rate, the lower the present value of future cash flows. A higher rate means that investors have to forego more returns by opting to receive the money today instead of future cash flows.

For example, Rs 1,000 received after 3 years when discounted at 5 per cent is worth Rs 864 today but the same amount discount at 8 per cent is worth only Rs 794.

In any time, value situation, the important parameters are:

a. Cash inflows or outflows: These could be either in the form of single period cash flow or in the form of an annuity or a stream of uneven or even cash flows.
b. Rate of interest: Also known as compounding rate or discount rate or reinvestment rate.
c. Time Period: This may be annual or any other fraction thereof like monthly, quarterly etc.
d. Frequency of cash flows, which may or may not be fixed.

Financial problems involving time value of money are usually concerned with calculating one of the above parameters.

**(https://www.encyclopedia.com/finance/encyclopedias-almanacs-transcripts-and-maps/time-value-money)*

2.2 Calculate the following

2.2.1 Present value

Present value is the amount that you would pay today for a cash flow that comes in the future. It brings the future value down to today's price. It is based on the basic principle of time value of money that value of money keeps reducing as time passes.

There are two ways in which the present value can be calculated.

If there is a future value that has been given then this can be brought to the present by discounting it by the rate of return. This will give an idea of what the value of the future amount is worth today.

PV = FV/(1+r)^n

Where

FV= Future Value

PV= Present Value

r = rate of return for each compounding period

n = number of compounding periods

For a one time receipt, PV is calculated as per the following formulae:

PV = C/(1+r)^n

In case of a regular cash flow the present value can be calculated by the following formula

PV = C * ((1-(1/(1+r)^n))/r)

Where C is the regular cash flow

For example, Shyam is going to receive a sum of Rs 6,500 a year for the next 8 years at an interest rate of 7 percent. He would like to know whether he should take the cash flow or a lump sum now and what this would be worth

In this case using the formula or the excel function the Present value would come to

PV = 6500/(1.07)^1 + 6500 /(1.07)^2 + 6500 / (1.07)^3 + 6500 /(1.07)^4 + 6500 / (1.07)^5 + 6500/(1.07)^6 + 6500 / (1.07) ^7 + 6500 / (1.07)^8=38813.44

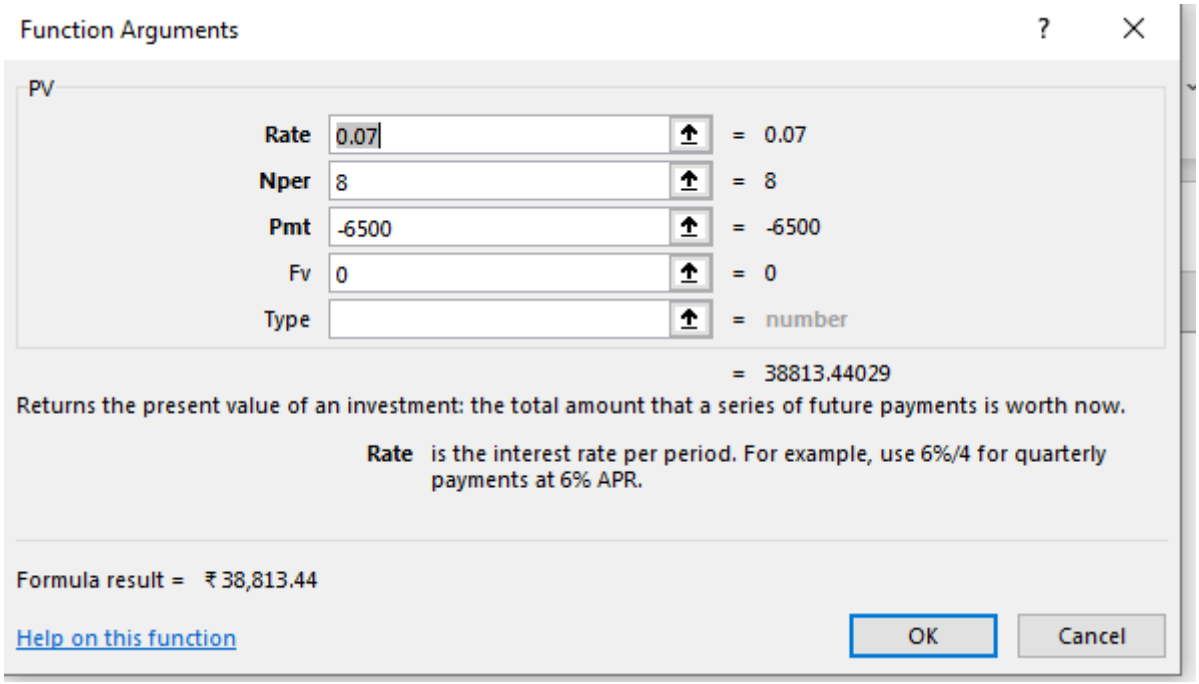
The present value can also be arrived at using the formula for a regular receipt

PV = 6500*((1-(1/(1.07)^8))/0.07)

In the excel function the rate of return has be put in as 0.07, the nper as 8 and the payment figure (pmt) as -6500 to arrive at the answer.

For E.g. - The Excel PV function calculates the Present Value of an investment, based on a series of future payments.
The syntax of the function is:

PV(rate, nper, [pmt], [fv], [type])



On the other hand, there can be a future payment of Rs 50,000 that might be received after a period of 5 year earning 6 per cent but this need to be evaluated in light of how much an investor should have in hand today.

This can be calculated as

PV = 50000/(1.06)^5

PV = 37362.91

2.2.2 Future value

Future value represents what something is worth at some point in the future. There can be various amounts for which such a future value might need to be calculated and this will give an idea of the erosion in value from the current period.

FV = PV (1+r)^n

Where

FV= Future Value

PV= Present Value

r = rate of return for each compounding period

n = number of compounding periods

Note that the rate of return for each compounding period has to be adjusted for the frequency of compounding. For example, if an investment pays 8% interest p.a. compounded quarterly, then the applicable rate of return for each compounding period is 8%/4, or 2%. Or it can be different for different periods in future.

The number of compounding periods (n) refers to the periodicity with which interest is paid on the investment during the year. For example, the Post Office Monthly Income Scheme (MIS) pays interest every month, while the Senior Citizens Scheme pays every quarter. The greater the frequency of compounding, the more often interest is paid on interest, and the greater are returns earned through compounding.

Consider the following example.

Krishna invests Rs.5 lakhs in a 5 year bank deposit that pays 8% interest compounded annually. What is the interest he earns from the investment in the following three scenarios?

Scenario: 1 The interest is used to pay the college fees of his daughter and there is no compounding.
Scenario: 2 The cumulative option is chosen and the interest is paid at maturity i.e. interest is compounded yearly.
Scenario: 3 If the interest is instead compounded quarterly and he chooses the cumulative option.

<u>Under Scenario 1</u>

The interest income earned is: Rs.5 lakhs x 8% x 5=Rs.200,000

There is no compounding benefit since the interest is taken out and used and not re-invested. This is also known the simple interest.

<u>Under scenario 2</u>

The maturity value will be= 500,000 x (1+8%)^5= Rs.734,664

Interest income earned over 5 years = Rs.734,664- Rs.500,000= Rs.234,664

The interest income is higher because the interest earned each year is re-invested and earns interest too. This is the compounding benefit.

Under scenario 3

Here the interest is compounded quarterly so this requires the rate to be divided by 4 while the total quarterly period are 20 during the 5 years

The maturity value will be= 500,000 x (1+(8%/4)^20)

= 500,000 x (1+2%)^20= Rs.742,974

Interest income earned over 5 years = Rs.742,974- Rs.500,000= Rs.242,974

The interest income is higher than scenario 2 because the frequency of compounding is higher. The interest is paid each quarter and this earns interest for the remaining period.

The future value of an investment can be easily computed in EXCEL using the FV function which prompts the user to input the interest rate, the number of total periods in the investment, the payment made each period, and whether payment is made at the beginning or end of the period.

FV(rate, nper, [pmt], [pv], [type])

For example, a sum of Rs 5,000 growing at 8 per cent per annum will become Rs 7346.64 in 5 years

FV (0.06,5,,-5000,,0)

FV = 7346.64

2.2.3 Rate of return

The rate of return is the percentage rate that is earned on a particular investment. There are times when the investor has just the amount that has been earned but this needs to be converted into a rate of return. This will enable proper comparison with other instrument and options that are present in the market and will aid in proper decision making too.

In financial markets, the time value of money is always taken into account. It is assumed that if an investment provides a series of cash inflows, they can be re-invested to earn a positive return. Alternatively, an investment that does not have intermediate cash flows, is assumed to grow at an annual rate each year, to be compounded every year to reach the final value.

The compounded annual growth rate (CAGR) of an investment is the underlying compound interest rate that equates the end value of the investment with its beginning value. Consider the following formula for FV:

PV (1+r)^n = FV

A sum of money at the current point in time (PV) grows at a rate of r over a period n to become a future value (FV). CAGR is the rate r, which can be solved as:

$$r = (FV/PV)^{(1/n)} - 1$$

CAGR is computed using the above formula, given a beginning and end value for an investment and the investment period in years.

Since FV and PV represent end and beginning values of the investment for which CAGR is to be computed, the formula for CAGR (in decimals, not %) can be written as:

CAGR = ((End Value/Beginning Value) ^ (1/n)) - 1

The resulting CAGR has to be multiplied by 100 to be expressed in percent terms. For example, consider an investment of Rs.100 that grows to Rs.120 in 2 years. In this case:

End Value (or FV) = 120

Beginning Value (or PV) = 100

No. of years ‘n’ = 2

Substituting in the formula for CAGR we have:

120 = 100*(1+r/100) ^ 2

We consider that Rs.100 has grown to Rs.120 over a 2 year period at CAGR of r.

Rearranging the terms and writing CAGR instead of r we get:

120/100 = (1+CAGR) ^ 2

CAGR = ((120/100) ^ (1/2)) - 1

CAGR = ((1.2) ^ (1/2)) - 1

= 1.095 – 1

= 0.095

= 9.5%

In Excel the CAGR can be found out by the Rate Formula

CAGR = RATE(Years,,-PV,FV)

In the above example

NPER or years =2

PV = -100

FV = 120

=RATE(2,,-100,120)

=0.095

CAGR is the accepted standard measure of return on investment in financial markets, except in case of returns that involve periods of less than one year.

The following example shows how CAGR is computed for a mutual fund investment.

Assume that Rs. 10.50 was invested in a mutual fund and redeemed for Rs. 12.25 at the end of 3 years. What is the compounded rate of return?

In this problem, Rs.10.50 grew at some compounded rate to become Rs.12.25 at the end of 3 years. To solve for the CAGR, we use the formula: CAGR = ((12.25/10.5) ^ (1/3)) – 1 = 5.27%

The same formula may be applied for fractional compounding periods. Consider this example:

An investor purchased mutual fund units at an NAV of Rs.11. After 450 days, she redeemed it at Rs.13.50. What is her compounded rate of return, assume that it's a non-leap year?

In order to use the CAGR formula, period of 450 days has to be converted into years or 450/365 years.

CAGR = ((13.5/11) ^ (365/450)) – 1

= 0.1807 = 18.07%

2.2.4 Periodic investments or pay-outs

There are a lot of areas where the investor will be making a regular or a periodic payment. The most common example is that of a loan, where there is a regular Equated Monthly Instalment (EMI) being paid out to the lender each month. It is essential to know the amount that would be paid, so that there can be a proper planning made of how the amount should be accumulated.

This can be obtained using Excel using the PMT formula where the inputs will be the following

r = the rate of interest on the loan

Nper = the number of periods for which the loan has to be repaid

PV = the value of the loan that has to be repaid

The figure that emerges will be the EMI that will have to be paid.

For example, Satish is thinking of taking a loan of Rs 30 lakh for the purchase of a house property in his hometown. The current rate of interest is 6.5 per cent with a monthly reset and he is looking for a 20 year loan. What would be his monthly EMI?

In this case, all the relevant details are available. One thing to take care of is that the interest rate would have to be divided by 12 because the period for this is monthly. At the same time the period of payment is monthly so this would become 240 months.

Entering the figures into the formula it will be

PMT =(0.065/12,240,-3000000)

PMT = 22367.19

The final EMI figure that would have to be paid comes to around Rs 22,367. This kind of calculation can be done, so that the client is able to know whether the amount is affordable for them. Also, any change in the interest rate can also be applied to witness the kind of impact that is seen in the monthly payments and the change therein.

For example, in the above case if the interest rate falls to 6.25 per cent then what will be the EMI for the 20 year loan. In this case

PMT= (0.0625/12,240.-3000000)

PMT =21927.85

This shows that the EMI will fall to around Rs 21,928 when the interest rate falls by 0.25 per cent from the earlier case. Changes at any point of time during the loan period can be seen through this calculation.

2.2.5 Period of the loan (NPER)

There are times when a person would like to know the time period within which they would be able to pay off an amount. Given the fact that there is a capital amount that is present

along with the loan interest and a fixed amount repaid each month the amount in which the loan can be repaid can be known. This is also known by its Excel term NPER.

The details that are vital here is the

r = rate of interest on the loan

PMT = the equal payment on the loan

PV = The present value of all the future payments

For example, a person wants to know the NPER of a loan that is worth Rs 5 lakh now and where the EMI is Rs 12,000 per month. The rate of interest on the loan is 8 per cent.

In this case too since this is a monthly payment the interest rate would have to be divided by 12 and putting this into the Excel formula we get =NPER(0.08/12,-12000,500000).

= 48.97

The result is 48.97 months. This gives a clear idea about the time period in which the payment would be complete.

The NPER is useful to calculate the time period of repayment and this is then matched with the EMI payable, so that it can be affordable for the individual.

2.2.6 Annuity

An annuity is a sum of money paid at regular periods, such as monthly, quarterly, annually. A common example of an annuity is pension. Annuities can be of two types (1) Fixed annuity and (2) Flexible annuity.

Fixed Annuity means that fixed returns are received at regular periods. For instance, a fixed deposit with a bank paying 5.5 % p.a. on the investment for a predetermined term assured (for example, for the next 5 years).

Floating annuities are those in which the returns are benchmarked to inflation or index returns or any other return as specified in the indenture agreement at the time of buying. So, the annuities paid are not fixed, but change in line with the chosen benchmark.

Annuities are used extensively during retirement wherein there is the need for a regular cash flow and this is generated by several investment instruments. There are various terms by which an annuity is referred to but the key point is that the feature of all these are that there is a regular sum of money being received.

There are two types of annuities that can be received on an investment:

Ordinary Annuity

An annuity is differentiated based on the time period when the payment on it is made. In case of an ordinary annuity the payment is made at the end of the relevant time period. Most of the annuities are of this type as the payment comes at the end of the period. Consider for example a bond, which pays out a sum of money. This is received at the end of the year if the payment is made annually and this becomes an ordinary annuity.

The way to calculate an annuity is to look at the present value of such a cash flow. This will tell you what the future payments are worth at the present time. This can also be used to make various calculations in terms of how much is required in order to ensure a certain payment in the future.

The calculation for an ordinary annuity can be done as a normal present value formula.

For example, consider an annuity that is paid out each year of Rs 5,000 and this is at a rate of return of 10 per cent for a period of 4 years. In this case the present value of the annuity would come out to

PV = PV(0.1,4,-5000)

PV = 15849.33

When the PV calculation is made in excel there is a row for details to be entered called type present in the formula. This is usually left blank and it takes the default position of the payment coming at the end of the period.

There can also be the use of an annuity table for the purpose of the calculation. An annuity table gives a multiple for different rates of interest and varying time periods. One can just look up the annuity table figure and then use this in the calculation.

For example, consider a person who wants to value an annuity of Rs 12,000 a year for 10 years at 5 per cent per annum. The normal PV calculation will give the answer as:

PV =PV(0.05,10,-12000)

PV = 92,660

Looking at the annuity table the annuity factor for 10 years at 5 per cent is 7.7217

So, PV = 12000 X 7.7217

PV = 92,660

Annuity Due

There is a change that occurs in an annuity due as compared to an ordinary annuity and this is with respect to the time period when the payment is made. Here the payment is made at the start of the period instead of at the end of the period. This will impact the value of the annuity because if you are a person receiving the payment then you are getting it at the start of the year which gives the chance for this to be deployed during the year.

In order to get the value of such an annuity the present value of the cash flow would need to be calculated. As compared to an ordinary annuity there is an additional figure that will come in the calculation.

The calculation for an ordinary annuity can be done using the PV function but here in the type column instead of leaving it blank or 0, the number 1 is entered.

For example, consider an annuity that is paid out each year of Rs 5,000 and this is at a rate of return of 10 per cent for a period of 4 years. This is the same case that was considered in the ordinary annuity working but here if the payment is made at the start of the year as is the case with an annuity due then the calculation will become

PV =PV(0.1,4,-5000,,1)

PV = 17434.26

As can be seen from above, the payment at the start of the period raises the value of the annuity. One has to consider this from various angles. It is more valuable for a person to receive an annuity due because they get the money earlier which can be invested to earn further return. For someone who has to make payments for any purpose at the start of the period then this is more costly because they are losing the opportunity of earning on that particular capital for the duration of the year for which the amount would have otherwise remained with them.

2.2.7 Perpetuity

Perpetuity is a cash flow from an investment that goes on forever. A normal instrument would have a specific time period for which the cash flow might be received but in case of perpetuity there is no finite period for which the cash flow is received. There are perpetual bonds that are issued by entities and these are the best example of real life perpetuity. In these bonds the cash flow keeps coming year after year. The other common life example would be pensions that are payable to pensioner till their life term.

The perpetuity provides a constant cash flow for an unlimited time period. In order to calculate the value of perpetuity one has to find its present value. This is given by

PV = C/ (1+r)^1 + C/(1+r)^2 + C/(1+r)^3 +.....

PV = C/r

Where

PV = Present Value

C = Cash flow

r = discount rate

The constant stream of a similar cash flow will ultimately lead to the calculation being made as the cash flow divided by the discount rate.

Example
A bond pays out Rs 10,000 as interest on an annual basis and this is a perpetual bond. If the discount rate or the interest rate is 8 per cent then the valuation of the perpetuity would be as under:

PV = C/r

PV = 10,000/0.08

PV = 125,000

CHAPTER 3: EVALUATING THE FINANCIAL POSITION OF CLIENTS

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Cash flow management in personal finance
- Know about preparation of household budget
- Cash inflows and outflows
- Know about budgeting and forecasting
- Importance of monitoring budgets and provision for savings
- Creating personal balance sheet and net-worth
- Creating a budget and savings plan
- Understand contingency planning
- Evaluating the financial position of clients

3.1 Importance of cash flow management in personal finance

Personal finance involves looking at the various sources of income and expenses and ensuring that there is some surplus savings which is allocated to various investments to meet the different goals in the future. One of the key aspects of the entire process is to look at the cash flow that is generated by the individual or household and how this is handled.

There are several factors that make the entire process of managing the cash flow very significant in the personal finance management process.

The cash flow is the starting point of the whole personal finance process. The time and the amount of income that is generated and the time and the amount when this is spent as expense is critical to ensure that there is a proper balance maintained between the two.

The time of the cash flow becomes critical because the income has to be available when expenses crop up. A very good example of a balance between income and expense is that of a salaried individual who gets a monthly income in the form of salary and whose expenses are also due monthly like payment of electricity, telephone bill, salary to household staff etc..

Even a slight mismatch between the cash flow can lead to the need for debt which is costly for the individual. If there is a situation wherein the income comes in at unspecified time intervals, but the expenses are evenly spread out then this can lead to a short term mismatch. This has to be met through debt, which comes at a cost in the form of interest. The interest becomes an extra outgo, which reduces the savings further.

There has to be adequate income coming in at all points of time so that a surplus is generated. This surplus called savings is essential because this is necessary for difficult times. Cash flow

mismanagement can become a source of tension for the individual and family. This can disrupt normal life and peace in the family which becomes a crucial factor to consider. This can further lead to health problems if the tension persist over a period of time.

Cash flow management ensures that there is a control over the finances in a family and for an individual. There is a sense of empowerment that this gives, because there is confidence that things are being handled in a proper manner. It also makes for smooth running of the household as funds are available as and when required.

3.2 Preparing Household Budget

The investment adviser performs an important role in helping the household or an individual understand a household budget. Preparing a household budget entails an understanding of the sources from which the household or individual receives income, and the application of these funds in a typical month. A sample household budget is shown in Table 3.1.

The way to go about preparing a household budget is to first start with the various heads of income. All the amount that is received from various sources has to be listed out and this will become the income. Some of it might be regular in nature while there might be heads like investment income that is not regular and which comes infrequently.

On the expense side there are some amounts that have to be compulsorily spent and these are called mandatory expenses. Others are essential living expenses, which are necessary for daily use. Finally comes the discretionary expenses and these are the expenses that can be cut in case there is need for a control on the total amount spent.

The total expenses when reduced from the total income would give the savings that are managed by the household. In some cases there could be just a single family member who is earning while in other families there could be more than one earning family member.

The difference between monthly surplus in hand and savings is to be noted. The monthly surplus in hand is calculated after mandatory deductions, such as, contributions made to provident fund and National Pension System. These are added back to the monthly surplus in hand to arrive at the savings.

Let us assume that 6 months expenses need to be covered. Monthly expenses to consider are Rs.79,000(regular expenses) and Rs.12,000 (loan servicing) i.e. Rs.91,000.

Table 3.1 Monthly Household Budget of ABC Family

		Particulars			(In Rupees)	
			Mr. A	Ms .B	Total	
I		**Income**				
	a.	Gross Salary	50,000	60,000	1,10,000	
	b.	Income from Investment	15,000	12,000	27,000	
		i. Total Income	65,000	72,000	1,37,000	
II		**Expenses**				
	a.	*Mandatory Expenses*				
		ii. Contribution to PF	4000	5000	9000	
		iii. Tax	5000	7000	12000	
		iv. Loan repayment		12000	12000	
	b.	*Essential Living Expenses*				
		v. Grocery			12,000	
		vi. Fees and education			15,000	
		vii. Rent, Maintenance & Other charges			15,000	
		viii. Transportation			10,000	
		ix. Telephone and Internet			7,000	
		x. Utilities			5,000	
	c.	*Discretionary Expenses*				
		xi. Entertainment			5,000	
		xii. Lifestyle expenses			10,000	
		xiii. Total Expenses			112000	
III		**Investments**	10,000	8,000	18,000	
		xiv. Net Income			1,16,000	i -(ii+ iii)
		xv. Monthly surplus in hand			7,000	i-(xiii+III)
IV		**Savings**			34,000	ii+III+xv
		Savings Ratio			24.8%	IV/i

3.3 Cash inflows and outflows

3.3.1 Cash management

One of the important aspects of the household budget management process is the handling of the cash. On paper there could be a situation wherein there is some savings or surplus that is being seen, but this has to match with the actual cash flow because the income and expense figures have to be backed by actual cash.

This aspect of handling the income and expense flow, so that there is proper balance between the need and availability of cash is known as cash management. For example, consider a situation wherein Sunita earns Rs 50,000 a month. This is the income and the various expenses will be considered against this to see how the savings work out. In reality there is something more that needs to be seen and this is whether the full amount of Rs 50,000 has been received every month. It could be that there are several components to Sunita's salary, let us say, Rs 15,000 of various reimbursements that need to be claimed. If in a particular month this figure has not been claimed, then the actual cash inflow would be just Rs 35,000. This can throw the entire calculation out of control and there could be a cash crunch that could arise.

On the expense side too there has to be look at the cash aspect because this can cause some mismatch too. If too many expenses come right at the start of the month then the overall cash balance could run low, which would leave less amounts available for spends during the rest of the month. In case there is a situation where some additional expenses spring up, then again there could be cash mismatch that is witnessed.

Too many expenses right in the first few days of the month can also lead to a problem if the income is delayed for even a few days. This is where the entire cash management comes into play. Taking all these factors and possibilities into consideration, the individual and the household has to ensure that there is enough cash available for various expenses. In addition, there is also the need to ensure that some delays or disruption would not lead to a crisis.

The way in which this would work out is that a surplus amount would always be maintained in the bank or in cash. This would ensure that there is adequate balance available for even some extra expenses that might suddenly arise. The other way to tackle this is through the creation of a separate fund set aside for this purpose. This is different from an emergency fund that is used to tackle income disruption. This separate fund just helps to tackle some short term cash mismatch.

Effective cash management is thus at the heart of every budget because this will ensure that there is no crisis that arises because there is not enough money to meet the expenses when required. It takes some understanding of the exact nature of the income and the expenses to be able to create the right cash handling position.

3.3.2 Income and expenditure statement

An income and expenditure statement gives a view of the financial flows for an individual or household for a specific time period. There is always a time period for which the income and expenditure statement is prepared and this could be a year or month.

The income and expenditure statement shows the actual amount of income earned during the period and the actual amount of expenses that have been made. This is a very useful tool because the actual figures can be compared with the amounts that have been taken in the budget.

All the income that has been earned is taken on one side and this is considered against the expenses that have been incurred. There is a slight difference between the income and the expenditure statement as compared to the cash statement because there can be some items in the income and expenditure statement that have not been received or paid yet.

A very good example of this is say income from salary. An individual might be receiving their salary on the first of the next month. However, the income and expenditure figure would include the figure in the previous month since this pertains to the previous month. The amount is received a day later, but for calculation purpose it goes into the earlier time period. Similarly, there can be expenses made using a credit card but the payment for this could be due later when the free credit period is over and the bill is generated. Still, this would have to be included in expenditure statement for the period in which the expense was actually made.

The income and expenditure statement shows the extent of the surplus or savings that is generated and this can also give an idea about where the money is actually going and what needs effective control.

3.4 Budgeting and forecasting

The income of a household or individual has to be adequate to meet the current expenses as well provide the savings to create the assets that will help meet future expenses. If the current expenses are controlled, then it is better possible to secure the financial future of the household. It is essential to understand the nature of income and expenses of the household to be able to manage the personal financial situation.

Income has to be regular and stable to be able to be assigned to expenses. The income is first used to meet mandatory expenses such as repayment of loans and payment of taxes. The remaining income is next used to meet essential expenses, such as the living expenses. Discretionary expenses, such as those on entertainment and recreational activities, are next met out of available income. The excess income available is the savings of the household. However, meeting goals and future needs cannot be done if savings is adhoc. Prudent financial management requires that a defined level of savings should be targeted that is

essential to meet goals. A budget helps a household plan its income and expenses so that the income available is utilized in the best possible way to meet current and future requirements.

The steps to making a budget are the following:

1. List and total the regular and definite incomes that will be received in the period.

2. List and deduct the mandatory expenses from the total income. What is left is the disposable income.

3. Identify essential living expenses of the household and deduct from the disposable income.

4. List the discretionary expenses and deduct it from available income to arrive at the savings.

Once the incomes and expenses are identified and listed, it will be easy to assess where the problem lies, if the savings are seen to be inadequate. The income cannot be expanded beyond a certain level. The focus should be on managing the expenses to enhance savings. If the mandatory expenses are too high, it may be because of the pressure from loan repayments. A debt rationalisation exercise with a financial planner may help reduce the burden to some extent. Discretionary expenses and living expenses to some extent are areas where a household can focus on cutting back or postponing till the income expands to accommodate them without compromising on the required savings.

Forecasting or projecting is the ability to look ahead and plan for the future. Forecasting requires looking at the various data and conditions that are present and based on this and the expected changes there is an estimate of the various figures going forward. There are some conditions that are related to forecasting that needs to be understood.

1. This involves predicting the future situation that is expected to arise. This requires the individual or the household to look at how various events will play out because the final forecast will be based on the conditions prevalent at that point of time.

2. There has to be a specific basis on which forecasting is done. This means that it is not just a random exercise but there is a basis for which the predictions are made. Arriving at the basis for forecasting thus becomes a key aspect.

3. The various evolving conditions are taken into consideration when the forecasting is made. This makes forecasting a dynamic exercise.

4. There are several assumptions that are made when the forecasting is undertaken so these assumptions need to be looked at closely. Assumptions can also change along with the change in the overall conditions.

5. There might be a need for several experts or expert opinion in the way in which things are considered, so this assumes an important role in the overall plan. This is needed as one person might not know about all the areas and factors that impact decision making.

6. There has to be some experience present for the person making the forecasts. Hence, the more one does it, the better it gets because there is a proper idea of how things will work out under different circumstances.

Forecasting is an exercise and this can be used to move ahead with budgeting as it can be the basis for the budget that is prepared. The forecast also has to be seen in the context of what actually happens so that the real situation is understood and deviations if any are plugged.

3.5 Monitoring budgets and provision for savings

Understanding the concept of budgeting is the first step in the entire process of maintaining control over the finances of the household or the individual. Once the concept is known the next step is to actually prepare a budget. This will give a complete picture about how the financial flows look like and it will also give an idea about the areas in which action needs to be taken. This does not complete the process, because one of the most important steps remains i.e. monitoring of the budget.

The process of monitoring of the budget involves recording the actual income and the expenses that have arisen. This shows the real situation that is faced by the household or the individual and it has a vital role to play in decision making. The actual figures when compared to the budget plan, will give an idea of how robust the budget planning actually was. It is not likely that every item considered in the budget will end up with the same actual figure, thus the variation witnessed gives a better picture of the strength of the budgeting process.

The monitoring of the budget has to be done on a continuous basis and after looking at the difference seen in the figures further action needs to be taken. This action has to be in the form of correcting the budget figures going ahead. If there is an area where there is a constant miss of the budget target then the planning is off track and this needs to be improved through future changes. For example, if there is a provision of Rs 4,000 a month for conveyance and the average conveyance expense comes to Rs 6,000 for a few months then it is clear that either the budget figure has to be raised or the individual has to change the mode of conveyance to reduce cost.

The ability to provide various areas of action through monitoring ensures that the budget improves over a period of time. This is the desired outcome from the effort of monitoring. There can be an end of the month monitoring that will give an idea about the actual situation but the effort also depends on the kind of record keeping that is taking place. If there is a regular noting down of expense, then even a mid month review can be made so that a better

idea is available about the manner in which the trend is going and if some specific action is required in the remaining part of the month.

The final objective of the budgeting process is to have some element of extra amounts left with the individual or the household. This means that the income has to be more than the expenses that are made. This balance figure is the savings that can then be put to better use for the future. All the further steps in the financial planning process can arise only if there are savings generated.

The amount of savings that is actually seen has to be checked in the light of the requirements of an individual or household. For example, a person could have a savings of Rs 15,000 per month but if the goals require an investment of Rs 30,000 a month then this is not enough. The budget and its monitoring will also give a direction about the steps to be undertaken so that the savings can rise and reach to the desired level or target.

There might be a small difference between the savings desired and the actual amount of savings done. If this is there then bridging the gap is not a difficult task. The real challenge is when the gap between the actual and the desired savings is huge. This will require a step by step approach to raise the savings level. It can consist of some of the following steps.

1. A target of raising the savings rate by a specified percentage might be set. This could be something like 10 % which is not too difficult to achieve.

2. The target once achieved would result in a further target being set. This will ensure that there are constant efforts to raise the savings rate.

3. The manner in which the savings come about is also significant. Elimination of wasteful expenditure and cutting down on discretionary expenses are a good way to raise the savings rate.

4. Lumpsum of large receipts should be directly diverted towards savings. This can give a boost to the overall savings rate.

5. Higher income should not be committed to some additional expense but this should be left free for contribution to the savings rate.

3.6 Creating a personal Balance Sheet and net-worth

Creating a personal balance sheet for an individual will require that various assets and liabilities are brought together and shown at a single place. A balance sheet shows the financial position of the individual or household in the form of assets and liabilities at a particular date. Things can change after the date and the balance sheet will also change but

it is necessary to see how things are stacked up at a particular time and this what the balance sheet actually provides.

Assets for an individual will include physical assets like property, car etc. and financial asset like investments in equity, debt and mutual funds. There might be some advances received by them along with their cash and bank balances which would form current assets. On the liabilities side the various loans that they have plus other payments outstanding including short term debt like credit card dues would make up the list. The different between the assets and the liabilities would be the net worth of the individual or the household.

The income of a household or individual is at the base of all financial activities it undertakes. The income is used to meet current expenses and a portion is set aside to meet expenses in the future. The portion of current income earmarked for future needs is called savings. The adequacy of the income of a household is always relative to its expenses. If the expenses are managed within the income and there is surplus to save, then the household's finances are seen as stable. Short-term imbalances in income and expenses can be managed by loans and advances. The loans are a liability and come at a cost which may further strain the future income. The option of loans to fund expenses must be used with discretion since it weakens the financial situation of the household.

The savings of a household are put to work by investing them in assets. Assets are broadly classified as physical assets and financial assets. Assets may be appreciating in value or depreciating. All assets have a resale value. Investors hold assets for the returns they provide. The nature of return that an asset provides classifies them as growth-oriented, income-oriented or a combination of the two.

Physical assets are tangible assets and include real estate, gold and other precious metals. Physical assets have an intrinsic value though the actual price at which they trade is impacted by demand and supply. They are usually seen as natural hedges against inflation since their price show a positive correlation with inflation. Physical assets are more growth investments that are bought for the appreciation in value rather than the income they generate. Some such as real estate provide both income and growth while others such as gold are pure growth-oriented assets. The primary drawbacks of physical assets are illiquidity, lack of regulation/limited regulation and the need for specific skills to identify investment opportunities, assess the merits of the investment, arrange for the purchase of the asset and its management and sale of the asset when required. The other limitation of physical assets as an investment is that they are typically large ticket investments and require substantial savings or a combination of savings and loan to acquire.

Financial assets represent a claim that the investor has on benefits represented by the asset. For example, a bank deposit gives the benefit of periodic interest and repayment of principal amount to the holder of the asset, an equity share provides periodic dividend paid, if any, and

the appreciation or depreciation in its value is also to the account of the holder. These assets may be structured as growth-oriented assets, such as equity investments, or as income-oriented, such as deposits, or a combination of the two, such as all listed securities. Financial assets are typically standardized products and controlled by the regulations in force at the point in time. They may differ on liquidity features, with some such as listed securities enjoying high liquidity, while others such as privately placed instruments featuring low liquidity. The standardization of financial assets and the mandatory information made available makes evaluation and comparisons more efficient. These assets lend themselves to investment in small amounts and units. Together, the physical and financial assets represent the investments made by the investor.

While these assets represent financial benefits and returns to the holder, the financial strength of the household depends upon how the assets are acquired. Loans and borrowings used to buy assets create a liability and impose a repayment obligation on the buyer and a charge on the future income of the household. Loans taken to buy appreciating assets add to the long-term wealth. Loans taken to buy financial assets, also called leveraging, is risky because of the higher volatility in the price of such assets. Assets acquired with savings and without taking on a liability add to the financial strength of the household.

An assessment of the financial well-being of the household can be made by calculating the Net worth. The net worth is calculated as Assets – Liabilities. Higher this number better is the financial position of the household. Net worth should be calculated periodically, and the progress tracked to bring the financial situation to the desired stage.

An example of a personal budget for Lakshmi is given below. A brief analysis of this will give a better idea about the existing financial situation for her. There is a fixed asset in the form of a house and a car that is present. As compared to the value of the house, the investment figure is still a bit less and these are also not much into growth assets like equity and equity oriented mutual funds. The amount lying in the bank is also not very high. On the other side the net worth figure is relatively low because most of the assets have been acquired through loans and a large part of these are still outstanding. Over a period of time the changes in the net worth can be seen to see how this is rising along with the value of the assets. The net worth is the total assets of Rs 36,22,000 reduced by the total liabilities of Rs 12,07,000 (Rs 12,02,000 +5,000) giving the amount as Rs 24,15,000.

Personal balance sheet example

Liabilities	**Amount**	**Assets**	**Amount**
Net worth	**24,15,000**	House	18,12,000
Loans		Car	3,25,000
Housing Loan	12,02,000	Investments	
Credit card dues	5,000	Mutual Funds	8,40,000
		PPF	3,20,000
		Shares	2,80,000
		Cash and Bank	45,000
Total	36,22,000	**Total**	36,22,000

3.7 Creating a budget and savings plan

There are several steps that need to be taken when a budget and savings plan is created. This will ensure that the process is done in a step by step manner and nothing has been missed out. The following steps would be useful in the budget creation process

a) Start by gathering all the relevant details about the various sources of income and expenses for the individual or the household. The availability of the basic information is the most crucial part of the process, so unless this is present the budget would not reflect the true situation.

b) Check to see that some area has not been missed out in terms of the heads of income or the heads of expenses. This requires going back and looking at the details over and over again. The wider the coverage of the areas, the better the budget will turn out to be.

c) Base the budget figures on either actual expenses that have been made in the past or if this has changed, then the kind of expense that are likely. A record of various expenses would be very useful to arrive at the correct estimate.

d) There has to be some element of change in the various figures in the budget based on the time period for which this is done. For example, when vegetable prices show a seasonal spike a higher amount needs to be allocated here. A month in which there are a couple of birthdays in the family might need a higher allocation for discretionary expenses.

e) There has to be a contingency figure that is present in the budget. There are times when a sudden change disrupts everything but this feature would ensure that the budget remains robust.

f) The amount of savings needed would have to be achieved through the curtailment of expenses within limits. So, the required savings figure based on the goals needs to be present.

g) There has to be a proper allocation of the savings amount and this should be done before the figure is spent elsewhere. This is why there has to be a direct transfer to the various investments, so that the amount automatically goes each month in the required investments.

Make the savings plan a part of the fixed figure in the budget and this will ensure that there are no variations here and that the goal is met.

3.8 Contingency Planning

Investment advisers need to prepare the client for various contingencies that might come up. The household or individual's financial strategy needs to provide for these risks. The following are typical contingencies to provide for:

* A family that is dependent on incomes of both its earning members needs some protection. If anything were to happen to either earning member, the family will be in dire straits. Life insurance mitigates this risk.

* Healthcare costs are another financial risk for any family. Medical insurance, addresses this risk.

*Income streams are also affected if people lose their jobs. The double income can offer some kind of insurance against the job loss risk. If one loses the job, the other hopefully will retain the job. This would ensure that some income keeps coming in every month.

* An emergency fund needs to be the first goal towards which a household or individual should save as a protection against the possibility of loss or reduction of income. The fund should be adequate to meet the expenses for six months, in the event the regular income is not available. The emergency fund should be held in liquid assets, to enable easy access as and when required. If income security is high, the fund can also be held in a laddered way, with the equivalent of around three months' expenses being held in liquid assets, and the rest of the funds being held in a less liquid assets but which gives better returns. If the emergency fund is used then efforts must be made to replenish it as soon as possible. The adequacy of the emergency fund should also be periodically reviewed. It should be done annually or whenever there is a large addition, such as an EMI, to the monthly expenses.

* Separation (divorce) is another risk that families face. In developed countries, the wealthy go in for pre-nuptial agreements. This is an agreement, entered into before marriage, which details how the finances (and any other matter) will be dealt with, in the event of a separation. The legality of such pre-nuptial agreements in India has not been established.

* The Investment Adviser should ensure a healthy distribution between both spouses of the holdings of the family's assets and liabilities. For example, in some investments, one partner will be the first holder, while the other may be a joint holder; the holding pattern can be reversed in some other investments.

* In the case of double income families, the holding pattern can be closely aligned to the source of income of the investment. Investment made out of incomes of one partner can be held with that partner as the first holder.

* Another approach would be to keep the salary account of each partner distinct (with the other partner as joint holder). This account is to be used only for investments, or to transfer funds to another joint account that is used for meeting household expenses. Such segregation of investment flows and household expense flow helps in better expense monitoring, as well as investment record keeping and tax record keeping.

* When a housing loan is taken for purchase of property, the partners can be joint owners of the property as well as joint borrowers for the loan.

3.9 Evaluation of financial position of clients

The personal financial situation of an individual or a household primarily refers to its ability to manage its current and future needs and expenses. The income available to do this may be drawn from salary, a business or profession or from the assets created over time by saving and investing a portion of the income. Typically, assets are created to meet the future expenses of the household, and financial planning helps apportion the available current income to immediate expenses and savings for the future. Loans are used to meet expenses and to create assets, if the income is inadequate to meet all the needs. This creates a liability for the household which also has to be settled in the future from the income.

The efficiency with which the interplay between income, expenses, assets and liabilities are handled by the household determines its financial situation. Insurance planning is an essential element of a financial plan. Insurance is an efficient way of protecting the household finances from a loss of income or a large, unexpected expense that can derail the financial situation. Similarly, meeting income needs in retirement is an important concern and financial goal for all households.

Just as analysts use various ratios to assess the financial position of companies, similarly, investment advisers use various personal finance ratios to assess the financial position of their clients. These ratios are calculated using the income, expenses, savings and investment data for each client and gives a numerical snapshot of their current situation. It helps identify areas that require changes and helps set the course of action for the future. Personal finance ratios

thus form an important input in the financial planning process. Some of the important ratios are as follows:

3.9.1 Savings Ratio & Expenses Ratio

Savings Ratio is the percentage of annual income that a person is able to save. It is calculated as Savings per year/Annual Income.

ABC earns an annual income of Rs. 6 lakhs and saves Rs. 60,000 from the income. The savings ratio is Rs. 60,000 ÷ Rs. 6,00,000 = 10%.

Savings is not limited to money that is retained in the savings bank account. Money invested in fixed deposits, mutual funds, shares, debentures, public provident fund, national savings certificates, post office deposits, real estate, gold and others during the year also form part of the savings.

Some savings may not even reach the investor during the year. For example, the company's contribution to provident fund or superannuation fund on account of the investor. The money will not go to the investor immediately, but it belongs to the investor and will be available in the investor's account with the provident fund or superannuation fund and will form part of the savings during the year.

Annual income will include all income earned from employment or business and in the form of interest, dividend, rent and such other items during the year.

Consider the following information. XYZ earned a gross salary of Rs. 10,000, including company's contribution to provident fund of Rs. 500. Net take home salary was Rs. 9,000 after deducting Rs. 500 towards employee's contribution to provident fund. XYZ earned Rs. 200 towards interest in the savings bank account. Expenses during the month were Rs. 7,000. What is the savings ratio?

Total Income: Gross salary + Interest income = Rs10,000 + 200 = Rs10,200

Savings: (Net salary + Interest income + Contributions of employer and employee to provident fund)–(Expenses) = Rs9,000 + Rs200 +Rs500 + Rs500 – Rs7,000 =Rs3,200.

Savings Ratio: Savings /Total Income = Rs3,200 ÷ Rs10,200 =31.4%.

The Savings to Income ratio measures the total accumulated savings of the individual relative to the annual income. It is calculated as Total Savings/Annual Income.

Consider the following information of the financial situation of GGN.

Annual salary: Rs.12,00,000

Accumulated investments, including PF balance, value of bank deposits, mutual fund units, PPF, NSC: Rs. 15,00,000

Savings to Income ratio: Rs.15,00,000/Rs.12,00,000= 1.25

This ratio measures the preparedness to meet long term goals such as retirement. The current value of the investments and assets, after accounting for any outstanding loans taken to acquire the same, is taken to compute the total savings. Self-occupied home is typically not included when calculating the savings level.

The appropriate level for this ratio will depend upon the age of the individual. When the individual is young, expenses are high relative to the income available and the accumulated savings are likely to be low. Moreover, at this stage much of the available surplus is likely to go towards servicing a home loan. The ratio is expected to improve over time, as income goes up and expenses stabilize. A suitable savings to income ratio in the early 40s is at least 3 times the annual income. This means that the annual savings rate, or the annual savings relative to income, has to be stepped up as income levels go up, so that the savings can be built to a level that is suitable to the age and stage in life.

In the earlier example, if ABC has saved Rs. 60,000 out of an income of Rs. 6 lakhs, it stands to reason that Rs. 6,00,000 – Rs. 60,000 i.e. Rs. 5,40,000 was spent towards various expenses.

The Expenses Ratio is calculated as Annual Recurring Expenses ÷ Annual Income. In the case of ABC, it amounts to Rs. 5,40,000 ÷ Rs. 6,00,000 = 90%.

Expenses Ratio can also be calculated as 1 – Savings Ratio. Similarly, Savings Ratio is 1 – Expenses Ratio.

Non-recurring expenses are kept out of the expense ratio. For example, if a person incurred a one-time medical expenses of Rs. 50,000 in a year, then that would be excluded. However, if it is found that on an average, every year the family spends Rs. 30,000 towards healthcare expenses (beyond any re-imbursement from employers or insurers), then these would be included in determining the expense ratio.

Suppose a family goes on a foreign holiday every 3 years, when they spend about Rs. 6,00,000, then its annual equivalent viz. Rs2,00,000 will be considered in the expense ratio.

Expenses may be mandatory, such as taxes, rents, EMIs for loans and necessities for living. Discretionary expenses are those items of expenses that are not essential. Much of the reduction and rationalisation of expenses happen with respect to discretionary expenses in order to improve the savings ratio. A low expense ratio and high savings ratio is desirable for an individual’s financial security and stability.

3.9.2 Total Assets

Savings of the individual are deployed in various forms of physical and financial assets such as shares, debentures, mutual funds, real estate, gold, provident fund, superannuation fund, and others over a period of time. The current value of these assets constitutes the investor's total assets. Physical assets such as real estate is typically acquired with a combination of savings and loans.

A conservative approach would be to exclude personal jewellery, one residential house that the investor's family stays in, and any other form of asset meant for personal use (e.g. car) while estimating assets available to meet goals and financial needs.

3.9.3 Total Liabilities

Liabilities include loans and different forms of credit taken to meet expenses or to acquire assets. These may be taken from institutional sources, such as banks and financial institutions, or from personal sources such as friends and relatives. Liabilities may be long term and secured on assets, such as mortgage towards purchase of house and car loans. Or they may be short-term and unsecured, such as credit card outstanding and personal loans. Such liabilities tend to be more expensive.

Liabilities imply an obligation to repay the loan from the future income. This impacts the ability of the household to meet other expenses and to save for other assets. It must be used with caution, ideally to acquire assets that appreciate in value. Greater is the liability, more shall be the financial pressures on the investor for repayment.

3.9.4 Leverage Ratio

This is a measure of the role of debt in the asset build-up of the investor. It is calculated as Total Liabilities ÷ Total Assets.

For example, an investor owns real estate worth Rs.50lakhs, investments and bank balances valued at Rs.10 lakhs, and Rs.5 lakhs is lying in provident fund account. The real estate was bought with a loan of Rs. 30 lakhs, of which Rs. 10 lakhs is currently outstanding. The investor also has credit card dues of Rs. 2lakhs and a loan of Rs.1 lakh from a friend.

Total assets = Rs. 50 lakhs + Rs. 10 lakhs + Rs. 5 lakhs i.e. Rs. 65lakhs.

Total liabilities = Rs. 10 lakhs + Rs. 2 lakhs + Rs. 1 lakh i.e. Rs. 13lakhs.

Leverage Ratio = Rs. 13 lakhs ÷ Rs. 65 lakhs i.e. 20%.

Higher the leverage, more risky it is for the individual's financial situation. A ratio greater than 1 indicates that the assets will not be adequate to meet the liabilities. The ratio is likely to be

high immediately after a large-ticket asset, such as real estate, is purchased with debt. Over time as the asset value appreciates, the ratio will also moderate. Investor needs to look at the leverage in the context of debt servicing capability. Further, investor needs to ensure that a risky investment position is not compounded with high leverage financing it.

3.9.5 Net Worth

A strong asset position is of no use, if most of these are acquired through loans that are outstanding. Similarly, liability is not bad, if it has been used for creating an asset, such as real estate, which has the potential to appreciate in value.

It is therefore normal to monitor any investor's financial position through the net worth. It is calculated as Total assets – Total liabilities.

In the previous example,

Net worth = Rs. 65 lakhs – Rs. 13 lakhs i.e. Rs. 52 lakhs.

Net worth is monitored over a period of time to monitor improvement or deterioration in the financial position.

3.9.6 Solvency Ratio

Despite having assets, a person may be insolvent, if the liabilities are higher than the value of the assets held. A critical benchmark is that the individual's net worth should be positive.

The extent of the investor's solvency can be determined through the solvency ratio, which is calculated as Net Worth ÷ Total Assets. For the same asset position, higher the solvency ratio, stronger the investor's financial position.

In the above example, it is calculated as Rs. 52 lakhs ÷ Rs. 65 lakhs i.e. 80%.

It can also be calculated as 1 – Leverage Ratio. Similarly, Leverage Ratio = 1 – Solvency Ratio.

3.9.7 Liquid Assets

Liquid assets are those assets that can be easily converted into cash at short notice to meet expenses or emergencies. Liquid assets include money in savings bank account, fixed deposits that mature within 6 months, investment in liquid funds or other mutual funds and such other short-term assets. On the other hand, there are assets that are not easy to convert into cash. For example, it can take a long time to sell real estate at the fair value and realize it.

Closed-end mutual fund units may not be as easily realizable as units of open-end mutual fund units. Some assets may be easily converted into cash but their values may fluctuate

widely in the short-term, thus making them unsuitable for realising cash at short notice. Shares and open-end equity schemes fall under this category. Open-end debt schemes too have a significant market element in their valuation which makes their return volatile, and therefore unsuitable to meet the need for funds at short notice.

More the money in liquid assets, lesser are the chances of the investor getting caught in a liquidity crunch. However, keeping the entire money in liquid assets is not a sensible solution. Liquidity comes at a cost. For example, banks usually offer lower rate of interest on shorter-term fixed deposits; liquid schemes may yield a lower return than longer-term debt schemes.

Investors therefore need to balance their liquidity and return needs. Keep enough in liquid assets to meet liquidity requirements, and invest the balance in longer term assets with a view to earning superior return.

3.9.8 Liquidity Ratio

The role of liquid assets is to meet the near-term liquidity needs of the individual. It is normal to calculate the liquidity needs as the expenses that an investor will incur over the following 6 months (including loan repayments). In exceptional situations, expenses over a longer period may be considered.

Liquidity ratio measures how well the household is equipped to meet its expenses from its short-term assets. It is calculated as: Liquid Assets/Monthly Expenses.

A ratio of at least 4 to 6 indicates a comfortable level for the household to meet its expenses for 4 to 6 months, even if there was a loss or decline in regular income.

Consider the financial situation of NFG. The monthly expense incurred, including loan repayments, is Rs.1.5 lakh. The market value of the assets held are as follows:

Equity Shares Rs.3 lakhs

Savings bank account Rs.7lakhs

Short-term Fixed Deposits Rs.2lakhs

Long-term Fixed Deposits Rs.6lakhs

Open-end liquid mutual fund schemes Rs.4 lakhs

Other open-end mutual fund schemes Rs.5 lakhs

Closed-end mutual fund schemes Rs.12 lakhs

Liquid assets = Rs.7lakhs + Rs.2lakhs + Rs.4lakhs = Rs.13lakhs.

Liquid Ratio = Rs.13lakhs ÷ Rs.1.5lakhs= 8.66.

A ratio of around 6 indicates a comfortable situation to manage short-term obligations.

Note: Shares have not been included in liquid assets because the uncertainty in the value of the share makes it risky for an investor to include in liquid assets.

Another liquidity ratio that is tracked is the Liquid assets to Net worth ratio. This ratio has to be interpreted in light of the goals of the individual. If there is a longer period to the goals, then this ratio should be low. A high ratio would indicate that a large portion of the savings are held in liquid assets and would be earning low returns. This will affect the ability to meet their long-term goals efficiently. If goals have to be met in the near term, then adequate assets must be held in easily realisable assets. In this situation the ratio needs to be higher.

3.9.9 Financial Assets Ratio

Assets can broadly be categorised as financial assets such as shares, debentures, bank deposits, Public Provident Fund, mutual fund investments and others, and physical assets such as gold, other precious metals, diamonds and real estate. Financial assets have the advantage of greater liquidity, flexibility, convenience of investing and ease of maintaining the investments. They are primarily income generating investments, though some of them, such as equity-oriented investments are held for long-term capital appreciation. There is greater ease of investing in such assets as it lends itself to small and frequent investments.

Consider the assets held by PQR:

Shares Rs. 5 lakhs, Fixed Deposits Rs. 10 lakhs, Mutual Fund Investments Rs. 12 lakhs, Land Rs. 9 lakhs and Gold Rs. 14 lakhs

Financial assets are Rs. 27 lakhs (5 + 10 + 12)

Physical assets are Rs. 23 lakhs (9 + 14)

Total assets are Rs. 50 lakhs (27 + 23)

Financial assets ratio= [(Rs. 27 lakhs ÷ Rs. 50 lakhs)*100]= 54%.

A higher proportion of financial assets is preferred especially when goals are closer to realisation and when there is a need for income or funds to meet the goals.

3.9.10 Debt to Income Ratio

Leverage ratio measures the extent of debt use in asset acquisition. It however does not directly measure the ability of the individual's income to service or meet the obligations arising from all debt outstanding. Debt to income ratio is an indicator of the individual's ability to manage current obligations given the available income and a parameter used by lenders to determine eligibility for additional loans.

It is calculated as Monthly Debt Servicing Commitment ÷ Monthly Income.

Debt servicing refers to all payments due to lenders, whether as principal or interest.

Consider an example where an individual has a monthly income of Rs.1.5 lakh and has loan commitments of Rs. 60,000 per month. The Debt to Income ratio = Rs.60,000/Rs.150,000= 40%.

A ratio higher than 35% to 40% is seen as excessive. A large portion of the income of the household is committed to meet these obligations and may affect their ability to meet regular expenses and savings. Obtaining loans in the case of an emergency may also become difficult. Any reduction in income will cause stress to the household's finances.

Personal Finance Ratios need to be calculated periodically, say once a year, and compared with past numbers to identify trends. They help identify areas where corrective action needs to be taken to improve the financial situation. The trends also show the efficacy of actions already taken. While benchmarks have been established for each of the ratios, they may have to be customized to each individual's situation.

CHAPTER 4: DEBT MANAGEMENT AND LOANS

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Need of debt
- Role and impact of debt in cash flow management
- Know about Leverage and Debt Counselling
- Calculation of debt servicing requirements
- Understand Responsible Borrowing
- Concept of secured and unsecured loans
- Know certain terms related to loans
- Types of borrowings
- Understand various Loan calculations
- Know Loan restructuring – present value of future payments
- Repayment schedules with varying interest rates
- Criteria to evaluate various loans
- Opting for change in EMI or change in tenure for interest rate changes?
- Invest the money or pay off outstanding loan?
- Know the Strategies to get rid of debt faster

4.1 The purpose or need of debt

Debt is used to finance goals when available funds (self-funding) are inadequate. Even though income might be higher than expenses it is not possible to finance every purchase or asset with just the existing savings. For example, most people cannot buy a house without a loan. This is because the cost of a house is huge and if people waited till they had enough savings to buy a house then it is likely that this would not be possible till they near retirement. Lenders protect themselves by securing their loan against a charge or security or pledge or mortgage on the property. Such loans are also called 'mortgages'.

Other debt includes auto loans, credit taken for buying consumer durables, personal loans and credit card outstanding. However, debt comes at a cost and imposes a repayment obligation on the borrower. The decision on whether or not to use debt will depend upon the ability of the available income to bear the additional charge of interest cost and repayment.

Debt is not always bad. In some cases, the decision to use borrowed funds over own funds, also called leverage, may actually increase the return made on an investment (Modigliani-Miller Theorem (M&M)). In some cases, a loan may make more sense in a given situation. For example, an education loan may be a better choice than drawing from a retirement account to fund the children's education. The future income would be easily able to repay the loan

and at the same time the existing funds can continue to earn without losing the benefit of compounding.

It can be seen that debt is needed under various circumstances and sometimes it can be also for temporary use of funds. This kind of short term needs might arise due to some emergency or some cash flow mismatch but it can ensure that an individual is able to continue on their life path without facing sudden disruptions.

4.2 Role and impact of debt in cash flow management

While some debt is good and may even be recommended, how much debt is good depends upon the financial situation of each household. A good indicator is the debt to income ratio (DTI) that measures the ability to meet the obligations arising from debt with the available income. There is no "perfect or optimal" DTI ratio that lenders require, but all lenders tend to agree that a lower DTI is better. Depending on the size and type of loan they're issuing, lenders set their own limits on how low your DTI must be for loan approval.

Consider a salaried employee who draws a salary of Rs. 15,000 per month, and is paying Rs7,500 towards debt servicing. The debt servicing ratio comes to Rs.7,500 ÷ Rs15,000 i.e. 50%. This is too high. If 50% goes towards debt servicing, it affects the ability to meet other regular expenses, provide for emergencies and the person may have nothing left to invest for the future.

The interest rate and the amount of debt play an important role as far as the measurement of the impact of the debt is concerned. A higher interest rate will raise the repayment amount that will have to be paid and similarly a higher loan amount will also increase the monthly repayment amount. One has to look at the cash flow and then decide on the amount of debt that will be taken.

All this needs to be done to ensure that the debt and its outflow do not disrupt the entire cash flow management plan laid out. Often there could be a situation wherein the debt servicing needs are high and at the same time a crisis on some other front can leave little room for borrowing some more amounts to tide over it. This is also the reason why the debt servicing amount needs to be low so that there is scope for raising some more funds in case this is required.

4.2.1 Differentiating between consumption expenditure and investment expenditure

Many clients have an endless list of lifestyle expenses. The Investment Adviser should be able to influence the client to be prudent in the expenditure. This can be done by highlighting how expenditure might affect the chances of the family being able to fulfil some other financial goal. One way to differentiate the various expenditures is by classifying them as consumption expenditure and investment expenditure. Consumption expenditure is that amount which

once used does not create any asset that generates further income. Amount spent at a restaurant or for buying clothes or expenses made at a saloon are some examples of consumption expenditure. On the other hand investment expenditure will lead to the creation of an asset, which then can generate further income in the future. The trade-offs should be clearly understood by the client. For example, buying a bond or a property can be investment expenditure.

Some outflows, like providing education to children, may appear to be consumption expenditure. But they may be a useful investment, if the children do well and are able to raise the family's income. Such expenditure needs to be prioritized. A budget that clearly demarcates mandatory and legal payments such as taxes, contributions to provident fund and gratuity and loan commitments, essential living expenses such as food and shelter and discretionary expenses such as lifestyle expenses, will help allocate income better between current and future needs. Allocate savings for goals before considering the discretionary expenses. This will make sure that the future needs are taken care of. Systematic investment plan (SIPs), especially when automatically transferred from the salary, helps in prioritizing the investment expenditure.

4.2.2 Identifying the holes in the household budget

A household may not be managing its income and expenses efficiently to enable savings for goals. Some common errors that make it seem as if savings are not possible include not being clear if an expense is an essential living expense or discretionary in nature, incorrect (higher) allocation for expenses, not 'paying self' before allocating for discretionary expenses, not tracking expenses regularly and hence going over-budget, among others. Very often, clients do not realise how much money goes in various avoidable expenses. The adviser should inculcate the habit in the client, to note down all expenses above a specific level. The limit may be Rs.500 for some clients; Rs.5,000 for some others. The actual figure would depend on the income level of the client.

A summarisation of the list of expenses at the end of the month can be enlightening, even for the client. For example, the amount that went in eating out or entertainment might be pretty high but this might not register for the client because all payments were made by credit card so this was not actually tracked. When the client recognises the scale of the lost opportunity to save, there is better likelihood of prudence in future. An adviser's primary role is to identify and eliminate these lacunae that inhibit savings. There are often cases where a lot of money is spent on buying the latest gadgets when this is not necessary. Spending on a gadget like a phone or a laptop is necessary because it helps in work and increases efficiency and learning for an individual or the household. However constant upgradation just so that they have the latest model to show off is not a wise way to spend money and the amount saved from such expenses can be used at several other places.

4.2.3 Allocation to various categories of expenses

The monthly summary of outflows helps in understanding the current prioritization. If unusual expenses are kept out (for instance, a hospitalization that was not covered by insurance), the balance outflows can be categorized as mandatory contributions to provident fund and other retirement savings, loan servicing, essential expenses and lifestyle expenses.

Families vary in their financial circumstances. The advisor should work with the family in setting limits on various categories of outflows. The household can make additional savings possible by changing their choices on the expenses they incur. An essential expense does not lend itself to much reduction but lifestyle expenses can be controlled to a large extent. Considering the alternate use to which the income can be used instead of spending it on discretionary expenses is one way in which such expenses can be controlled

4.2.4 Windfalls

Clients occasionally earn a windfall such as unexpectedly high annual bonus, inheritance, winning a lottery, etc.. A healthy portion of such unexpected income should be set apart for the future, since the family is used to living without that windfall. This can also be the time to take a look at the outstanding loans and consider pre-paying some of them.

Windfall gain need not be invested immediately, as appropriate investment opportunities may not be available at the time gain occurs. The gain may be held in risk free liquid assets, till investment decision is reached. The amount of the windfall should be properly allocated as the extent of the windfall matters. For example, a very high annual bonus a year can be used to prepay loans and at the same time make some additional investments too, which can yield a return in the future. One should not expect a windfall to occur regularly in the hope that this will save a bad financial situation, as this can encourage wayward financial behaviour and still end up with a higher amount of debt when the windfall does not materialise.

4.3 Leverage and Debt Counselling

Investment Advisers need to consider various aspects when they are advising clients on debt as this can have a big role in the kind of financial behaviour that is witnessed. Many factors will vary for a client and each of these needs to be taken into consideration when a specific plan is put forward. Some of the factor here includes the following:

4.3.1 Purpose of the debt

Debt or loan should ideally be taken for acquiring appreciating assets such as real estate. Some debt may be recommended to meet an expense that will increase the value of an asset, say an education loan to upskill, so that the income generating ability of the person goes up. Financing risky or volatile investment propositions with debt may entail high risk and may put

the entire financial security of the individual or household at risk. Margin financing for stock market investing is one such investment. A fall in the value of the investment will magnify the loss since the cost of debt will also have to be accounted for. Debt should certainly not be used for financing one's regular expenses. If a person starts borrowing to meet expenses, then he is clearly living beyond his means and likely to be in a debt trap. Taking short term debt to tide over temporary liquidity problems may be fine, as long as the borrower knows the risk and has a plan to repay the debt as soon as possible.

4.3.2 Cost of debt

Higher the rate of interest at which money is borrowed, more will be the outgo in servicing the debt. Secured loans, such as mortgages, and education loans are relatively cheaper as there is the benefit of the security available to the lender. Unsecured loans such as personal loans and credit card debt are very expensive and must be used with caution. Credit card is an interest free borrowing option only if the use is within the limits specified, and the repayments are made by the due date each month. When the credit card user does not pay the entire amount i.e. some amount is carried over for payment in the following business cycles, it is called "revolving credit". If a credit card company charges 3% p.m. as interest, the compounded annual cost is (1+3%)^12-1 i.e. 42.6%. Given the exorbitant cost, revolving credit should be avoided. A similar argument can be made for loans for unorganized sector like pawn traders or money lenders who charge as high as 60-80% interest rate or 5% a month from people.

4.3.3 Maturity of debt

Shorter the tenor of the loan; more will be the periodic repayment putting pressure on available income. Even if the cost of debt is low, short loan tenor can put financial pressures in repayment. Therefore, loan tenor should be decided keeping in mind the repayment capacity of the borrower. A longer tenor loan translates into higher interest paid over the term. The debt to income ratio can be used as an indicator of what the household income can take on as repayment obligations, and decide on the tenor accordingly.

4.3.4 Debt Re-scheduling

If the borrower is unable to manage the debt repayments, then it helps to work out a solution as soon as possible. Potential solutions are as follows:

* Rank debt in order of their cost and deal with the costliest debt first. Typically, credit card dues and personal loans will be the most expensive, and work to eliminate them from the outstanding debt list. Low cost debt and debt that provide tax benefits such as home loans and education loans can be dealt with later when finances permit.

* If the debt was taken for purchasing an asset, then the asset can be sold and the proceeds used for pre-paying the debt. While doing this, the borrower should also plan for any pre-payment charges that the bank may levy.

* If the cost of debt is high, then cheaper re-financing is an option. A lower cost loan can be availed to repay the costlier loan. A credit card balance transfer is an example of such refinancing.

* If the problem is with the tenor of the loan, then the possibility of extending the tenor of the loan can be explored. This will reduce the monthly outgo in debt servicing. However, the loan will be repaid over a longer period of time and the total interest paid over the tenor of the loan will go up.

* If none of these is possible, then the borrower should inform the lender about the problem and explore a revised loan schedule. It should however be noted that such re-scheduling of loans hurts the borrower's credit history (also known as credit score like Cibil score). This will affect the chances of obtaining loans in future or the cost at which they will become available.

4.4 Calculate the debt servicing requirements

4.4.1 Role of Credit Bureaus and Credit Score

Credit score is a number assigned to each individual by a credit information bureau based on their credit behaviour and repayment history. A credit bureau is licenced by the RBI and governed by the Credit Information Companies (Regulation) Act, 2005. The credit and financial health of the individual is assessed on the basis of the outstanding loans and credit facilities used, repayment behaviour exhibited, utilization of credit limits, type of loans i.e. the proportion of credit card outstanding, personal loans and other unsecured loans, and other factors that may affect the ability to service loans. This information is reported on a monthly basis by providers of loans and credit to the credit information companies. Here it is collated and used to develop the credit score and the credit report. For example, the CIBIL TransUnion Score is a three digit number ranging from 300 to 900.

Banks, Housing Finance Companies, NBFCs use this score and report for making decisions on a loan application to determine interest rate, loan eligibility and credit limits. A high credit score makes the lender consider the loan application and the terms of offer.

A good credit score and credit report can be built by dealing with debt responsibly. Always pay dues on loans, credit cards and others on time. Credit utilization relative to credit available should be kept low. Too much of unsecured loans such as credit cards or high utilization on your credit card limits and personal loans have a negative impact on the score. For a good score it is important to have a mix of secured and unsecured credit and to apply for credit, or make credit enquiries only when required, and in moderation. A person's credit

score is also affected by the repayment behaviour in loans where they are joint holders or guarantors. Review the credit report periodically so that any errors can be identified and rectified.

Accessing your credit score

In order to have access to your credit score the client has to go to a credit bureau that is licensed to operate in the country. The various personal details can be mentioned to the bureau and the appropriate credit score and even the credit report can be taken. The credit report will not just have the score but all the details of the various loans outstanding and those that the client has serviced or missed payments on or even settled.

The credit bureaus allow for online access to the details for an individual, so this is also an option that can be used to directly access the credit score. The client can open their account with their login details and password on the website of the credit bureau and then check the details. There is also a tie-up by the credit bureaus with various loan providers, so the client can also get their credit score from such loan providers. One has to be careful about accessing the credit score this way because one has to be sure that there is a genuine tie up for access to such scores and that this is not some online scam targeting people for their personal information.

RBI's regulation about free credit score

The importance of credit scores is increasing with each passing day and there is a greater emphasis on this aspect while a new loan is sanctioned by various banks and financial institutions. In order to protect the customer and enable them to get the right kind of information, RBI has introduced some specific conditions with respect to free credit scores. Some of the highlights here include:

* Every individual is entitled to a free copy of their credit report every year from each credit bureau also known as credit information companies. In India, you can access the same from CIBIL, EXPERIAN, CRIF Highmark and Equifax.

* The customer should get a full copy of such a credit report which is the same as what is accessed by the financial institutions when they check the credit details of a borrower.

* The report should also enable the borrower to rectify the mistakes like wrong info, loan closure if any, present in the credit report.

* The credit report will have the credit score plus the details of the latest outstanding loans that are there for the individual. Typically, the report shows, repayment history for last 2-3 years

* The year for this purpose is from January to December or a calendar year.

* The report can be accessed in electronic format.

* The report can be given after the necessary checks for authentication of the individual is done like UID, PAN etc. Credit scoring reports are also available for non-individuals like companies etc..

4.5 Responsible Borrowing

Every individual has a need for some sort of debt or borrowings for meeting their various financial needs. Since there are several assets that are big ticket purchases there is a need to have some debt to finance their purchases. Similarly the use of electronic and plastic payment methods ensure that the individual is able to incur some expenses and pay them off in a few days. All these are facilities for an individual but they need to be used responsibly.

One of the key points that every individual needs to follow is that they should never borrow more than what they can afford. A lifestyle that is flashy might seem enchanting but there is a cost that has to be paid for this and if this is not sustainable then it is better to not go down that path. In terms of expenses an individual should be responsible enough to buy only those things for which they can make payments. The best way to use a credit card is to pay off the amounts by the due date and not leave any amount as revolving credit.

On the loan front it is better to borrow for assets that are value appreciating in nature and which can yield some income down the line. Also, too many loans at the same time can make debt servicing very difficult and hence this has to be avoided. Ensuring that debt options are used responsibly will ensure that this is sustained over a longer time period and at the same time the goals are also attained.

4.6 Secured and Unsecured loans

There are various types of loans based on the nature of the security that is present for the lender of these loans. One is secured loans and as the name suggests these loans are backed by some asset as security. The most common example of such a secured loan is that of housing loans. When an individual takes a housing loan the lender takes the house as a security or mortgage. This is a source of comfort for the lender in case the borrower is not able to repay the money. The asset that is present as security remains in the name of the borrower but in case the loan is not repaid then the borrower can take over and dispose off the asset to recover the money. The most visible outcome of such a security is that the interest rates on such loans are relatively lower. Vehicle loans, Gold loans, loans against securities are some other examples of secured loans.

Unsecured loans are those loans where the lender does not take any security from the borrower. In such loans there is just the personal security or guarantee of the borrower to repay the amount, so this is more risky in terms of lending. The outcome is that such loans are costlier in terms of a higher interest rate to be paid by the borrower. Examples of such loans are personal loans and credit card dues. The interest rate on such loans can be quite steep.

Clients should be advised to use secured loans for building long term assets as the cost will be lower if needed and ensure that the unsecured loans are kept to a minimum or regularly paid before the interest cycle kicks in on credit cards.

4.7 Terms related to loans

4.7.1 Fixed Rate Loans

Fixed rate loans are those loans where the interest rate on the loan is fixed for the entire duration of the loan. This enables the borrower to know the exact cost that they would face over the entire duration of the loan. Fixed rate loans are useful when the interest rates are low and the borrower wants to lock into these low rates.

4.7.2 Variable or Floating Rate Loans

Variable rate loans are also known as floating rate loan. These loans have an interest rate that changes or gets reset periodically with the changes to the benchmark rate to which this is linked. Variable rate loans can be linked to an external benchmark like the repo rate or an internal bank benchmark rate like the Marginal Cost of Lending Rate (MCLR). These types of loans are preferred by borrowers for long term loans especially when they feel that the rates are likely to fall over a period of time.

4.7.3 Home equity loan

A home equity loan is also called a loan against property (LAP). In such a loan the borrower uses the home or any other real estate as collateral for the purpose of taking a loan. The home is the asset of the individual and they are thus borrowing against the security of this asset. The borrowing enables them to raise money which can be used for several purposes. The value of the property and the extent to which the lending institution gives money against the value is what will determine the extent of the home equity loan.

4.7.4 Hire purchase

A hire purchase agreement is one where an individual agrees to buy a certain asset by paying instalments over a period of time. There is an initial payment that is made followed by several instalments over a given time period. The person paying the amounts becomes the owner of the asset when the final instalment is paid. This separates the hire purchase transaction from

a lease because here the individual can become the owner of the asset at the end of the agreement period when all payments are made.

4.7.5 Lease

A lease is a contractual agreement where the owner of an asset called the lessor allows another person called the lessee to use the asset for a certain period of time in exchange for the payment of lease. Assets like property, vehicles, machinery etc. are those where a lease agreement is normally seen. The difference in a lease as compared to a hire purchase is that the lessor will remain the owner of the asset and the lessee cannot become the owner even after the specified lease period is over. This is largely used for vehicles by large companies.

4.7.6 Amortisation

The process of amortisation of a loan is one where the capital borrowed is repaid over a period of time. This is done through fixed payments which are also known as Equated monthly Instalments (EMI). The entire repayment amount is converted into equal fixed amount called the EMI. This gives an element of stability and certainty to the repayments and the borrower knows exactly how much they need to repay each month.

However, there is a schedule to the whole amortisation whereby the EMI repaid consists of both capital and interest in different proportions. The amortisation chart will list out the breakup of the EMI into the interest and capital component each month. There is a higher element of interest component in the EMI repayments in the earlier period of the loan which becomes smaller as the capital component increases with time.

4.7.7 Refinancing

The act of refinancing a loan means that an individual repays an existing loan by taking another loan either to extend the duration of loan or lower the interest cost. The reason for doing this is that there is a lower interest rate on the new loan which will reduce the overall outgo because a lesser amount has to be paid on the loan. The refinancing is usually done for long term loans or for those loans where the amount outstanding is high as in these cases the savings on the interest will also be higher. An example is refinancing a home loan when the difference between the existing rate paid by the borrower and the new available rate is significant.

4.7.8 Prepayment

There is a specific schedule that is prepared for every loan wherein the total amount to be repaid is broken down into equal instalments. There are times when the borrower has some extra amounts and they would like to reduce the outstanding amount of the loan. At such a point they can go and make a prepayment which is paying back the capital before the

specified time. The prepayment will reduce the capital and it will reduce the remaining EMI period too on the loan. Lots of loans, restrict the prepayment of the loans for certain periods like 12 months or levy charges for prepayment e.g. car loan. RBI has mandated that there would be no pre-payment charges for home loans taken from banks.

4.7.9 Pre EMI interest

The Pre EMI interest refers to the monthly payments that are made on the loan which includes only the interest component being repaid. Normally a loan will not have capital amount repaid till the time that the entire loan is disbursed. This kind of pre EMI interest is usually present for house properties that are not yet complete and hence the full amount of the loan has not been taken or possession has not been received for the property. The amount that is being repaid here just consists of the interest component and the normal EMI repaying both capital and interest will start at a later date.

4.7.10 Moratorium

Moratorium refers to a period wherein the repayments on a loan are stopped temporarily or for a certain period of time because of some extraordinary factors also known as (a.k.a) force majeure or tough conditions including some crisis or war or similar situation. The important thing is that under normal circumstances non-payment of the regular EMI will be considered a default but under a moratorium there is a pause and no default is counted. This does not affect the credit score and credit history of the borrower. The interest meter during the moratorium continues so the dues of the borrower keep increasing. The EMI missed during the moratorium are pushed back but they will have to be repaid with the additional interest. For example, banks and financial institutions have given several months of moratorium to borrowers following the Covid outbreak.

4.7.11 Mortgage

A mortgage is a debt instrument that is backed by a specified property that the borrower has to pay back over a specified time period through regular payments. In simple words, a home loan backed by the security of the property is also called a mortgage. Individuals use mortgages to buy properties without putting up the entire money upfront as this allows them to repay the amount over a period of time. It allows for leverage in buying an asset which they would otherwise not be able to afford.

4.7.12 Pledge

A pledge is something that is held as a security on a contract. In case of a debt this is an asset that is held and which can be sold by the lender in case the borrower is not able to repay the amount. Under a pledge the asset which is usually a movable asset remains with the lender till the loan is repaid. This can be contrasted with a mortgage which is for an immovable asset.

4.7.13 Hypothecation

This is a term used for creating a charge against an asset but in this case the asset remains with the borrower. In this sense it differs from a pledge where the asset is with the lender. If there is a default then the lender will have to first take possession of the asset and then sell it. The best example of hypothecation is that of a car loan where the asset is with the user and if there is a default the lender comes and repossesses the car.

4.8 Types of borrowing

4.8.1 Home Loan

A home loan is a loan that is taken for the purchase of a house property. This can be to purchase a constructed property or it can be an under construction property. In case of an individual, those who buy a house either for living or for investment can take a loan for the purpose. The loan is taken because the cost of the house is high and it is not possible for everyone to pay the full amount from their own financial resources. The home loan is the amount that is borrowed from the financial institution to pay for the purchase of the property.

Home loans are a long term loan and the period for this can stretch even for 30 to 35 years subject to working age limits. This makes it a significant loan because even the amount of the loan is likely to be large. The interest that is paid on the loan will thus be huge since it stretches over a longer time period. The security against the loan is the property itself and the financial institution takes the property documents and keeps it with itself till the loan is repaid.

4.8.2 Education Loan

The cost of education is rising with each passing year. Courses for post-graduation or higher education and in many cases even graduation have become very expensive. This can make it difficult for someone with low savings or without large assets to actually finance the education of their children. An education loan is one which is used to fund the cost of education. This is not a very long term loan as the time period of repayment is usually 5 to 8 years.

One of the features of an education loan is that the repayment usually starts after the completion of the education course or when the person completing the course starts earning whichever is earlier. Till this time the interest keeps accumulating on the loan. The loan can be repaid by the parent or even by the child who was educated.

4.8.3 Vehicle loan

A vehicle be it a two wheeler or a four wheeler is now a requirement for many people across the country. The lack of proper public transport plus the convenience of an owned vehicle

makes this an essential asset. A loan that is taken for the purpose of purchase of a vehicle is called a vehicle loan. The vehicle is hypothecated against the loan and the individual is then able to use the vehicle.

The vehicle loan is usually for a period of 3 to 7 years and the longer the time period the lower will be the EMI but the total interest paid will keep climbing. The individual has to choose the right time period and the EMI which is affordable to them plus it does not put too much burden in terms of interest payments since the vehicle is usually a depreciating asset.

4.8.4 Business Loan

A loan that is taken for the purpose of conducting business or profession is a business loan. This differs from an individual taking a loan to purchase an asset. In this case, the amount would be used for the purpose of running the business. The lending institution would look at the financial position of the business and whether it would be able to repay the amount that has been borrowed. For this purpose, the working capital requirement and various turnover ratios are also seen along with the strength of the balance sheet.

A business loan can often have the security of an asset so that there is additional comfort for the lender or it could be that the goods that are produced are hypothecated in the form of stock i.e. goods/inventory. There are often overall limits for the business loan and the amount that is required is utilised. Depending on the nature of the business and the economic cycle there could be different amounts that can be used on this loan at varying time periods.

4.8.5 Personal loan

There are times when an individual would want to spend some money for purposes like travel or even buy some gadget or use the money for a wedding. The full amount that is required might not be available at that specific time. At other times they might have to pay for some expense like a medical emergency or some other debt repayment that cannot be done due to lack of funds. In such times, there is a personal loan which can be taken. This loan is one which can be used for any purpose and there is no fixed area in which this has to be spent.

The personal loan is given without any security and hence it is called a personal loan, which an individual can use any way they want. There are no restrictions on its usage but there is a cost that comes with this freedom. A personal loan is far more expensive than a normal loan backed by an asset and one has to be very careful when using such loans because they are easy to get. The amount of such loans can be easily spent but paying back can become a problem if care is not taken.

4.8.6 Credit card debt

Credit card is a way to access short term credit for an individual. A credit card has a specified spending limit and a person can use the credit card to spend up to the limit. At the end of the billing period cycle the total amount that has been spent is the amount to be repaid on the credit card. Payment of the amount by the due date will not involve any charge but if a part of the amount is carried forward then the interest meter starts ticking. Since this is an unsecured loan there is a large interest charged on credit card remaining unpaid which makes it a very expensive way to borrow.

Credit card debt is the most expensive way to borrow but it is also the easiest because an individual needs to just swipe the card or enter the details online and the transaction is completed. People end up spending far more than what they would be able to repay immediately and they end up getting stuck in the revolving credit cycle. With a high rate of interest, the dues also keep increasing at a quick rate so one has to be very careful in keeping control over expenses when using credit cards.

4.8.7 Overdraft

A bank account allows an individual to use the money that is present in the account. The normal way of using the account is that one can spend only upto the balance that is present in the account. There are times when a higher amount is required for just a few days or a short time period and taking a loan for such a situation would take up too much effort and be time consuming too. The solution is an overdraft wherein the individual is allowed to use more than the balance in the account up to the limit specified in the overdraft. The overdraft facility is usually used by businesses.

There is some asset like a fixed deposit or some other security that is taken by the bank when the overdraft limit is sanctioned. The individual can issue cheques and make payments from the account and the interest is charged only for the time period for which the account was overdrawn. Any amount received can be deposited into the bank account and this would automatically reduce the overdraft amount. This is a flexible and easy way to access short term credit.

4.8.8 Loan against securities, gold, property etc.

There is a category of loans which is in the nature of secured loans. There are various assets like some investment in a mutual fund or shares or even gold that is available with the individual. If there is some need for money then instead of selling the asset there is an option to take a loan against the asset. In this type of loan, the individual uses the security as collateral and gets a loan which has to be repaid according to the schedule that has been set up.

The loan that is taken under this route is given at a certain percentage of the value of the asset as per RBI guidelines. In case there is a sharp downward movement in the price of the asset then the bank can also ask the borrower to deposit some money to cover the change in value. A large loan can also be taken in the form of loan against property, wherein the asset is used to raise money. The repayment capacity of the borrower is considered in deciding the amount that is sanctioned so this remains an important factor.

4.8.9 P2P loans

P2P loans are also known as Peer to Peer loans and this involves one person lending to another person directly instead of a financial institution lending to an individual. There are P2P lending platforms where a person can register themselves and then give or take loans. What happens in these types of loans is that an individual is giving money to another person and this is an unsecured credit because there is no security behind the lending. There is a basic background check that is made of the people on the platform but this does not reduce the risk for the lender.

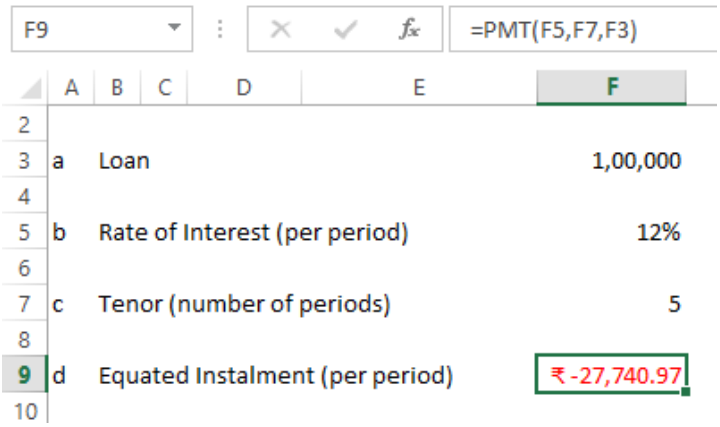
The risk for the lender is that the amount might not be repaid. Since this is an unsecured lending there is a high risk that if the borrower might not be able to repay the money there is no recourse to some asset to recover the amount. This is why the interest rates on such loans are quite high, although the amounts are very low. The time period for the borrowing is usually short term and it is an easy way to get some funds when there is an immediate need for money. The borrower is able to borrow smaller amounts using these platforms and that too in a short period of time. This is a growing field and lenders as well as borrowers need to be alert about the conditions and features of the loan when they use this mode to transact.

4.9 Understand loan calculations

Many investors need assistance in understanding how much loan is good for them. The financial pressures arising from debt are linked to debt repayment. What is the Equated Monthly Instalment (EMI) for a loan under consideration?

EMI can easily be calculated in MS Excel using the ‘=pmt’ function as shown in the example

Determining the EMI



The point to note is that b, c and d in the table are defined in terms of per period – a year in the above case. If each year Rs. 27,740.97 is to be paid, then the monthly payment would be Rs. 27,740.97 ÷ 12 i.e. Rs. 2,311.75, payable for 5 X 12 i.e. 60 months. This instalment represents a combination of principal and interest.

If the debt is at 1% per month interest and loan is to be repaid in 5 years, interest per period would be 1% and number of periods would be 60. Accordingly, the equated instalment would be Rs. 2,224.44 by changing the variables.

Lenders use the term 'rest' to indicate the interest charging cycle, which can be different from the payment cycle. For example, interest is chargeable at 12% p.a. on annual reset. The repayment obligation needs to be worked out, initially for the interest charging cycle (period =1 year in this example). Thereafter, each instalment is calculated. Thus, if payment cycle is quarterly, the annual instalment is to be divided by 4; monthly instalment is calculated by dividing the annual instalment by 12.

Suppose interest is chargeable on annual reset and payment cycle is monthly. The implication for the borrower is that although repayments are being made monthly, the lender will adjust the loan obligations (for calculation of interest charge) only every year. Since borrower is not getting credit for payments made during the year, the effective borrowing cost turns out to be higher than the interest rate quoted by the borrower.

If the borrower earns Rs. 10,000 per month, and this is the only debt, then debt servicing ratio would be Rs2,224.44 ÷ Rs10,000 i.e. 22.24%.

This can be reduced by increasing the tenor or reducing the interest cost or reducing the amount borrowed. Suppose the tenor is extended to 6 years. Then the EMI changes from Rs.2,224.44 to Rs 1955.02. The revised debt servicing ratio is 19.55%.

If the borrower has another loan on which repayment is Rs1,000 per month, then total debt servicing is Rs1,955.02+ Rs1,000 i.e. Rs2,955.02. Debt servicing ratio would then be 29.55%.

4.10 Loan restructuring

There might be some sort of financial stress for the borrower that would make them unable to pay the loan that has been taken. For an individual this can happen when they lose their job and their income stops or it could happen when they face a sharp reduction in their income either through a pay cut for an employee or through loss of business or professional income for others. The financial institution would not like the loan to become a non performing asset and hence they would want to ensure that there is a loan restructuring.

Under a loan restructuring there is a change in the conditions related to an existing loan. This could involve a reduction in the EMI that is being paid so that the loan becomes affordable or it could be an increase in the time period for repayment. These have to be seen in two ways where the first is the affordability for the client. This should fit into their financial condition, so that it does not disrupt their other payments and expenses. The other aspect is the actual value of such a change and this is known through the present value of all the future payments that are going to occur.

For example, consider a loan of Rs. 3 lakh that has to be repaid over the next 3 years at an interest rate of 7 per cent when the rest is monthly. In this case the existing EMI would come to Rs. 9,263. If the period of the loan is extended to 5 years then the payment periods go from 36 to 60 and this will bring down the EMI to Rs 5,940. The entire flow of Rs 5,940 is nothing but the cash flow whose present value will be equal to the loan amount.

This is calculated by using the PMT function=PMT(0.07/12,36,-300000,,)

PMT = 9263

This kind of calculation can be done for any situation wherein the amounts are adjusted so that the present value for the lender remains the same. There can be cases where the lender takes a haircut and in this case the amount that is to be repaid would be less. In the example above if the lender decides to reduce the amount to be repaid to Rs 2 lakh and the loan period remaining is at 3 years then the EMI would drop to Rs 6,175 which would be a real relief for the borrower because they are paying less in terms of present value of the final payments.

=PMT(0.07/12,36,-200000,,)

=6,175

A simple reduction in the number of instalments would again mean that the borrower is going to pay a lesser amount in terms of present value on the loan. However this has to be seen in

the light of whether the amount of the instalment has been raised. This could cancel out the benefit of the lower number of instalments, so this has to be checked.

In some cases, the restructuring will also involve a reduction in the interest rate. When there is a reduction in the rate the borrower will end up saving some payments if all the other conditions related to the loan remain the same. For example, if the 7 per cent rate in the example goes to 5 per cent then the EMI will drop from Rs 9,253 to Rs 5,994. This is a real saving only if the period of repayment is not increased.

Sometimes an additional loan is given which will help in tackling the financial crisis and this can help the repayment of the amounts on the earlier loan. The conditions of the new loan will once again need to be seen in the light of the present value calculations so that this does not end up putting a higher burden on the borrower.

The client has to ensure that they are paying the right amount under the entire restructuring process because unless they check the present value of the cash flows, they will not be able to know what the real situation actually is.

4.11 Repayment schedules with varying interest rates

The repayment schedule on a loan is a significant component that is often ignored because all that an individual focuses on is the EMI amount. The repayment of a loan consists of two parts which is interest and capital repaid. There might be a specific amount paid but every individual also needs to see the amount that is being repaid towards capital as well as interest as it will determine the amount that is outstanding on the loan.

The normal EMI amount is found out by the PMT function in Excel but to get a proper break up of how the interest and the capital are being repaid there is a need to look at more functions. This would be the PPMT function for the purpose of knowing the principal part of the repayment. In this part the principal component of the EMI will be known and this will give an idea of the kind of money going to repay the capital borrowed. Similarly, for the interest component it is the IPMT function that has to be used.

Taken an example where the interest rate is 7 per cent that is being paid on a loan of Rs. 10 lakh that has to be repaid in a period of 10 years in monthly instalment assuming that the rest is monthly. Using the simple PMT function the EMI for this repayment would come to Rs. 11,610.

The next part of the exercise is to see how this would be broken up into the principal and interest part. In the PPMT function there is the interest rate that has to be entered along with the period which is the period for which the break up has to be found. In this case if you want the principal payment for the first month then 1 entered here with the total l oan period of

120 months and the loan amount would give an amount of Rs. 5,777. Using the IPMT function the interest component comes to Rs. 5,833 which shows the total breakup of the entire EMI.

For the principal calculation for the firm EMI

=PPMT(0.07/12,1,120,-1000000)

= 5,777

For the interest calculation for the first EMI

=IPMT(0.07/12,1,120,-1000000)

=5,833

If the interest rate is lower at say 5% in the example then the total EMI drops to Rs. 10,606. However, this has a big impact on the distribution of the interest and the capital within the EMI. Now the capital repaid in the first instalment is Rs. 6,440 while the interest component is Rs. 4,166. As can be seen since the overall interest rate is lower a larger part is going towards the capital repayment right from the initial EMI.

To contrast the situation, consider the position when the interest rate is 9 percent. In this case the EMI would rise to Rs. 12,667. Now out of this amount in the first month it is just Rs. 5,167 that goes towards the principal and the remaining Rs. 7,500 goes towards the interest component. A higher interest rate has led to a higher total interest cost which means more goes towards interest right from the first payment.

4.12 Criteria to evaluate loans

There are multiple features of loans that differ and this need to be considered by anyone who wants to take a loan. The exact feature can make a huge difference as far as the final cost or expense on the loan is concerned. Here are some criteria that can be considered while looking at loans.

a) The interest rate on the loan is one of the most vital criteria to consider. The rate of interest that is charged is significant and a lower rate will be better than a higher rate but this is not enough. The method of calculation of the rate is also a factor. The interest rate has to be calculated on a reducing balance method as compared to a fixed capital so that the repayment benefit on the loan leads to a lower interest rate.

b) The period after which the loan is reset for interest rate changes is also critical. A very long period of say a year could mean that the benefit of some rate cuts come to the individual borrower very late. This could result in the outstanding amount not being affected much. In

case of a rising interest rate then the same thing could be a benefit as the higher rates kick in after a longer time period.

c) There are different expenses involved at the time of taking a loan. This could include a processing fee or legal/other charges which can be expressed as a small percentage of the loan amount or a fixed sum. This will raise the cost of the loan as this is a payment that is additional to the interest cost. Many times, these processing charges are waived and that can be a factor that leads to some savings for the borrower.

d) The time period of the loan being offered will be a serious factor that can decide where to take a loan from. There are situations when some institution offers a longer time period for repayment and this could be favourable for someone who wants a longer term loan. A longer time period of repayment means a higher interest outgo but for those who want to reduce their EMI the choice here could be crucial.

e) The nature of the benchmark that is available for the loan is also a factor that an individual has to consider before making their decision about a loan. There are now loans linked to an external benchmark like the repo rate which is transparent. Internal bank benchmarks often do not change as quickly as the changes in the rates in the economy as the transmission of the rates takes place slowly. The changes can work either ways because a rising rate scenario will lead to higher rates coming through quicker so this also needs to be considered before a final decision is made.

4.13 Opting for change in EMI or change in tenure for interest rate changes

Floating rate loans are a very popular category of loans and most long term loans are of this nature. The changes in the linked benchmark to the loan will lead to a change in the interest rate applicable on the loan. There are two choices that come before the borrower when the interest rate changes and this is to either change the EMI amount or change the time for which the loan would be repaid.

Making a choice as to what route to adopt is crucial for the individual because they will be affected by how their loan payment behaves. There is a clear working that is done when the loan is taken. The EMI that has been selected is usually an amount that is affordable for the individual given their income and savings level. So, it is easier to deal with a situation wherein this remains the same and the tenure of the loan changes it is easier to keep track of the same amount that has to be paid rather than having this change with each change in the applicable interest rate. It is also that there would be some times when the interest rate rises and if the EMI starts rising then this could impact the financial situation or cause distress if the loan payment goes higher than what is optimal.

There can be times when the interest rate change can be reflected in the EMI. If for example a loan has been taken at a high interest rate and this has declined significantly then the tenure would have come down quite a bit. To ensure that there is a reduction on the monthly outgo there could be a onetime reduction in the EMI which would reset the entire working. In other circumstances when the EMI pressure is high then such a change in interest rate can be used to change the EMI and keep the financial situation strong.

4.14 Invest the money or pay off outstanding loan

Many times, the individual has some amount that they received either as a lump sum or even as a onetime gain or windfall. The question that arises at such a time is whether the amount should be used to make an investment or to pay off an outstanding loan. There are different conditions that would impact the decision and some factors here would be as follows:

1. If there is a very high loan burden, which is a strain on the finances then the amount received can be used to pay down the loan and bring it to a comfortable level. This would relieve a lot of mental pressure and while in some cases this might not be the best opportunity for deployment, it could be essential for mental peace or pressure.

2. The amount that is available to repay the loan or invest also has to be seen in the context of both the absolute figure and a relative figure. In terms of absolute amounts, if this is quite high, then this could be significant in terms of the decision made. Hence, additional factors like the interest rate on the loan and the earnings on the investment need to be considered. However, if the absolute amount is small, this might not make a big difference in terms of repaying the loan if the loan amount is large. In case the amount available is a significant portion of the loan, then repayment could lead to a debt free situation being seen earlier.

3. The mathematical aspect of the decision would depend on two main things. What is the interest rate that is being charged on the loan and what is the average earning, which would be available from the investment amount going forward? In some cases, the decision is easy to make, as a high cost credit card outstanding or a personal loan would see a repayment as a better choice. When it comes to the question of earnings, then one needs to look for a longer time period in the future because unlike a loan where the repayment of the EMI leads to a reduction in the interest component in the entire working, the reverse is true for the investment. The benefit of compounding would mean that a good rate of return would boost the capital amount significantly, so that in some time the capital available would be high which would easily pay off the loan and still have some amount left as investment.

4. The asset class of the investment also has to be considered because if one is planning to invest in equity then there is also an extra risk that is being taken, However if the return here over the longer term comes to around say 12 percent while the loan rate is around 7 percent then the better idea would be to invest. However, when there is a higher earning investment,

then there is also a risk element involved. This should not be forgotten. Sometimes the rates are not very different in the loan and the investment but still the latter is compounding, so it could lead to a better return on the money some time down the line, if it sustains.

4.15 Strategies to reduce debt faster

A large amount of debt can seem to be a big problem in terms of the amount outstanding as well as the interest cost that this also brings along. The goal of many people would be to reduce the debt as quickly as possible. There are several strategies that can be used in this regard.

4.15.1 Avalanche

The avalanche strategy for paying off debt involves looking at the various loans and borrowings and paying off those with the highest interest rates first. This is a logical way of going about the repayment process because the highest interest rate loans are the most costly and hence this is expected to bring down the interest burden. The thought is also that the lower interest rate loans will not hurt the financial situation as much, so they can be paid off later. The risk in such a strategy is that if the higher rate loans are less in terms of absolute amounts, then paying off them first will not reduce the interest payment pressure as expected.

For example, if an individual has a credit card outstanding of Rs. 30,000 (42 % interest), a personal loan Rs. 1.2 lakh (21 % interest), a housing loan of Rs. 15 lakh (8 % interest) and a car loan Rs. 1 lakh (12 % interest) then the avalanche strategy will lead to repayment of the credit card first followed by the personal loan and then the car loan. This will reduce high interest-bearing debt first followed by others.

4.15.2 Snowball

The snowball route of repayment of debt focuses on the amount of the loan. In order to get a sense of success in the repayment the method first starts off with the lowest debt amount and then moves to the higher amount that is outstanding. In the snowball method, the interest rate does not come into the decision making consideration, so it could be that some lower amount outstanding has a low interest rate but this will still be repaid first while a higher cost loan still remains standing. This kind of strategy is useful to achieve a sense of success when there are quite a few loans remaining. The exact mixture of the amounts outstanding and the rates could still leave the interest pressure high, if the high amount loans have a higher outstanding and hence this is not preferred for the example, we took above for credit card and car loan etc.

In the snowball strategy the goal is to pick up momentum as the next repayment occurs. When the first loan is paid off the amount saved here is sought to be mixed and rolled on to

the next loan repayment with the expectation that this will keep gaining in terms of amount, so the next higher debt becomes easier to pay. This is often used as a motivational strategy.

4.15.3 Blizzard

The blizzard approach to repaying debt is a mixture of the avalanche and snowball methods. This starts off with the snowball method, whereby the lowest amount of debt is paid off first. Once this gives a motivational boost, then the next step involves switching to the avalanche method and paying off the highest interest rate debt. This method is supposed to take care of the risk of ending up with the highest interest rate debt in the portfolio while paying off the outstanding.

To get the calculations correct the exact amount that is outstanding plus the interest rates on the loans would need to be available. In the example above this would involve paying off the credit card debt first, since it is the smallest amount and this would be followed by the personal loan since now this has the highest rate and then followed by the car loan and the housing loan.

Module 1 Sample Questions

1. **Which of the following is not a part of the financial planning process?**

   a. Setting goals
   b. Monitoring
   c. Develop financial planning recommendations
   d. Financing the investments

2. **Mr. Khanna requires Rs.10 lakhs in six months' time to pay his son's admission fees. An appropriate investment to set aside money for his goal would be:**

   a. Equity shares of high-growth companies
   b. Real estate
   c. Short term debt fund
   d. Long term corporate bond

3. **An ordinary annuity is received at the _____.**

   a. Middle of the period
   b. Start of the period
   c. End of the period
   d. At any point in the period

4. **Income from investments would be found in the _____**

   a. Income and expenditure account
   b. Balance Sheet
   c. Capital Gains Statement
   d. Loss working

5. **Mutual funds are found in the Balance Sheet as _____**

   a. Capital
   b. Liabilities
   c. Investments
   d. Fixed Asset

6. **The following is not a liquid asset:**

   a. Cash balance
   b. Savings bank account balance
   c. Liquid fund balance
   d. Close ended fund balance

7. In the avalanche mode of repayment of loan the amount paid first is the

a. Loan with the highest amount
b. Loan with the lowest amount
c. Loan with the highest interest rate
d. Loan with the lowest interest rate

8. In a P2P lending process the lender is

a. A bank
b. A financial institution
c. An individual
d. A fund

9. A car loan is usually under _____.

a. Hypothecation
b. Pledge
c. Mortgage
d. Moratorium

10. Which of the following is an unsecured loan

a. Home loan
b. Car loan
c. Gold loan
d. Personal loan

MODULE 2: INDIAN FINANCIAL MARKETS

Chapter 5: Introduction to the Indian Financial Markets

Chapter 6: Securities Market Segments

CHAPTER 5: INTRODUCTION TO THE INDIAN FINANCIAL MARKETS

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Overview of Indian Economy
- Indian Financial Markets
- Role of Regulators of Financial Markets
- Structure of Financial Markets in India
- Role of the participants in the Indian Financial Markets

5.1 The Indian Economy

The Indian economy has gone through phases of growth and change that has transformed it from being a primarily agriculture-oriented economy to one where services and manufacturing contribute to 3/4th of its gross domestic product. The economy requires the financial system to support growth by enabling access to resources, both financial as well as real.

The banking sector provides—credit at efficient costs, secure systems for transactions and transfer of funds and the means to channelize savings of the economy in productive ways.

Securities markets allow businesses seeking funds to reach out to a wider group of institutional and retail investors by issuing different types of securities, such as equity and debt securities, with different features of risk and return.

The foreign exchange markets provide a platform for trading in the currencies of countries which in turn determines the costs of import of funds and commodities essential for production and enables global investing. A well-developed foreign exchange market helps to hedge the risks of movements in currency exchange rates for companies dependent upon imports as well as the earnings of export-oriented organisation.

Similarly, the commodity markets enable mitigating the risk of adverse price movements in commodities to producers and users. A well-developed insurance market is necessary to ensure adequate insurance cover for people. Insurance is important to protect people's finances from emergencies of large expenses or loss of income. This enables higher savings and investments. All these markets need to be well developed in terms of systems and regulations to enable economic growth.

5.2 The Indian Financial Markets

5.2.1 Key Features

The financial markets enable efficient transfer and allocation of resources for productive activities in the economy. Users of funds include governments, businesses and households who seek funds to run their activities. Governments, businesses and households also act as providers of surplus funds. Intermediaries such as banks, financial institutions, mutual funds and insurance companies, among others, channelize the available surplus funds from lenders to the users.

The function of the financial markets is to ensure that economic activity is enabled by providing access of funds to those that need it for consumption or productive activity. They provide a way for aggregation of funds from a large number of investors and make it available for productive economic activity. For example, banks collect deposits from a large number of depositors who have surplus funds and lend it to individuals and businesses who seek loans to meet their need for funds. In the absence of financial markets such aggregation may not be possible. An efficient financial market ensures that the transfer of funds happens at a cost that makes it attractive for savers to save and lend and for users to borrow funds. The markets must enable the dissemination of relevant information to all its participants so that the decision is made after integrating all available information that determine the risk and return for the lenders and cost of funds to the borrowers. It must also allow the participants to review their funding decisions given new information and to re-allocate the resources accordingly. Therefore, providing liquidity and exit options are an important function of financial markets. Financial market regulations and regulators focus on setting up systems and processes in place to streamline the activities associated with the transfer of funds.

The financial market comprises money markets that deal with the short-term lending and borrowing of funds and the securities or capital markets that enable longer term transfer of funds using debt and equity instruments. The allocation and re-allocation of resources may happen in the primary markets where securities are issued by the borrowing institutions directly to the lenders or investors or in the secondary markets which provides investors the options to exit or reallocate their resources by dealing amongst themselves.

The activities in the financial markets are facilitated by the market participants such as banks, financial institutions, brokers and dealers, custodians, depositories and depository participants, among others. Institutions such as mutual funds, insurance companies and pension funds are large and informed investors who provide funds in the markets and provide liquidity and stability. They also play an important role in the proper pricing of financial assets since they can source and evaluate information better. Banks and financial institutions aid the actual transfer of funds between the participants and may also be present in the markets to source funds for their activities or as investors of funds. Fund managers and financial advisors

provide the service of advising and managing funds for investors so that their savings are invested in a way that suits their requirements the best.

Apart from the financial markets, economic activity is supported by the development of other markets such as the commodities markets and foreign exchange markets that protect producers, consumers and businesses against adverse price movements. Similarly, a well-developed insurance and pension markets protect the personal financial situation of households apart from playing an important role as an institutional investor in the financial markets.

5.3 Regulators of Financial Markets

Regulation of the financial markets is motivated by the need to safeguard the interests of investors. What is paramount is to ensure that investors make informed decisions about their financial transactions on the basis of a fair understanding of various markets which enable such financial transactions.

The Reserve Bank of India (RBI) regulates commercial banks, the Securities and Exchange Board of India (SEBI) regulates securities markets and commodity, the Insurance Regulatory and Development Authority of India (IRDAI) regulates insurance companies, the Pension Fund Regulatory and Development Authority (PFRDA) regulates the pension sector. The Central Government exercises a certain level of oversight on these and other regulatory institutions.

5.3.1 Ministry of Finance

The Ministry of Finance through its Department of Financial Services regulates and overseas the activities of the banking system, insurance and pension sectors. The Department of Economic Affairs regulates the capital markets and its participants. The ministry initiates discussions on reforms and overseas the implementation of law.

The Ministry of Finance (MoF) has a wide range of responsibilities. It has five departments under it, whose roles are briefly described below:

a) **Department of Economic Affairs** is the nodal agency of the Central Government to formulate and monitor India's macroeconomic policies, covering monetary and fiscal policy as well as the functioning of the capital market including stock exchanges.

b) **Department of Expenditure** is concerned with, among other things, the administration of various financial rules and regulations including service conditions of all Central Government employees. The department is also involved with matters such as financial assistance to states and borrowings by states.

c) **Department of Revenue** exercises control over matters relating to direct and indirect taxes of the Central Government, through two statutory boards, viz., the Central Board of Direct Taxes and Central Board of Excise and Customs.

d) **Department of Financial Services** administers government policies relating to:
   - Public sector banks.
   - Term-lending financial institutions.
   - Life Insurance and General Insurance.
   - Pension Reforms.

e) **Department of Investment and Public Asset Management** oversees, among other things, all matters relating to the disinvestment of Central Government equity from Central Public Sector undertakings. The department is also concerned with the financial policy relating to the utilization of proceeds of disinvestment.

5.3.2 Ministry of Corporate Affairs

The Ministry is primarily concerned with administration of the Companies Act 2013, the Companies Act 1956, the Limited Liability Partnership Act, 2008 & other allied Acts and rules & regulations framed there-under mainly for regulating the functioning of the corporate sector in accordance with law. The Ministry is also responsible for administering the Competition Act, 2002 to prevent practices having adverse effect on competition, to promote and sustain competition in markets, to protect the interests of consumers through the commission set up under the Act. Besides, it exercises supervision over the three professional bodies, namely, Institute of Chartered Accountants of India (ICAI), Institute of Company Secretaries of India (ICSI) and the Institute of Cost Accountants of India (ICAI) which are constituted under three separate Acts of the Parliament for proper and orderly growth of the professions concerned.

5.3.3 Registrar of Companies

The Registrar of Companies (RoC) is the authority appointed under the Companies Act to register companies and to ensure that they comply with the provisions of the law.

5.3.4 Reserve Bank of India (RBI)

The Preamble of the Reserve Bank of India describes the basic functions of the Reserve Bank as: "to regulate the issue of Bank notes and keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage; to have a modern monetary policy framework to meet the challenge of an increasingly complex economy, to maintain price stability while keeping in mind the objective of growth."

The main functions/roles of RBI**:**

- Formulates, implements and monitors the monetary policy.
- Maintaining price stability
- Regulator and supervisor of the financial system

- Manager of Foreign Exchange
- Issuer of currency
- Regulator and Supervisor of Payment and Settlement Systems
- Banker to the Government: performs merchant banking function for the central and the state governments; also acts as their banker.
- Banker to banks: maintains banking accounts of all scheduled banks.

5.3.5 Securities and Exchange Board of India (SEBI)

The Securities and Exchange Board of India (SEBI), a statutory body appointed by an Act of Parliament (SEBI Act, 1992), is the primary regulator of securities markets in India. The Preamble of the Securities and Exchange Board of India describes the basic functions of the Securities and Exchange Board of India as "...to protect the interests of investors in securities and to promote the development of, and to regulate the securities market and for matters connected therewith or incidental thereto".

Some of the Functions of SEBI:

- Regulating the business in stock exchanges.
- Register and regulate working of intermediaries associated with the securities market.
- Prohibit fraudulent and unfair trade practices, insider trading
- Power to call for information, undertake inspection, conduct inquiries and audits, summon witnesses from such intermediaries.
- Promote investor education and training of intermediaries

5.3.6 Insurance Regulatory and Development Authority of India (IRDAI)

IRDAI regulates the insurance sector in India in accordance with the terms of the IRDA Act of 1999. IRDAI is the licensing authority for insurance companies and defines the capital and networth requirements for insurance companies.

- Regulates the insurance sector including registering insurance companies, clearing insurance products, licensing and establishing norms for the intermediaries and protecting policy holders' interest.
- Ensures the adherence of insurance products to the rules laid down and defines the rules for the terms and conditions of insurance contracts such as sum assured, surrender value, settlement of claims, nomination and assignment, insurable interest and others.
- Regulates distribution of insurance products by laying down the qualification and training requirements of intermediaries and the payment of commission to distributors.

- Supervises the functioning of the Tariff Advisory Committee that determines the rates for general insurance products. It also lays down the modalities for investment of funds by insurance companies.

5.3.7 Pension Fund Regulatory and Development Authority (PFRDA)

The PFRDA is the authority entrusted to act as a regulator of the pension sector in India under the PFRDA Act, 2013. PFRDA regulates the National Pension System (NPS) and any other pension scheme specified under its ambit. It is responsible for registering the various constituents such as the fund managers, custodians, central record keeping agency and trustee banks and to define the parameters of their roles and responsibilities.

The Act and its provisions apply to the National Pension System (NPS) and other pension schemes not regulated by any other enactment. The NPS will be based on defined contributions. It will also offer a menu of investment choices and Fund Managers.

The functions and responsibilities of the PFRDA under the Act include:

- Regulating the National Pension System and any other pension schemes to which the act applies.
- Approving the schemes and their terms and investment guidelines to manage the corpus.
- Registering and regulating intermediaries.
- Protecting the interests of the subscribers by ensuring the funds are managed according to the mandate received, costs of management are reasonable and establishing a mechanism for redressal.
- Educating subscribers and the general public on matters relating to retirement savings

5.3.8 Role of Self-Regulatory Organizations (SRO)

According to SEBI (Self-Regulatory Organizations) Regulations, 2004, “Self-Regulatory Organisation” means an organization of intermediaries which represents a particular segment of the securities market and which is duly recognized by SEBI but excludes a stock exchange.”

In Indian securities markets, an SRO needs to be registered and recognized by SEBI after following a registration process that lays down norms for professional competence of the Board, infrastructure and capital requirements. The SEBI (SRO) Regulations, 2004 lay down certain obligations and responsibilities on SROs. An SRO must always abide by the directions of the SEBI and act in the best interest of investors. SEBI also nominates Directors on the Board of the SRO. The SRO can also conduct inspection and audit of its members. It is bound to report any violations or non-compliance by any of its members to SEBI.

5.4 Structure of Financial Markets in India

5.4.1 Banking System

The banking system is at the core of the financial structure of an economy and supports its growth. It enables capital growth and formation through financial intermediation by accumulating savings from households, governments and businesses and making credit available for productive activities. RBI is the regulator of the banking system and the monetary authority.

RBI

RBI is the central bank of India. It performs supervisory function under the guidance of the Board for Financial Supervision (BFS). The primary objective of BFS is to undertake consolidated supervision of the financial sector comprising Scheduled Commercial and Co-operative Banks, All India Financial Institutions, Local Area Banks, Small Finance Banks, Payments Banks, Credit Information Companies, Non-Banking Finance Companies and Primary Dealers.

Banks

Banks act as an intermediary between those that have excess funds to invest and those that need funds by undertaking the role of mobilizing these surplus funds by taking deposits and lending it on the basis of a credit evaluation done on the ability of the borrowers to pay interest and return the principal. The banks also provide a secure system for settling financial transactions of their customers through a system of cheques and electronic payment systems. Apart from these primary banking activities, banks also provide third-party products and services to their clients by offering advice on investments and insurance. Banks tie up with mutual funds, portfolio management service providers, insurance companies and others and offer their products and services.

Commercial banks may be scheduled commercial banks which include public sector banks, private sector banks, foreign banks and regional rural banks or non-scheduled commercial banks that include local area banks.

Apart from commercial banks, there are **co-operative credit institutions** such as the urban co-operative banks and state and district level co-operative banks that cover rural area needs.

Payment banks have been notified by the RBI to encourage financial inclusion to low income households, small business and others by providing small savings accounts and payment/remittance services. Their activities include accepting current and savings deposits not exceeding Rs.100,000/- issuing ATM/Debit cards but not credit cards and providing payment and remittance services. The bank cannot undertake any lending activities.

Small Finance Banks are another category of banks approved by RBI to provide a savings vehicle, banking facilities and to supply credit to small businesses, marginal farmers, micro and small industries and other entities in the unorganized sector. The capital requirements, functions and obligations and regulatory provisions of each category are defined by the RBI.

Non-Banking Finance Companies

Non-Banking Finance Companies (NBFCs) play an important role in the Indian financial system. They are companies that are engaged in the business of loans and advances, leasing, hire purchase, insurance business or chit business. In a way the NBFCs are in a business that is similar to banks but there are some key differences between the two. NBFCs cannot accept demand deposits nor can they have the facility of issuing cheques and in addition they do not have the benefit of deposit insurance with the Deposit Insurance and Credit Guarantee Corporation. NBFC's fill in the gap of lending, where banks are unable to lend due to high risk or reach.

Housing Finance Companies

Housing Finance Companies are those whose primary business is for the purpose of lending for purchase of property/real estate. The regulation for these companies was earlier under the National Housing Bank but now their regulation has been taken over by the Reserve Bank of India. Increasingly there are detailed guidelines being framed for the purpose of clear definition and the modes of working of the housing finance companies.

P2P lending

An area of lending that has witnessed a sharp rise is that of Peer to Peer (P2P) lending wherein one person lends to another person(s). This is a form of unsecured lending and it takes place through a peer to peer lending platform. These platforms are regulated by the Reserve Bank of India and there are detailed guidelines in place. The financial stability of the peer to peer lending platform is one thing but these platforms also need to conduct the required checks and due diligence on various participants especially lenders on their platform in order to reduce the risk element that is present. This is meant to ensure that a robust peer to peer lending system develops so that there is increased confidence too in the manner and operation of these platforms.

Money market

Money market is a part of the financial market where instruments with short term maturities (< 1 year) are traded. The money market instruments consist of call (overnight) and short-notice (up to fourteen days) money, commercial paper (CP) certificates of deposit (CDs), money market mutual funds (MMMFs), commercial bills and Treasury Bills. Among these, call and short-notice money and Treasury Bills consist of the most significant segments of the

Indian money market. Banks, financial institutions (FIs) and Primary Dealers (PDs) are the major players in these segments of the money market with mutual funds allowed to participate as lenders in the call/notice money and bills rediscounting markets.

These are usually very liquid as there are a lot of players who transact in these markets to meet their immediate requirements of funds. There is also a lot of intervention by the Reserve Bank of India in the money market in order to influence the way things are going so as to meet its policy objectives. As the depth of the market grows there is a greater choice for investors who are institutions and hence this can be considered as a wholesale market.

Foreign Exchange Market

The growth of international trade made it necessary to be able to determine the relative value of currencies given the differences in their purchasing power. The need for exchanging one currency to another for settling trades in goods and services brought about the term foreign exchange. Since the foreign exchange is the value of a currency relative to other currencies, its value will differ for each combination of currency, called a currency pair. For example, USDINR is the currency pair of US dollars and Indian rupee. The currency quoted first in the currency pair is called the base currency and the currency quoted next is called the quoting currency.

The Indian foreign exchange market has a spot market, a forward market, and also currency trading is available on exchanges. The spot market has an interbank segment and a merchant segment. In the interbank segment, banks make market by giving two-way quotes for buying and selling a currency. In the merchant segment, the merchants are price takers who buy or sell currency based on the price given by the banks. The participants in the spot markets are the banks, the dealers and brokers, businesses, government and retail customers. The quotes offered for different currencies will depend upon the interbank rate available to the bank for different currencies.

Financial Benchmark India Pvt. Ltd. (FBIL) computes and publishes the USD/INR, EURO/INR, GBP/INR and JPY/INR Reference Rates on a daily basis on all Mumbai business days.

The forward market in currency can be the OTC market or the exchange traded futures market. The exchange traded derivative market in currency consists of futures and options. Hedgers, speculators and arbitrageurs trade in the derivatives market.

Credit Information Companies

Credit reporting system consists of the institutions, individuals, statutes, procedures, standards and technology that enable information flows relevant to making decision relating to credit and loan agreements. Credit Reporting System in India currently consists of credit Information companies such as Trans Union CIBIL limited, Experian Credit Information

Company of India Private Ltd, Equifax Credit Information Services Private Limited and CRIF High Mark Credit Information Services Pvt. Ltd. and credit institutions – Banks, All India Financial Institutions, NBFCs, Housing Finance companies, State Financial Corporations, Credit Card Companies etc., are governed by the provisions of Credit Information Companies (Regulation) Act, 2005, CIC Rules 2006 and CIC Regulation, 2006. The credit information reports (CIR) of borrowers can be obtained from the CICs by specified users listed under CIC regulations which include credit institutions, telecom companies, other regulators, insurance companies, stock brokers, credit rating agencies, resolution professionals, etc. CICs also offer value added products like credit scores. Individual borrowers can also obtain credit report from CICs. RBI has directed CICs to furnish Free Full Credit Report (FFCR) which includes credit score to individual borrowers once in a calendar year.

Account Aggregators

Account aggregators are financial entities that are licensed by the Reserve Bank of India whose main role is to bring together different parts of customer information and share it in a consolidated manner with third parties. This is done only with the express consent of the customer whose data is being shared. It is meant to ensure that there is proper data available so digital lending becomes easier and more people are brought into the formal credit system. The customer has the right to revoke their consent at any point of time. Also this can lead to less paperwork in the entire lending process making the experience easier and quicker.

5.4.2 Securities Market under SEBI

Definition of securities

The term "securities" has been defined in Section 2 (h) of the Securities Contracts (Regulation) Act 1956. The Act defines securities to include:

a) shares, scrips, stocks, bonds, debentures, debenture stock or other marketable securities of a like nature in or of any incorporated company or other body corporate;

b) derivative [1];

c) units or any other instrument issued by any collective investment scheme to the investors in such schemes;

d) security receipt as defined in clause (zg) of section 2 of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002;

e) units or any other such instrument issued to the investors under any mutual fund scheme (securities do not include any unit linked insurance policy or scrips or any such

[1]As per SCRA, derivatives include a security derived from a debt instrument, share, loan, whether secured or unsecured, risk instrument or contract for differences or any other form of security; a contract which derives its value from the prices, or index of prices, of underlying securities; commodity derivatives; and such other instruments as may be declared by the Central Government to be derivatives. [Amended by the Finance Act 2017]

instrument or unit, by whatever name called which provides a combined benefit risk on the life of the persons and investment by such persons and issued by an insurer referred to in clause (9) of section 2 of the Insurance Act, 1938 (4 of 1938));

f) any certificate or instrument (by whatever name called), issued to an investor by any issuer being a special purpose distinct entity which possesses any debt or receivable, including mortgage debt, assigned to such entity, and acknowledging beneficial interest of such investor in such debt or receivable, including mortgage debt, as the case may be;

g) government securities;

h) such other instruments as may be declared by the Central Government to be securities (including onshore rupee bonds issued by multilateral institutions like the Asian Development Bank and the International Finance Corporation electronic gold receipts, zero coupon zero principal instruments);

i) rights or interest in securities.

Terms related to Securities markets

Securities Exchanges provide the infrastructure for trading in securities that have been issued at prices that reflect its current value. The existence of the stock exchange system helps the stakeholders (investors/corporates) in getting a fair valuation on their investment. It also provides liquidity to the investors when they require funds and encourages investors to invest when issuers raise funds. Securities/stock exchanges such as the National Stock Exchange (NSE) and Bombay Stock Exchange (BSE) are national exchanges which provide nation-wide broker networks. Trading happens on electronic trading terminals through anonymous order matching. Stock exchanges also appoint clearing and settlement agencies and clearing banks that manage the funds and securities settlement that arise out of these trades.

Clearing corporations are an important part of the entire stock exchange structure. When an investor transacts through a registered stock exchange, they need the confidence that their money and trades are safe. The clearing corporation has the role to ensure the confirmation, settlement and delivery of transactions on the stock exchange. The clearing corporation has to set up risk management systems so that there is no risk to the overall system in case some investor or member is not able to pay their dues.

Depositories enable a single point for electronic holding of financial assets. This includes equities, warrants, preference shares, mutual funds held in demat form, corporate bonds, money market instruments, government securities, securitized instruments and postal savings schemes. In order for a security to be eligible to trade in the secondary markets, it should be held in electronic or dematerialised form. Issuers get their securities admitted to

the depositories, where they are held as electronic entries against investor names, without any paper certificate National Securities Depository Ltd (NSDL) and Central Depository Services Ltd (CDSL) are the two depositories in India.

Depository participants enable investors to hold and transact in securities in the dematerialised form. Demat securities are held by depositories, where they are admitted for dematerialisation after the issuer applies to the depository and pays a fee. Depository participants (DPs) open investor accounts, in which they hold the securities that they have bought in dematerialised form. Brokers and banks offer DP services to investors. DPs help investors receive and deliver securities when they trade in them. While the investor-level accounts in securities are held and maintained by the DP, the company enters into an agreement with the depository to dematerialize the securities. In other words, DPs act as agents of the Depositories.

Custodians typically work with institutional investors. They hold securities and manage bank accounts on behalf of the institutional investors. They manage the transactions pertaining to delivery of securities and money after a trade is made through the broker, and also keeps the accounts of securities and money. They are also responsible for collecting the benefits and rights in respect of the securities held by the client and maintaining records of the services provided. Custodians are usually large banks.

Stock brokers are registered trading members of stock exchanges. They sell new issuance of securities to investors. They put through the buy and sell transactions of investors on stock exchanges. All secondary market transactions on stock exchanges have to be conducted through registered brokers. Several brokers provide research, analysis and recommendations about securities to buy and sell, to their investors. Brokers may also enable screen-based electronic trading of securities for their investors, or support investor orders over phone. Brokers earn a commission for their services.

Investment advisers

There is a huge amount of choice of investment products that are present for investors in securities market. There is also the need for effective allocation and choice considering the risk appetite for the investor. This is facilitated through investment advisers, who guide their clients towards their goals through the effective creation of a portfolio of investments. The investment adviser play an important role because they enable those who do not understand the complex finance products and services to choose what is right for them.

Alternative Investment Funds are those that privately pool money and then deploy them for investing in accordance with a defined investment policy for the benefit of its investors. The investor are sophisticated investors and hence these funds cater to a segment of investors who are well versed with the technical and other aspects so are able to take a

decision on the kind of investment policy that they should follow. This is a growing segment of the Indian securities market.

KYC registration agencies perform a significant task in the securities market. There is a need to ensure that there is a proper verification of the investors who are putting their money into the various investments. This is done through the KYC process and the details of this is maintained by the KYC registration agency. Every time that an investor goes to transact they would not need to submit the same documents and this can be verified through the details maintained by the KYC registration agency. The records of the investors are maintained in a central database on behalf of the various intermediaries which can be fetched when required. For individuals, it's called CKYC Registry and for non-individuals it's called KRA maintained by various bodies such as CVL, CAMS, NDML etc.

Credit rating agencies

The actual performance and financial position of any issuer in the securities market is the key for investors to determine whether they should invest or not. Normal investors do not have access to the detailed financial position of the issues and in most cases might not be able to understand the risk that is present in these instruments. Credit rating agencies are those which look at the detailed financial position of an issuer and then they give a credit rating about a specific issue that is being made. The rating is given in standard terms so that the investor is able to know the risk element by looking at the rating.

Credit rating agencies have an important role to play in case of debt securities where the investor would like to know the risk of default by an issuer. A default can lead to a large loss and the rating agency is expected to reflect the financial situation that the issuer finds itself in through its ratings. Each credit rating agency has its own way of showing the various financial positions so this has to be seen by the investor in the specific context.

Investment Banks are financial entities that provide strategic advice to companies, governments and others on their capital requirements and investment decisions and arrange raising such funds on terms that are most suitable to the company. Their activities include advisory services for business expansions, project financing, mergers and acquisition, investment valuation, among others.

Asset Management Companies and **Portfolio Managers** are investment specialists who offer their services in selecting and managing a portfolio of securities ('Portfolio' is the collective noun for securities. A portfolio holds multiple securities). Asset management companies are permitted to offer securities (called 'units') that represent participation in a pool of money, which is used to create the portfolio of a mutual fund.

Portfolio managers do not offer any security and are not permitted to pool the money collected from investors. They act on behalf of the investor in creating and managing a portfolio. Both asset managers and portfolio managers charge the investor a fee for their services, and may engage other security market intermediaries such as brokers, registrars, and custodians in conducting their functions.

Registrar and Transfer agencies help in the process of ensuring a smooth experience for investors in their investment. There are various actions like dividend payment or voting for several issues in companies. The registrar and transfer agency has the records of the investor and they carry out the process of paying the dividend into the respective bank accounts or sending emails with the details for e-voting and so on. They carry out the backroom work that helps in the benefits of the investment reaching the investor. In case of mutual funds they also ensure that the investors can transact through them and complete their investment requirements and even update their details like email, phone number or address.

5.4.3 Industry and market under IRDAI

IRDAI is the regulator of insurance market. The insurance market is a significant part of the overall financial structure that has to be developed as the economy grows. The Indian insurance market consists of the life insurance segment and the general insurance segment. The life insurance sector was opened to private service providers in 2001.

The life insurance products may be broadly categorized as the traditional products, variable insurance products and the unit linked products. Traditional life insurance products include term insurance, endowment policies, whole life policies and the like. Term insurance is a pure risk protection product with no benefit on maturity. If the insured event occurs, in this case loss of life insured, then the sum assured is paid to the beneficiaries. Other traditional products typically have maturity benefits and have a small savings component. Variable insurance products and unit linked products combine risk protection and investment. A portion of the premium is used for risk cover while the remaining portion of the premium is invested to provide returns linked to an index or based on the performance of the portfolio in which it is invested. On the occurrence of the event or maturity of the policy the sum assured and/or value of the fund created is returned to the policy holder or beneficiary.

The products are distributed through multiple channels such as agency, bancassurance, direct agents, broking and corporate agency, among others.

The non-life insurance or general insurance segment covers motor, health insurance, travel, fire and personal accident, among others.

Other entities involved in the insurance sector include insurance brokers, who are licensed to offer policies from any insurance company and are paid a brokerage by the company whose policy is sold. Individual agents are certified and licensed by IRDAI and can sell policies of life insurance and general insurance companies or both. Corporate agents include institutions such as banks, and they offer the insurance products to their clients. Agents typically represent one life insurer, one general insurer and one standalone health insurance company. Surveyors and loss assessors are used by general insurance companies to assess a claim and quantum of loss. Third party administrators are used to process health insurance claims.

5.3.4 Industry and markets under PFRDA

The Pension Fund Regulatory and Development Authority (PFRDA) is the regulator of the pension market. The pension market especially the National Pension System (NPS) has been growing in India as a larger part of the population has to rely on its own savings for the purpose of meeting the various needs during retirement and old age.

A growing elderly population and a large unorganized employment market are two primary factors that define the pension industry in India. Much of the Indian population is still outside the formal retirement benefit cover provided by the government and its associated organisations, and companies covered under the Employees Provident Fund Organisation (EPFO) rules. The government's pension plan has moved from defined benefit structure, where all retired employees of a particular rank get the same pension with no contributions by the employee, to a defined contribution structure, where the employee and the employer contribute to the pension fund and the pension received on retirement will depend upon the fund accumulated. The retirement benefits in the private sector are primarily covered by the Employee Provident Fund administered and supervised by the Employee Provident Fund Organisation with contributions made both by the employee and the employer. A portion of the employers' contribution is earmarked to provide pension under the Employee Pension scheme. Some private companies may provide Superannuation plans and privately sponsored pension plans to their employees.

National Pension System (NPS) is a voluntary, defined contribution retirement savings scheme designed to enable the subscribers to make optimum decisions regarding their future through systematic savings during their working life. The NPS is also available for government employees and the general public to voluntarily contribute periodically and create a retirement corpus. There are different fund managers under the NPS which offer different investment choices for the investor. The PFRDA regulates these so that there is a proper protection of the rights of the investors. The manner in which there has to be a central record keeping agency plus the various intermediaries in the NPS are all decided by the pension regulator. The type of funds and the conditions related to them that are offered by the various fund managers is monitored by the regulator. A new concept of Retirement Adviser has been introduced to help people get advice on NPS.

CHAPTER 6: SECURITIES MARKET SEGMENTS

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Nature and definition of Primary Markets
- Role and Function of the Secondary Market
- Corporate Actions

6.1 Nature and Definition of Primary Markets

The capital of a company is brought in by the promoters and their associates in the initial stages. As the requirement for additional funds go up, it may be necessary to source funds from a wider group of investors.

The primary market refers to the market where equity or debt funds are raised by companies from 'outside' investors through an offer of securities. 'Outside' investors refer to investors who are not associated with the promoters.

In primary market, investors purchase the security directly from the issuer. It is also called the "new issue market" since these securities are issued for the first time by the company. The process of expanding the ability of an issuer to raise capital from public investors, who may not have been associated with the initial stages of the business, is also known as "going public." The issuance of securities in the primary markets expands the reach of an issuer and makes long-term capital available to the issuer from a larger number of investors.

6.1.1 Functions of the Primary Market

The primary markets serve the following functions:

a. Access to wider markets and investors

A primary market issue enables participation of a wider group of investors. Companies move away from known sources of funding that may be restrictive in terms of the amount available or the terms at which capital may be made available. They may be able to raise the funds they require at much more competitive terms. For example, when an Indian company issues a global depository receipt (GDR) in the Euromarkets, it reaches out to institutional and retail investors in those markets who may find the investment in a growing Indian enterprise attractive.

b. Transparent Pricing Mechanism

Securities are issued for public subscription, at a price that is determined by the demand and supply conditions in the market and the perceived fundamental strengths of the issuer

to honour their commitments. The rate of interest a debt instrument will have to offer and the price at which an equity share will be purchased are dependent on the pricing mechanisms. For example, government securities, which are issued by RBI on behalf of the government, are priced through an auction process. Banks and institutional investors are the main buyers of government securities, and they bid the rates they are willing to accept and the final pricing of the instrument on offer depends on the outcome of the auction. This enables fair pricing of securities in the primary market.

c. Ownership Diversification

As new subscribers of equity capital come in, the stakes of existing shareholders reduces and the ownership of the business becomes more broad-based and diversified. This enables the separation of ownership and management of an enterprise, where professional managers are brought into work in the broad interest of a large group of diverse shareholders. The presence of independent directors on the boards of companies, representing public shareholders, enhances the governance standards of companies.

d. Better Disclosures

A business that seeks to raise capital from new investors, who may not be familiar with the history and working of the enterprise, has to meet higher standards of disclosure and transparency. Regulations that govern primary markets prescribe the nature and periodicity of disclosures that have to be made. This provides investors with relevant, accurate and verifiable financial and other information about the business and enables them to make informed decisions for investing in the securities of those businesses.

e. Evaluation by Investors

An issuer that raises money from outside investors is evaluated by a large number of prospective investors. This forms another layer of scrutiny of the operations and performance of the company, apart from its auditors and regulators. Publicly disclosed financial statements, reports, prospectus and other information also come up for scrutiny and discussion by analysts, researchers, activists, and media apart from investors.

f. Exit for Early Investors

Primary markets provide an exit option for promoters, private and other investors who subscribed to the initial capital issued by the company to fund the early requirements for capital. ‘Early investors’ who take a risk by investing in a company in the initial stages before it has established a record of performance and profitability are thus able to make a profit when they have the choice to sell their holdings in the primary market. A vibrant primary market is thus an incentive for such investors who invest in early-stage business with the intent to nurture the business to a level at which public and other investors would be interested.

g. Liquidity for Securities

When capital is held by a few inside investors, the equity and debt securities held are not liquid, unless sold in a chunk to another set of interested investors. The costs and effort of finding another investor(s) willing to buy the securities held is high. However, a primary market issue enables distribution of securities to a large number of investors. It is mandatory to list a public issue of securities on the stock exchange. This opens up the secondary market where the securities can be bought and sold between investors easily in small and large quantities.

h. Regulatory Supervision

Inviting 'outside investors' for subscribing to the capital or buying securities of an issuer comes under comprehensive regulatory supervision. The issue process, intermediaries involved, the disclosure norms, and every step of the primary issuance process is subject to regulatory provisions and supervision. The objective is to protect the interest of investors who contribute capital to a business, which they may not directly control or manage. While there is no assurance of return, risk, safety or security, regulatory processes are designed to ensure that fair procedures are used to raise capital in the primary market, adequate and accurate information is provided, and rights of all parties is well defined, balanced and protected.

6.1.2 Types of Issues

All primary market issues need not be public issues. The securities can be issued either through public issues or through private placement (which involves issuance of securities to a relatively small number of select investors).

Issuance of capital in the primary market can be classified under four broad heads:

a. Public issue

Securities are issued to the members of the public, and anyone eligible to invest can participate in the issue. "Public issue" means an Initial Public Offer (IPO) or a Further Public Offer (FPO). Initial public offer means an offer of specified securities by an unlisted issuer to the public for subscription and includes an offer for sale of specified securities to the public by any existing holder of such specified securities in an unlisted issuer. 'Further Public Offer' means an offer of specified securities by a listed issuer to the public for subscription and includes an offer for sale of specified securities to the public by any existing holders of such specified securities in a listed issuer.

b. Private placement

Securities are issued to a select set of investors who can bid and purchase the securities on offer. This is primarily a wholesale issue of securities to institutional investors by an unlisted company.

c. Preferential issue

Preferential issue means an issue of specified securities by a listed issuer to any select person or group of persons on a private placement basis in accordance with SEBI ICDR Regulations, 2018 and does not include an offer of specified securities made through employee stock option scheme, employee stock purchase scheme or an issue of sweat equity shares or depository receipts issued in a country outside India or foreign securities.

d. Qualified Institutions Placement

Qualified institutions placement means issue of eligible securities by a listed issuer to qualified institutional buyers on a private placement basis and includes an offer for sale of specified securities by the promoters and/or promoter group on a private placement basis. Qualified institutional buyers include institutions such as mutual funds, foreign portfolio investor, insurance company etc..

e. Rights and Bonus issues

Securities are issued to existing investors as on a specific cut-off date, enabling them to buy more securities at a specific price (rights) or get an allotment of additional shares without any consideration (bonus).

6.1.3 Types of Issuers

As per the SEBI Issue of Capital and Disclosure Requirements (ICDR) Regulations, 2018 “issuer” means a company or a body corporate authorized to issue specified securities under the relevant laws and whose specified securities are being issued and/or offered for sale in accordance with SEBI ICDR Regulations, 2018.

An issuer in the primary market has to be eligible to raise capital under the provisions of the regulations that govern it. The issuer has to meet the eligibility conditions specified by the concerned regulator before making an issue. The primary responsibility to meet the obligations associated with the security being issued rests on the issuer. For example, an issuer of bonds is responsible for paying interest and returning the principal on maturity; an issuer of equity shares is responsible to pay dividends as and when declared and notify equity shareholders about resolutions being brought for their approval through voting in the annual general meeting. Issue of securities in the primary market may be made by the following entities:

a. Central, State and Local Governments

Governments raise funds through government securities (G-Sec). Such securities are short term (usually called treasury bills with original maturities of less than one year) or long term (usually called Government bonds or dated securities with original maturity of one year or more). In India, the Central Government issues both, treasury bills and bonds or dated securities while the State Governments issue only bonds or dated securities, which are called the State Development Loans (SDLs). G-Secs carry no risk of default and, hence, are called risk-free gilt-edged instruments. The central government alone issues treasury bills for different maturities such as 91 days, 182 days and 364 days.

b. Public Sector Units

Public sector units are companies registered under the Companies Act, in which the government is the majority shareholder. These companies may make an issue of shares where the government offers a portion of the shares held by them to the public. This is called disinvestment. For example, in December 2013, Power Grid Corporation of India made a share issue which comprised of 13% fresh equity offer by the company and a 4% stake sale by the government. These companies also issue bonds. Some of the bonds may provide tax benefits to investors in the form of exemption from tax for interest earned on them or to save on long-term capital gains. For example, the National Highway Authority of India (NHAI) made an issue of tax free bonds in January 2014. The interest earned by investors on these bonds is exempt from tax.

c. Private Sector Companies

For private sector companies, securities market is the principal source of funds. They raise funds from the markets by issuing equity or debt securities. They can raise funds from domestic and international markets. They may issue ordinary equity shares, preference shares and convertible instruments. Corporate bonds are issued to raise long-term debt capital while commercial papers and securitized papers are issued to raise funds for less than one year (short-term debt capital).

d. Banks, Financial Institutions and Non-Banking Finance Companies

Banks, Financial Institution and Non-Banking Finance Companies (NBFCS) raise funds by issuing equity shares, preference shares, bonds, convertible bonds, commercial paper, certificates of deposits and securitized paper. Deposit taking institutions such as banks have access to low cost funds from the public and therefore are not dependent too much on the securities markets. However, financial institutions and NBFCs raise short term and long term capital through the issue of securities. They have access to domestic and international markets.

e. Mutual Funds

Mutual Funds make a new fund offer (NFO) of units in the domestic markets to raise funds for a defined scheme. The funds are raised for a specific period after which the current value of the units is returned to the investors (Closed-end fund) or it may be for perpetuity with investors being given the option to exit at any time at the prevailing value of the units.

f. Real Estate Investment Trusts and Infrastructure Investment Trusts

Real Estate Investment Trusts (REITs) and Infrastructure Investment Trusts (InvITs) may issue units in a public offer or private placement to raise funds for a scheme. REIT invest in real estate while InvIT do so in infrastructure projects. The issue shall be managed by merchant bankers appointed for the purpose. The units will be listed on a stock exchange, where they can be traded at market-determined prices. An important factor to consider in these investments, is that there is a higher minimum amount for investment even when the units are offered in a public offer as compared to a normal IPO.

g. Alternative Investment Funds

Alternative Investment Funds are privately pooled investments. They raise money through a private placement. An AIF cannot make an invitation to the public at large to raise money. The AIF may also undertake to raise debt through borrowings.

6.1.4 Types of Investors

Both retail and institutional investors participate in primary market issues. The various categories of investors are:

- Resident individuals
- Hindu Undivided Family (HUF)
- Minors through guardians
- Registered societies and clubs
- Non-resident Indians (NRI)
- Persons of Indian Origin (PIO)
- Banks
- Financial institutions
- Association of persons
- Companies
- Partnership firms
- Trusts
- Foreign portfolio investors (FPIs)
- Limited Liability Partnerships (LLP)

6.1.5 Types of Public Issue of Equity Shares

Public issue of equity shares can be categorized as follows:

a. Initial Public Offer (IPO)

The first public offer of shares made by a company is called an Initial Public Offer (IPO). When a company makes an IPO, the shares of the company become widely held and there is a change in the shareholding pattern. The shares which were privately held by promoters are now held by retail investors, institutions, promoters etc. An IPO can either be a fresh issue of shares by the company or it can be an offer for sale to the public by any of the existing shareholders, such as the promoters or financial institutions, or a combination of the two.

- **Fresh Issue of Shares:** New shares are issued by the company to public investors. The issued share capital of the company increases. The percentage holding of existing shareholders will come down due to the issuance of new shares.
- **Offer for Sale:** Existing shareholders such as promoters or financial institutions offer a part of their holding to the public investors. The share capital of the company does not change since the company is not making a new issue of shares. The proceeds from the IPO go to the existing shareholders who are selling the shares and not to the company. The holding of the existing shareholders in the share capital of the company will reduce.

Example

A company has issued 1000 shares of a face value of Rs. 10 each. The shares are equally held by the two promoters P and Q.

A. The company decides to make a fresh issue of 500 shares.

B. The company decides to offer 250 shares of each promoter to the public.

The fresh issue of shares in the IPO (A) will result in the following post-IPO situation:

- The issued capital of the company will now be 1500 shares with a face value of Rs. 10 each.
- Promoters A and B continue to hold 500 shares each. The percentage holding of each of the promoters in the share capital of the company will change from 50% (500 shares out of 1000 shares issued by the company) to 33.33% (500 shares out of 1500 shares issued by the company).

The offer for sale in the IPO (B) will result in the following post-IPO situation:

- The capital of the company will remain at 1000 shares with a face value of Rs.10 each.
- The holding of the promoters will decrease to 250 shares each from 500 shares each pre-issue. They now hold 25% each of the share capital; 50% is held by the public.

- The money raised in the IPO will go to the promoters who have sold the shares and not to the company.

The disinvestment of shares by the government in PSUs is an example of an offer for sale. The government offers a portion of its shares to the public in an IPO. The proceeds collected go to the government which is selling the shares and not to the company. There will be no change in the share capital of the company. However, there will be a change in the list of shareholders as new investors buy the shares and a reduction in the government's holding in the company.

An IPO may also be a combination of an offer for sale and a fresh issue of shares by the issuing company.

b. Further Public Offer

A Further public offer is made by an issuer that has already made an IPO in the past and now makes a further issue of securities to the public. When a company wants additional capital for growth or to redo its capital structure by retiring debt, it raises equity capital through a fresh issue of capital in a follow-on public offer. A further public offer may also be through an offer for sale. This usually happens when it is necessary to increase the public shareholding to meet the requirements laid down in the listing agreement between the company and the stock exchange. Or promoters may dilute their holdings in the company after the lock-in imposed at the time of the IPO is over.

6.1.6 Pricing a Public Issue of Shares

SEBI's Regulations allow an issuer to decide the price at which the shares will be allotted to investors in a public issue. This can either be fixed by the issuer in consultation with the managers of the issue or it can be determined by a process of bidding by investors. Based on the method used to determine the price, a public issue can be categorized as:

a. Fixed Price Issue

In a fixed price issue of shares to the public, the company in consultation with the lead manager (who is the merchant banker in-charge of the issue) would decide on the price at which the shares will be issued. The company justifies the price based on the expected performance of the company and the price of shares of comparable companies in the market. This information is made available to the investors when the issue is announced so that investors know the price at which the shares will be allotted to them at the time of making the application.

b. Book Built Issue

The objective of a book building process is to identify the price that the market is willing to pay for the securities being issued by the company. The company and its issue managers will specify either a floor price (base price) or a price band (price range starting from floor price to 20% above it) within which investors can bid[2]. When the issue opens, investors will put in bid applications specifying the price and the number of securities (or total amount) bid at that price. The price bid should be above the floor price or within the price band, as applicable. Retail investors can revise the bids in the period when the issue is open. The issuer, in consultation with the book running lead manager will decide on the cut-off price which is the price at which the issue gets subscribed. All allottees who bid at or above the cut-off price are successful bidders and are eligible for allotment in the respective categories.

For example, a company wants to issue 5000 shares through a book built offer within a price band of Rs 120 to Rs 144. Bids are received as follows:

Price	No. of Shares	Total Demand
Rs 144	1000 (A)	1000
Rs 140	1500 (B)	2500 (A+B)
Rs 135	2500 (C)	5000(A+B+C)
Rs 130	1000 (D)	6000 (A+B+C+D)
Rs 120	500 E	6500 (A+B+C+D+E)

The offer of 5,000 shares is filled up at the cut-off price of Rs.135. All investors who bid at this price and higher are eligible for allotment in their respective categories. Book built issues may also have a clause which allows allotment to retail investors at a price that is at a discount to the cut off price which cannot however be at a price not lower than by more than ten percent of the price at which shares are allotted to the other category of investors.

[2] https://www.nseindia.com/products-services/initial-public-offerings-faqs

Reservations to different categories of investors such as Qualified Institutional Buyers, mutual funds etc. are required to be made during the course of the issue. The details may be referred to in SEBI (Issue of Capital and Disclosure Requirements) Regulations (SEBI (ICDR)).

6.1.7 Regulatory Norms for Public Issue of Shares

Primary market offerings are subject to regulatory requirements laid down by Securities and Exchange Board of India (SEBI) in the SEBI Issue of Capital and Disclosure Requirements (ICDR) Regulations, 2018 and the provisions of the Companies Act, 2013/1956, as applicable for disclosures and raising capital from the public. They are also subject to RBI regulations as regards issues to non-resident investors and receipt of money from abroad.

The regulations cover the eligibility of a company to make a public issue in terms of networth and track record of profitability, the process of making the issue and the timelines to be adhered to and the usage of the funds raised from the public. A public issue of shares may be credit rated and the rating received is disclosed to the public. The regulations also require the issuer to provide information on a continuous basis to enable evaluation of the shares by existing and new investors and to provide a way for investors to make additional investment or exit from the investment through the mechanism of listing.

The company making a public issue of shares has to file with SEBI a document giving all information of the issuer and the proposed issue such as the operations and finances of the company, the current and future projects, the details of the promoters of the company, the proposed use of funds raised and details of the shares being issued such as the number of shares being raised and the price band. This document is called a prospectus. A draft prospectus in the specified format is first filed with SEBI for comments and approval. The modifications, if any, are incorporated before the final prospectus is filed with the Registrar of Companies, SEBI and the stock exchange where the shares are to be listed. The pricing of a public issue may be decided by the issuing company in consultation with the lead managers of the issue in a fixed price offer, or through a bidding process once the offer is open.

6.1.8 Applying to a Public Issue[3]

The prospectus or offer document lays down the process of applying to a public issue of securities. Information of a forthcoming public issue is typically available from the mandatory advertisements that the company will have to issue and from the coverage that IPOs get in the press. The soft copies of the offer document are available on SEBI's website and on the websites of the lead manager to the issue.

[3] https://www.sebi.gov.in/sebi_data/faqfiles/jan-2017/1485857575075.pdf

A public issue is open for subscription during a limited period as specified above. The date on which the issue will open for subscription and the earliest closing date are mentioned in the announcements about the issue. Investors have to make their application during this period.

Applications made in a public issue must be made only using the ASBA (Application Supported by Blocked Amount) facility. ASBA is an application for subscription to an issue containing an authorization to the investors' bank to block the application money in the bank account and release funds only on allotment.

SEBI has introduced the use of Unified Payment Interface (UPI) with facility of blocking Funds (ASBA facility), as a new payment mechanism for retail investor applications submitted through intermediaries.

In a book built offer investors must place bids for the minimum bid lot specified by the issuer so that the minimum application value adheres to the SEBI prescribed range of Rs.10,000 to Rs. 15,000. Investors can either specify the bidding price or they may choose to bid at the cut-off. Bidding at the cut-off implies that the price they would accept is the price determined by the bidding process.

Once the issue closes, the cut-off price is determined based on the bids received. All investors who bid at the cut-off price or higher are successful bidders and receive allotment at the cut-off price. Investors who bid lower than the cut-off price will receive the refund of their application amount. Bidding at the cut-off ensures that the investor's application is always accepted.

The issue may be over-subscribed, which means that the bids made at the cut-off price and higher were for a higher number of shares than what was offered. In an over-subscribed issue, the shares will be allotted to an investor on a proportionate basis. There will be a refund made to the extent that the shares allotted are lower than the shares applied for. If subscriptions are lower than the offered number of shares, it is undersubscribed and all applying investors, at or above the cut-off price will receive allotments. The issuer credits the shares to the beneficiary demat account of the successful applicants, and refunds for partial or non-allotment.

6.1.9 Public Issue of Debt Securities

A company can make a public issue of debt securities, such as, debentures by making an offer through a prospectus. The issue of debt securities is regulated by the provisions of the Companies Act, 2013 and SEBI rules and regulations.

The company is required to appoint a lead manager who ensures compliance with all the regulatory requirements for the issue.

A public issue of debt securities is possible by a company registered as a public limited company under the Companies Act, 2013. The company files an offer document with SEBI and the Registrar of Companies which gives all the material information of the issue as required under Companies Act 1956/2013[4] and SEBI Regulations. The debentures issued under a public offer have to mandatorily be listed on a stock exchange. The company is required to obtain credit rating from at least one credit rating agency and the rating has to be disclosed in the offer document. If the rating has been obtained from more than one rating agency, all the ratings are required to be disclosed.

Debenture trustees are required to be appointed to oversee the interests of the investors. Trustees are banks and financial institutions who are registered with SEBI to act as debenture trustees. If the debentures are secured, they ensure that the property charged as security is adequate to meet the obligations to the debenture holders at all times.

6.1.10 Rights Offer

A rights offer is an offer for shares made to the existing shareholders of the company. There is a specific ratio in which the shares are offered to the investor.

The RE has a separate (International Securities Identification Number) ISIN number so these can be traded on the stock exchanges. The investor who does not want to take on the rights issue can sell the RE at the prevailing market price. The investor can thus trade in the RE just like normal shares.

The application for a rights issue has to be only through Applications Supported by Blocked Amount (ASBA). The procedure for a rights issue has an application form that is available for investor, which now would have the details of the RE.

6.2 Role and Function of the Secondary Market

The secondary market is where securities once issued are bought and sold between investors. The instruments traded in secondary markets include securities issued in the primary market as well as those that were not issued in the primary market, such as privately placed debt or equity securities and derivatives of primary securities created and traded by financial intermediaries.

Transactions in the secondary market do not result in additional capital to the issuer as funds are only exchanged between investors. The role of the secondary market is to support the capital raising function of the primary market by providing liquidity, price identification, information signalling and acting as a barometer of economic activity.

[4]Companies Act, 2013 has not yet been fully notified. Hence, Companies Act, 1956 will continue to apply in those sections. (to recheck)

6.2.1 Functions of Secondary Markets

a. Liquidity

Secondary markets provide liquidity and marketability to existing securities. If an investor wants to sell off equity shares or debentures purchased earlier, it can be done in the secondary market. Alternately, if new investors want to buy equity shares or debentures that have been previously issued, sellers can be found in the secondary market. Investors can exit or enter any listed security by transacting in the secondary markets.

A liquid market enables investors to buy perpetual securities such as equity that are not redeemed by the issuer or long-term instruments maturing far into the future without the risk of the funds getting blocked. Where investors invest in risky securities whose future performance is unknown, a secondary market enables exit if the expectations are not met. Investors can sell their securities at a low cost and in a short span of time, if there is a liquid secondary market for the securities that they hold. The sellers transfer ownership to buyers who are willing to buy the security at the price prevailing in the secondary market.

b. Price Discovery

Secondary markets enable price discovery of traded securities. The price at which investors undertake buy or sell transaction reflects the individual assessment of investors about the fundamental worth of the security. The collective opinions of various investors are reflected in the real time trading information provided by the exchange. The continuous flow of price data allows investors to identify the market price of equity shares. If an issuing company is performing well or has good future prospects, many investors may try to buy its shares. As demand rises, the market price of the share will tend to go up. The rising price is a signal of expected good performance in the future. If an issuing company is performing poorly or is likely to face some operating distress in the future, there are likely to be more sellers than buyers of its shares. This will push down its market price. Market prices change continuously, and they reflect market judgement about the security.

Market valuation benefits issuers when they have to raise further capital from the market, by giving an indication of the price at which new capital could be issued. For example, consider a company with equity shares of face value of Rs.10, which are being traded for around Rs.100 in the market. If the company wants to raise additional capital by issuing fresh equity share, it could issue them at a price close to Rs.100, which is the value determined by investors in the market.

c. Information Signalling

Market prices provide instant information about issuing companies to all market participants. This information-signalling function of prices works like a continuous monitor

of issuing companies, and in turn forces issuers to improve profitability and performance. Efficient markets are those in which market prices of securities reflect all available information about the security. A large number of players trying to buy and sell based on information about the listed security tend to create volatility in prices, but also efficiently incorporate all relevant information into the price. As new information becomes available, prices change to reflect it.

d. Indicating Economic Activity

Secondary market trading data is used to generate benchmark indices that are widely tracked in the country. A market index is generated from market prices of a representative basket of equity shares. Movements in the index represent the overall market direction. The S&P BSE-Sensex and the NSE-Nifty 50 are the most popularly watched indices in India. A stock market index is viewed as a barometer of economic performance. A sustained rise in key market indices indicate healthy revenues, profitability, capital investment and expansion in large listed companies, which in turn implies that the economy is growing strongly. A continuous decline or poor returns on indices is a signal of weakening economic activity.

e. Market for Corporate Control

Stock markets function as markets for efficient governance by facilitating changes in corporate control. If management is inefficient, a company could end up performing below its potential. Market forces will push down shares prices of underperforming companies, leading to their undervaluation. Such companies can become takeover targets. Potential acquirers could acquire a significant portion of the target firm's shares in the market, take over its board of directors, and improve its market value by providing better governance. An actual takeover need not happen; even the possibility of a takeover can be an effective mechanism to ensure better governance.

6.2.2 Market Structure and Participants

The secondary market consists of the following participants:

- Market Infrastructure Institutions—stock exchanges, clearing corporations and depositories.
- Investors—individuals and institutions that buy and sell securities.
- Issuers—companies that issue securities.
- Financial intermediaries—firms that facilitate secondary market activity.
- Regulator—authority that oversees activities of all participants in the market.

6.2.3 Market Information

a. Market Capitalisation

Market capitalisation (or market cap) of a company is the number of shares outstanding multiplied by the market price per share. The market cap of a company measures the market value of its share capital. Traded stocks are often categorised by market capitalisation.

- Blue-chip stocks represent the largest companies by market capitalisation. These stock have a high level of liquidity. These are also known as large cap stocks.
- Mid cap stocks refer to those companies which enjoy a good level of liquidity but are medium in terms of size.
- Small cap stocks are those stocks that are smaller in size and therefore do not enjoy much liquidity.

Market cap is also used as an indicator of the size and importance of the stock market of a country. The ratio of market cap to GDP of a country is one such measure.

b. Market Turnover

Market turnover of a stock indicates how much trading activity took place in it on a given business day. Turnover can be represented in rupees or in a number of trades. Higher the turnover in a stock, better the liquidity. The turnover ratio for the market as a whole is computed as the ratio of turnover in rupees to market capitalisation. Higher is the liquidity in the market, higher will be the turnover ratio.

Trading activity is measured in two ways—traded values in rupees and traded volume in number of trades. It is usual for large cap stocks to have a high traded value.

c. Market Indices

A market index tracks the market movement by using the prices of a small number of shares chosen as a representative sample. Most leading indices are weighted by market capitalisation to take into account the fact that more the number of shares issued, greater the number of portfolios in which they may be held. Stocks included in an index are also quite liquid, making it possible for investors to replicate the index at a low cost. Narrow indices are usually made up of the most actively traded equity shares in that exchange. There are other indices to track sectors or different market cap categories. The most widely tracked indices in India are the S&P BSE Sensex and NSE's Nifty 50.

The composition of stocks in the index is reviewed and modified from time to time to keep the index representative of the underlying market.

There are also sector indices for banking, information technology, pharma, fast-moving consumer goods and such other sectors, created by the exchanges to enable tracking of specific sectors.

A stock market index has several uses:

- Indices are widely reported in the news, financial press and electronic information media and thus real time data on market movements is easily available to the investing public.
- The index value is a leading indicator of overall economic or sector performance and effectively captures the state of financial markets at a point of time.
- A representative index serves as a performance benchmark. The returns earned by equity mutual funds or other investment vehicles are often compared with the returns on the market index.

6.2.4 Risk Management Systems in the Secondary Markets

When a large volume of trades happen on a stock exchange it makes the market very liquid, efficient and low cost. However, the systemic risk also increases. Default by a trading member can have disastrous and catastrophic impact on the other trading members and the exchange as a whole. Risk management systems of stock exchanges are set up to mitigate the risk of members of the exchange defaulting on payment or delivery obligations. Stock exchanges have risk management systems to insure against the event that members of the exchange may default on payment or delivery obligations. Risk containment mechanisms such as maintenance of adequate capital assets by members and regular imposition of margin payments on trades ensure that damages through defaults are minimised. Exchanges thus enable two distinct functions: high liquidity in execution of trades and guaranteed settlement of executed trades.

a. Capital Adequacy Norms

In order to be eligible as trading and clearing members, individual and corporate entities have to meet and maintain minimum paid-up capital and net worth norms prescribed by the stock exchanges and SEBI. The Capital Adequacy Requirements consists of two components i.e. the Base Minimum Capital (BMC) and the Additional or Optional Capital related to volume of the business. BMC is the deposit given by the members of the exchange against which no exposure for trades is allowed. Additional capital is brought in over and above the BMC which has to be adequate to cover all margin payments.

b. Margins

A margin is the amount of funds that one has to deposit with the clearing corporation in order to cover the risk of non-payment of dues or non-delivery of securities.

Suppose an investor purchases 100 shares of Company X at Rs.100 each on January 1, 2020. He has to pay in Rs.10,000 by January 3, 2020. The risks in this transaction are that:

- The buyer may not be able to bring in the required funds by the due date
- The seller may not be able to deliver securities at the due date

In order to minimise this default risk, both buyers and sellers of equity are required to pay a percentage of their dues upfront at the time of placing their order. This payment is known as margin. For example, if the margin is set at 17%, the buyer would pay Rs.1,700 in advance. Margins are collected from the clients by brokers when the order is placed. Stock exchanges collect margins from brokers when the order is executed.

c. Circuit Breakers and Price Bands

If there is an abnormal price movement in an index, defined in percentage terms, the exchange can suspend trading. This is called hitting the circuit breaker.

The index-based market-wide circuit breaker system applies at 3 stages of the index movement, either way viz. at 10%, 15% and 20%. These circuit breakers when triggered bring about a coordinated trading halt in all equity and equity derivative markets nationwide. The market-wide circuit breakers are triggered by movement of either the BSE Sensex or the Nifty 50, whichever is breached earlier.

The period for which trading is suspended depends upon the extent of movement and the time when such move occurred.

Trigger limit	**Trigger time**	**Market halt duration**	**Pre-open call auction session post market halt**
10%	Before 1:00 pm.	45 Minutes	15 Minutes
	At or after 1:00 pm upto 2.30 pm	15 Minutes	15 Minutes
	At or after 2.30 pm	No halt	Not applicable

Trigger limit	Trigger time	Market halt duration	Pre-open call auction session post market halt
15%	Before 1 pm	1 hour 45 minutes	15 Minutes
	At or after 1:00 pm before 2:00 pm	45 Minutes	15 Minutes
	On or after 2:00 pm	Remainder of the day	Not applicable
20%	Any time during market hours	Remainder of the day	Not applicable

Exchanges compute the Index circuit breaker limits for 10%, 15% and 20% levels on a daily basis based on the previous day's closing level of the index rounded off to the nearest tick size.

Price Bands

Stock exchanges also impose price bands on individual securities to limit volatility in prices. Daily price bands applicable on securities are as follows:

- Daily price bands on 2%, 5% or 10% either way on securities as specified by the exchange.
- No price bands are applicable on scrips on which derivatives products are available or scrips included in indices on which derivatives products are available. In order to prevent members from entering orders at non-genuine prices in such securities, the exchange may fix operating range of 10% for such securities.
- Price bands of 20% either way on all remaining scrips.

d. Settlement Guarantee Mechanism

The clearing house/corporation is the counterparty to all trades in the stock exchange. This implies that it assumes counterparty risk completely, by settling all trades even if the trading member defaults on pay-in or pay-out. Some of this counter party risk is managed through the levy of margins. The guaranteed settlement is also ensured through the Core Settlement Guarantee Fund (Core SGF).

The primary objective of having Core Settlement Guarantee Fund (SGF) is to guarantee the settlement of trades executed in respective segments of the stock exchange (Cash, equity derivatives, Currency Derivatives). In the event of a clearing member failing to honour settlement commitments, the core SGF shall be used to fund the obligations of that member and complete the settlement without affecting the normal settlement process.

e. On-line Monitoring

The positions and transactions of the trading members/clearing members are monitored on a real-time basis by the stock exchanges. The on-line monitoring system is designed to give alerts if members build up an abnormal sale or purchase positions or if margins are inadequate relative to their exposure. The clearing house/corporation can proactively carry out a detailed check of members trading and reduce their open positions, if necessary. Any news or media information that leads to unusually large price/volume movements are also scrutinized and investigated by surveillance officers of the stock exchange.

f. Price Monitoring and Action

On surveillance of abnormal price movements, stock exchanges can take the following actions to minimise volatility:

- Imposition of special margins on scrips that have shown unusually large movements in price or volume. Depending on the situation, the margins may be imposed on client-wise net outstanding purchases, or sales or both.
- Circuit filter limits may be reduced to keep prices under control. This will ensure that trading will halt with a smaller rise in prices than usual.
- Shifting a scrip from settlement to the trade-to-trade segment forces members to give/take delivery in that scrip, and so minimises any volatility due to intra-day closing.

g. Inspection of Books

The stock exchange conducts an inspection of the books of trading members of each market segment at least once a year. The purpose of the inspection is to check member compliance with the applicable rules and regulations. Any violations observed result in disciplinary action by the Exchange.

6.3 Corporate Actions

A company conducts several actions, apart from those related to its business, that have a direct implication for the shareholder. These include sharing of surplus with the shareholders in the form of dividend or bonus, changes in the capital structure through the issue of rights shares, buy backs, mergers and acquisitions and delisting. In a company that has made a public issue of shares the interest of the small investors have to be particularly protected. All

corporate actions are regulated by the provisions of the Companies Act, 2013, the relevant regulations of SEBI and the terms of the listing agreement entered into with the stock exchange. All corporate actions therefore require notice to be given to the regulators as specified in the applicable clauses.

Corporate benefits and actions apply to all investors holding shares in physical form or in dematerialized form. In order to determine this, the company announces a record date or book closure period and investors whose names appear on the records on this date are eligible shareholders to receive notice of the action and entitled to benefit from it.

6.3.1 Rights Issue

Whenever a company makes a fresh issue of shares, it has an impact on the existing shareholders since their proportionate holding in the share capital of the company gets diluted. For example, a company may have 10 lakhs shares of Rs.10 each, amounting to an issued and paid-up capital of Rs. 1 crore. If it issues another 10 lakhs shares, to increase its capital, the proportion held by existing shareholders will come down by half, as the issued and paid up capital has doubled. This is called as dilution of holdings. To prevent this the Company's Act requires that a company which wants to raise more capital through an issue of shares must first offer them to the existing shareholders. Such an offer of shares is called a rights issue.

The rights shares are offered to the existing investors in a proportion as approved by the board of a company. For example, the company may choose to issue rights at 1 for 1, to double its capital. This means each existing shareholders will get one equity share for every one equity share that they already hold. The issued and paid up capital will double, but proportionate holdings will not change. Ratio of rights issues need not always be one. They can be 1:2, 2:3, and 2:5 and so on, depending on the decision of the board of the company.

A rights issue of shares must follow all SEBI's regulation on issue of shares. A listed company making a rights issue shall fix a record date to determine the eligibility of the shareholders for the rights issue. The company must issue a letter of offer giving details of the issue including the purpose for which funds are being raised. The draft letter of offer must be filed with SEBI. The rights entitlements are credited to the demat account of the investor.

6.3.2 Bonus Issue

A bonus issue of shares is made to the existing shareholders of a company without any consideration from them. The entitlement to the bonus shares depends upon the existing shareholding of the investor. A bonus issue in the ratio 1:3 entitles the shareholder to 1 bonus share for every 3 held. The company makes the bonus issue out of its free reserves built from genuine profits. A company cannot make a bonus issue if it has defaulted on the payment of interest or principal on any debt securities issued or any fixed deposit raised.

A company has to get the approval of its board of directors for a bonus issue. In some cases, the shareholders of the company also need to approve the issue.

6.3.3 Dividend

Dividends are the share of the profits of the company received by its shareholders. A company may declare interim dividends during the financial year and final dividend at the end of the year. A company is allowed to declare dividends out of the profit and loss account and the profits of the year in which the dividends are to be paid.

A loss-making company cannot therefore pay a dividend to its shareholder. A company which has failed to redeem its preference shares is prohibited from declaring dividends. Dividends cannot be declared out of the share premium account, revaluation reserve or capital redemption reserve, among others.

SEBI has mandated that listed companies shall declare dividends on a per share basis.

6.3.4 Stock Split

A stock split is a corporate action where the face value of the existing shares is reduced in a defined ratio. A stock split of 1:5 splits an existing share into 5 shares. Accordingly, the face value of the shares will go down to $1/5^{th}$ the original face value. For example, if an investor holds 100 shares of a company with a face value of Rs.10 each, a stock split in the ratio of 1:5 will increase the number of shares held by the investor to 500 but the face value of each share will go down to Rs.2. From the company's perspective, there is no change in its share capital since an increase in the number of shares is offset by a fall in the face value.

The value of the investor's holding will not change. For example, if the shares were trading at a price of Rs.1,000 per share prior to the split, post the split the price is likely to come down to Rs.200 per share. The value of the investor's holding was Rs.100,000 (100 shares x Rs.1,000). Post the split the value will remain at Rs.100,000 (500 shares x Rs.200). The actual price will be around Rs.200 and will depend on market factors of demand and supply.

Companies consider a share split if the price of the shares in the secondary markets is seen to be very high and therefore restricting the participation by investors. A share split leads to greater liquidity in the market.

A stock split has to be proposed by the board of directors of a company and approved by the shareholders. The additional shares on account of the split get credited to the demat account of the shareholder.

6.3.5 Share Buyback

A company may buy back its shares listed on a stock exchange from the investors out of the reserves and surplus available with the company. The shares bought back are extinguished by the company and leads to a reduction in its share capital. A share buyback is used by companies to increase the Earning Per Share (EPS) and thereby support the share price in the market. Surplus cash with the company for which there is no productive use, is used to restructure the capital of the company. To be eligible for a share buyback a company should not have defaulted on the payment of interest or principal on debentures, fixed deposits, redemption of preference shares or payment of dividend declared or payment of interest on any outstanding term loan.

6.3.6 Delisting of Shares

Delisting of shares refers to the permanent removal of the shares of a company from being listed on a stock exchange. Delisting may be compulsory or voluntary. In a compulsory delisting, the shares are delisted on account of non-compliance to regulations and the clauses of the listing agreement by the company. In a voluntary delisting, the company chooses to get the shares delisted by buying back the shares in a reverse book building process.

6.3.7 Mergers and Acquisitions

The shareholding pattern of a listed company may change due to a substantial acquisition of shares and voting rights by an acquirer and persons acting in concert with the acquirer. There are SEBI Regulations that provide the opportunity to public shareholders to exit from the company if they choose to do so.

6.3.8 Offer for Sale

Offer for sale means an offer by existing investors in the company to sell their shares to the public. In this case there are no new shares issued by existing shares held by the investor are sold. The money from the sale goes to the investor selling the shares and not the company. This route is adopted by companies to give their existing investors an option to exit either partially or fully.

Module 2 Sample Questions

1. **_____ defines the term "Securities".**
    a. Securities Contracts (Regulation) Rules, 1957
    b. Securities Contracts (Regulation) Act 1956
    c. The Depositories Act, 1996
    d. SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2018

2. **Which of the following is an advantage that institutional investors bring to the financial markets?**
    a. Better ability to source and analyse information relevant to a security
    b. Lower concentration of holding in a few investors
    c. Greater accountability since they invest own funds
    d. All of the above

3. **_____ is the market where issuers raise capital by issuing securities to investors for the first time.**
    a. Secondary Market
    b. Primary Market
    c. Money Market
    d. Forward Market

4. **The investment of funds by insurance companies is regulated by the norms laid down by _____.**
    a. RBI for debt investments and SEBI for equity investments
    b. Securities and Exchange Board of India
    c. Ministry of Finance
    d. Insurance Regulatory and Development Authority of India (IRDAI)

5. An investor bids Rs.45 in a book built public issue where the cut-off is discovered as Rs.50.
    a. The investor will get full allotment of shares.
    b. The investor will get proportionate allotment based on over subscription of shares.
    c. The investor will be allotted shares at Rs.50.
    d. The investor will not get an allotment of shares.

6.The share capital of a company will NOT increase when there is a

a. Fresh issue of shares
b. Offer for sale
c. Private placement
d. Preferential allotment

7.All primary market issues must be public issues. State whether True or False.

a. TRUE
b. FALSE

8.In which type of primary market issues are securities of an unlisted company issued to a select set of investors?

a. Preferential Issue
b. Private Placement
c. Offer for sale
d. Qualified Institutional Placement

MODULE 3: INVESTMENT PRODUCTS

Chapter 7: Introduction to Investment

Chapter 8: Investing in Stocks

Chapter 9: Investing in Fixed Income Securities

Chapter 10: Understanding Derivatives

CHAPTER 7: INTRODUCTION TO INVESTMENT

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Types of investment
- Equity
- Fixed Income
- Commodities
- Real Estate
- Structured products
- Distressed securities
- Other investment opportunities
- Know the channels for making investments

7.1 Types of investment

There are many investment opportunities. Broadly, investments can be classified into financial or non-financial investments. Non-financial investments include real estate, gold, commodities etc. Financial Investments are exchange of cash flows for a period of time. Financial instruments are essentially claims on future cash flows. On the basis of claims on the cash flows, there are two generic types of financial instruments: debt and equity. Financial investments can also be classified on the basis of the markets they trade: public versus private markets. Another popular way of classifying the financial opportunities is on the basis of their maturity profile: Capital market versus money market.

7.2 Equity

Investment characteristics and role

Equity Shares represent ownership in a company that entitles its holders share in profits and the right to vote on the company's affairs. Equity shareholders are residual owners of the firm's profit after other contractual claims on the firm are satisfied and have ultimate control over how the firm is operated. Equity Shareholders are residual claim holders. Investments in equity shares reward investors in two ways: dividend & capital appreciation. Investments in equities have proven time diversification benefits and considered to be a rewarding long-term investment. Time diversification benefits refers to the notion that fluctuation in investment returns tend to cancel out through time, thus more risk is diversified away over longer holding periods. It follows that investment in equities offer better risk-adjusted return if held for long time periods.

In addition to equity shares, companies may also issue preference shares. Preference shares rank above equity shares with respect to the payment of dividends and distribution of company's net assets in case of liquidation. However, preference shares do not generally have voting rights like equity shares, unless stated otherwise. Preference shares share some characteristics with debt securities like fixed dividend payment. Similar to equity share, preference shares can be perpetual. Dividends on preference shares can be cumulative, non-cumulative, participating, non-participating or some combination thereof (i.e., cumulative participating, cumulative non-participating, non-cumulative participating, non-cumulative non-participating). In case preference stock is cumulative, the unpaid dividends would accumulate to be paid in full at a later time, whereas in non-cumulative stocks the unpaid or omitted dividend does not get paid.

A non-participating preference share is one in which a dividend is paid, usually at a fixed rate, and not determined by a company's earnings. Participating preference share gives the holder the right to receive specified dividends plus an additional dividend based on some prespecified conditions. Participating preference shares can also have liquidation preferences upon a liquidation event.

Preference shares can also be convertible. Convertible preference shares entitle shareholders to convert their preference shares into a specified number of equity shares. Since preference shares carry some characteristics of equity share and at the same time some of the debt securities, they are referred to as hybrid or blended securities.

The chief characteristic of equity shares is shareholders' participation in the governance of the company through voting rights. Generally companies issue only one kind of common shares, on the principle of 'one share, one vote'. Some companies, however, issue shares with Differential Voting Rights (DVRs). Shares with DVRs can either have superior voting rights (i.e. multiple votes on one share) or inferior voting rights (i.e. a fraction of the voting right on one equity share) or differential rights as to dividend. Shares with DVRs are very popular in the western world for many decades. They have not really gained momentum in India. Though way back in 2000, the Companies Act, 1956, was amended to permit issuance of shares with DVRs, not many companies have issued shares with DVRs. Tata Motors was one of the first companies in India to issue DVRs in 2008. These DVRs carried 1/10 voting rights and 5% higher dividend than ordinary shares. Since then, Pantaloons Retail (currently Aditya Birla Fashion and Retail Limited), Gujarat NRE Coke Ltd., Jain Irrigation Systems Ltd. have issued DVRs.

7.3 Fixed Income

Debt instruments, also called fixed income instruments, are contracts containing a promise to pay a stream of cashflows during the term of the contract to the investors. The debt contract can be transferable, a feature specified in the contract that permits its sale to

another investor, or non-transferable, which prohibits sale to another party. Generally, the promised cash flow of a debt instrument is a periodic payment, but the parties involved can negotiate almost any sort of cash flow arrangement. A debt contract also establishes the financial requirements and restrictions that the borrower must meet and the rights of the holder of the debt instruments if the borrower defaults. Debt securities are issued by companies, municipalities, states and sovereign governments to raise money to finance a variety of projects and activities. Debt instruments can further be classified on the basis of issuer into government debt securities and corporate debt securities where the issuer is a non-government entity. Government securities form the largest component of debt market in India as well as world over.

Government versus corporate Debt Securities

A Government Security (G-Sec) is a tradeable instrument issued by the Central Government or the State Governments. It acknowledges the Government's debt obligation. Such securities are short term (usually called treasury bills, with original maturities of less than one year) or long term (usually called Government bonds or dated securities with original maturity of one year or more). In India, the Central Government issues both treasury bills and bonds or dated securities while the State Governments issue only bonds or dated securities, which are called the State Development Loans (SDLs). G-Secs carry practically no risk of default and, hence, are called risk-free gilt-edged instruments.

A key source of funds for corporates is debt financing. Companies issue debt securities of various maturity profile. Many of these corporate debt papers are listed on stock exchanges. However a bigger component of corporate borrowings lies in the unlisted space. Corporate fixed income securities pay higher interest rates than the government securities due to default risk. The difference between the yield on a government security and the corporate security for the same maturity is called "credit spread". Higher the probability of default greater would be the credit spread. Credit Spread could also be understood as the "Risk Premium" which the companies are paying to raise the debt, or the investors are charging for bearing default risk.

High Yield versus Investment Grade

The probability of default on a fixed income paper is captured by ratings given by rating agencies.

Table 7.1 gives the rating symbols given by CRISIL a rating agency registered with SEBI.

7.1 Rating Scale and description

Rating	Description
CRISIL AAA (Highest Safety)	Instruments with this rating are considered to have the highest degree of safety regarding timely servicing of financial obligations. Such instruments carry lowest credit risk.
CRISIL AA (High Safety)	Instruments with this rating are considered to have high degree of safety regarding timely servicing of financial obligations. Such instruments carry very low credit risk.
CRISIL A (Adequate Safety)	Instruments with this rating are considered to have adequate degree of safety regarding timely servicing of financial obligation. Such instruments carry low credit risk.
CRISIL BBB (Moderate Safety)	Instruments with this rating are considered to have moderate degree of safety regarding timely servicing of financial obligation. Such instruments carry moderate credit risk.
CRISIL BB (Moderate Risk)	Instruments with this rating are considered to have moderate risk of default regarding timely servicing of financial obligation.
CRISIL B (High Risk)	Instruments with this rating are considered to have high risk of default regarding timely servicing of financial obligation.
CRISIL C (Very High Risk)	Instruments with this rating are considered to have very high risk of default regarding timely servicing of financial obligation.
CRISIL D (Default)	Instruments with this rating are in default or are expected to be in default soon.

As can be observed in the rating description, higher rating denotes lower default risk and vice versa. The convention in the market is to classify bonds with rating BBB and above as investment grade and bonds below the BBB as high yield or junk bonds. Many institutional investors are prohibited from investing in junk bonds as they involve high default risk.

7.4 Commodities

Investments in soft commodities which are grown like corn, wheat, soybean, soybean oil, sugar and also used as inputs in the production of other goods; and hard commodities which are mined like gold, silver, oil, copper and aluminium are other investment avenues available

to investors. Soft commodities are perishable hence they exhibit high volatility in their prices. These commodities are subject to higher business cycle risk as their prices are determined by the demand and supply of the end products in which they are consumed. Soft commodities historically have shown low correlation to stocks and bonds. Hence, they provide benefits of risk diversification when held in a portfolio along with stock and bonds. Prediction of weather is an important factor while investing in soft commodities. Exposure to these commodities can be taken through derivative contracts like forwards or futures. Hence investors must carefully understand the risk involved in the same. Prices of hard commodities are determined by the interaction between global demand and supply. Hard commodities like gold and silver have been the investment avenues for centuries, as reserve assets. Due to its global acceptability gold has acquired the status safe haven asset. It is viewed as an attractive investment in times of economic uncertainty and geopolitical crisis. Gold has shown diversification benefits historically. Unlike most of the financial investments commodities do not generate any current income and the investor in these commodities would have to count only on capital appreciation.

7.5 Real Estate

Real estate is the largest asset class in the world. It has been a significant driver of economic growth. It offers significant diversification opportunities. It has been historically viewed as a good inflation hedge. Investors can invest into real estate with capital appreciation as an investment objective as well as to generate regular income by way of rents. It is usually a long-term investment. Real estate is classified into two sub-classes: commercial real estate or residential real estate. It can be further broken down into terms of tier I, tier II and tier III cities. Real estate investments often involve large commitments. Real estate funds or Real Estate Investment Trusts (REIT) have emerged as a good option to enable investors to take exposure to this asset class with smaller outflow commitments.

7.6 Structured products

Structured products are customized and sophisticated investments. They provide investors risk-adjusted exposure to traditional investments or to assets that are otherwise difficult to obtain. Structured products greatly use derivatives to create desired risk exposures. Many structured products are designed to provide risk-adjusted returns that are linked to equity market indices, sector indices, basket of stocks with some particular theme, currencies, interest rates, commodity or a basket of commodities. Structured products can be designed for a short term or for long terms. The terms can be customized to meet the requirements of the investing community. These products require investments of a larger denomination. They may offer investment protection from 0% to 100% and/or attractive yields. The performance of the structured product is largely driven by the underlying strategy subject to market conditions. Hence, they must not be taken as capital protection or guaranteed or assured return products.

7.7 Distressed Securities

Distressed securities are the securities of the companies that are in financial distress or near bankruptcy. Investors can make investments in the equity and debt securities of publicly traded companies. These may be available at huge discounts, however investments in them require higher skills and greater experience in business valuation than regular securities. These securities can be considered from the perspective of diversification of risk. These securities are also referred to as 'fallen angels' and many types of funds and institutional investors are prohibited from holding these securities because of the high risk involved. It is a popular investment segment among hedge fund managers as they have deep experience in valuation and credit analysis.

7.8 Other investment opportunities

Art and paintings and rare collectibles are emerging as an attractive long-term investment opportunity. This category of investment has been generating moderate return in the long term. It also has low correlation with financial investment like equities and bonds. Hence it provides a good risk diversification benefit. However, these are big ticket investments. Also, art is not a standard investment product as each work is unique. The market for the same is unregulated. These investments do not provide any income and just like gold, capital appreciation is the only way of reward. In terms of liquidity, this category is relatively more illiquid. To make the rewarding investment decisions, specialized knowledge in arts is more crucial than in traditional financial assets due to higher levels of information asymmetry and adverse selection problems. There are art and painting based investment funds. Investors can take exposure through these funds. Investments are also permitted abroad under the Liberalised Remittance Scheme (LRS) wherein an individual can invest upto $ 250,000 abroad every year. This route allows for geographical as well as currency diversification and also opens up several new choices for investors.

7.9 Channels for making investments

Investors can invest in any of the investment opportunities discussed above directly or through intermediary providing various managed portfolio solutions.

Direct investments

Direct investments are when investors buy the securities issued by companies and government bodies and commodities like gold and silver. Investors can buy gold or silver directly from the sellers or dealers. In case of financial securities, a few fee-based financial intermediaries aid investors buy or sell investments viz. brokers, depositories, advisors etc., for fees or commission.

Understanding the role of RIAs

Investors can take the advice from SEBI Registered Investment Adviser (RIA). As per the SEBI Regulation relating to RIA which came in the year 2013, only qualified professionals who are licensed by SEBI as Registered Investment Advisers (RIAs) can act as 'advisers'. These advisers are paid fees by the investors who hire them for investment advice. After this regulation, the distributors of financial products like mutual fund distributors, share brokers and insurance agents who would earlier act as investment advisers, can no longer claim the title. These advisers, like other fee-based professionals, are only accountable to their investors. They are required to follow a strict code of conduct and offer advice in the investors' best interests. They are also required to disclose any conflict of interest. Advisers do basic risk profiling, assess the needs and requirements of the investors, understand their financial health and develop 'financial plans'. They help in inculcating a sense of discipline in investors. Thus Investment advisers can help investors create an optimum investment portfolio and help them in making rational investment decisions.

Investments through managed portfolios

Alternatively, investors can invest through investment vehicles which pool money from investors and invest in a variety of securities and other investments on their behalf. In other words, investors make indirect investments. These investment vehicles are professionally managed. Through these managed portfolios they can avail the professional expertise at much lower costs.

The following are examples of managed portfolio solutions available to investors in India:

- Mutual Funds (MFs)
- Alternative Investment Funds (AIFs)
- Portfolio Managers (PMs)
- Collective Investment Schemes (CISs)

Mutual Fund

A Mutual Fund is a trust that pools the savings of a number of investors who share a common financial goal. Money collected through mutual fund is then invested in various investment opportunities like shares, debentures and other securities. The income earned through these investments and the capital appreciation realized are shared by its unit holders in proportion to the number of units owned by them. Mutual fund is a pass-through intermediary in the true sense.

The following are the benefits of investing through mutual funds:

- Professional investment Management
- Risk reduction through diversification
- Convenience

- Unit holders account administration and services
- Reduction in transaction costs
- Regulatory protection
- Product Variety

However, mutual fund products are not 'get rich quick' investments. They are not risk-free investments. Mutual funds are strictly regulated by SEBI under Mutual Fund Regulation 1996. Mutual fund industry offers tremendous variety. There are products for different types of investment objectives and goal.

Alternative Investment Fund

Alternative Investment Fund or AIF is a privately pooled investment vehicle which collects funds from sophisticated investors, for investing it in accordance with a defined investment policy for the benefit of its investors. The words 'privately pooled' denote that the fund is pooled from select investors and not from the general public at large. These private investors are institutions and high net worth individuals who understand the nuances of higher risk taking and complex investment arrangements. The minimum investment value in AIF is one crore rupees.

Portfolio Management Services

A portfolio manager is a body corporate who advises or directs or undertakes on behalf of the investors the management or administration of a portfolio of securities. There are two types of portfolio management services available. The discretionary portfolio manager individually and independently manages the funds of each investor whereas the non-discretionary portfolio manager manages the funds in accordance with the directions of the investors. The portfolio manager enters into an agreement in writing with the investor, clearly defining the relationship and setting out their mutual rights, liabilities and obligations relating to the management of funds or portfolio of securities. Portfolio management services are regulated by SEBI under Portfolio Manager Regulations. The regulations have not prescribed any scale of fee to be charged by the portfolio manager to its clients. However, the regulations provide that the portfolio manager shall charge fee as per the agreement with the client for rendering portfolio management services. The fee so charged may be a fixed amount or a return based fee or a combination of both. The portfolio manager is required to accept minimum Rs. 50 lakhs or securities having a minimum worth of Rs. 50 lakhs from the client while opening the account for the purpose of rendering portfolio management service to the client. Portfolio manager cannot borrow on behalf of his clients. Portfolio managers provide investment solutions unique to the needs of the investors.

Compare and Contrast between Mutual Funds, Alternate Investment Funds and Portfolio Managers

Mutual Funds, Alternate Investment Funds (AIFs) and Portfolio Managers (PMs) are managed portfolios. All three provide indirect ways of investing in securities and other investments to investors. All three are regulated by SEBI. However, Mutual funds are more stringently regulated compared to AIF and PMS as mutual funds cater to retail investors. In case of AIF, the minimum amount required for investment is Rs. one crore and in case of PMS it is Rs. Fifty lakhs. AIF and PMS cater to institutional and high net worth investors. These investors are expected to understand complex investment strategy and risks involved. The investment restrictions of PMS and AIF are also relatively less compared to mutual funds. So though, there are some similarities between them, there are important differences too. AIFs and PMS are popularly referred to as rich man's mutual fund.

CHAPTER 8: INVESTING IN STOCKS

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Understand Equity as an investment
- Diversification of risk through equity instruments - Cross sectional versus time series
- risks of equity investments
- Overview of Equity Market
- Know the equity research and stock selection
- Understand combining relative valuation and discounted cash flow models
- Know about Technical Analysis
- Qualitative evaluation of stocks

8.1 Equity as an investment

There are two broad types of securities that are issued by seekers of capital from investors: Equity and Debt. Equity securities are issued by companies providing ownership to the investor in their company, and Debt securities are issued by companies providing the rights of a lender to the investor. The features of both these securities differ due to the inherent difference in the claim of the investors on the company.

Equity investors also known as shareholders have residual claim[5] in the business. Because they are the owners of the company and not lenders, the company which issues equity securities, is not contractually obligated to repay the amount it receives from the shareholders. It is also not contractually obligated to make periodic payments to shareholders for the use of their funds, like interest payments in the case of lenders. Equity investors get voting rights. When equity investors own a sizable amount of shares in a company, they get an opportunity to participate in the management of the business.

Investors who purchase equity shares look for capital appreciation and dividend income. There is no assurance of both by the company to the equity investor. While dividend payment depends on the profitability of the company, capital appreciation depends on the conditions of the stock market. Because all residual benefits of deploying capital in a business go to the equity investor, It is usually expected that the return to equity investors should be higher than that of the debt investors (lenders).

Choosing between equity and debt is a trade-off for investors. Investors desiring lower risk choose debt, at the cost of lower but stable return. However, if they seek a higher returns they choose equity investment, but they may not be able to earn it without taking on the

[5] Claim on the company's net assets, i.e. the value of assets after all liabilities have been paid.

additional risk of the equity investment. Most investors tend to allocate their capital between these two choices, depending on their expected return, their investing time period, their risk appetite and their needs.

8.2 Diversification of risk through equity instruments - Cross sectional versus time series

Equity is inherently riskier compared to bonds and many other asset classes. However there are ways to mitigate the risks in stocks. The most meaningful way to risk reduction is through diversification – both on cross sectional (i.e. across business sectors and industries) as well as on time series basis (i.e. across various time periods).

Empirical research has demonstrated that a significant portion of risk can be reduced through diversification. Conceptually, it is achieved due to the relatively less correlated behaviour of various business sectors which underlie each equity investment. This is what the old adage 'Don't put all your eggs in one basket' means.

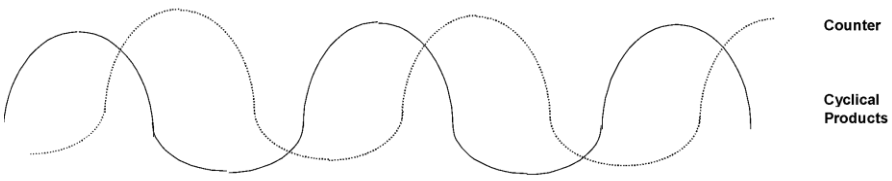
Cross sectional risk diversification is reducing risk by holding equities in many different kinds of businesses at a point in time and also across various geographies of the world.

Reaping the benefits of time diversification requires investing in equities for a long period of time. The belief is that bad times will get cancelled out by good times. This is why "time in the market" is suggested for equity investment as against "timing the market".

Underlying the word 'diversification' is the concept of business cycles and counter-cyclical businesses, and the phenomenon of lag and lead between the behaviour of investments returns and countries' economic performance.

In the Figure 8.1, a business cycle is shown as a dark line. Some businesses may be at peak when the business cycle is in its trough, as shown by the broken line. These products or businesses are called 'counter-cyclical' or defensive businesses. Businesses that do better in a recession are called 'recession-proof' businesses. Some products, sectors or countries come out of a recession faster than others (these are called as leading sectors); other products, sectors or countries may go into recession later than others (these are called lagging sectors).

Figure 8.1 Counter-cyclical products



8.3 Risks of equity investments

Equities are often regarded as riskier than other asset classes. The main types of risks discussed in the context of equity investments are discussed below:

8.3.1. Market risk

Market risks arise due to the fluctuations in the prices of equity shares due to various market related dynamics. These factors affect all the listed, market traded, assets, irrespective of their business sector. The degree of impact may be different. Beta is a proxy measure for market risk. Market risks cannot be diversified away, though it can be hedged.

8.3.2. Sector specific risk

Risks due to sector specific factors are not part of market risks. These risks can be diversified away by investing in different business sectors. Sector specific risks arise due to factors that affect the performance of businesses in a particular sector/industry. Factors affecting certain sectors might not impact certain other sectors. Such risks are also called "idiosyncratic risks". Say for instance there are restrictions on the movement of international tourists, the airline industry and hospitality industry are going to be affected. But industries and business sectors dependent on domestic customers are not affected by such restrictions.

8.3.3. Company specific risk

Risks arising due to company specific factors are also non-market risks. These risks can also be diversified away by investing in different companies. Company specific risk arises due to factors that affect only the performance of a single company and other firms might not be affected by them. Though, overall, the airline industry goes through turbulent times, time and again, certain airlines withstood the rough weather and other exited helplessly. Such corporate debacles are due to company specific factors. Same is now being seen in telecom sector.

8.3.4 Transactional risk

Risks due to the other party not fulfilling the terms of the contract while buying or selling equities is often referred to as transactional risk. This can happen when the other person is either not able to pay the money or deliver the shares. This type of risk can be mitigated by transacting through the stock exchange where there are robust risk mitigation procedures present to take care of such situations.

8.3.5. Liquidity risk

Liquidity risk is the risk of not being able to find a buyer or seller for the equity holdings. Liquidity risk is measured by impact cost. The impact cost is the percentage price movement caused by a particular order size (let's say an order size of Rs.1 Lakh) from the average of the best bid and offer price in the order book snapshot. The impact cost is calculated for both, the buy and the sell side. Less liquid stocks are more thinly traded, and a single large trade can move their prices considerably. Such stocks have high impact costs. A lower market impact implies the stock is more liquid.

8.3.6 Currency Risk

Prima Facie it appears that currency risk is not directly related to prices of equity. However, once the financial markets are open to the international investors currency risk sets in. Currency risk arises due to uncontrollable, unpredictable and volatile exchange rates of various pairs of currencies. When a significant proportion of players in a financial market belong to the international institutional investors groups, then that financial market is bound to be related to exchange rate movements. Many times we here that stock market reacts to FPIs' buy and sell pressure, and FPIs move in and move out of a country with changes in their home country interest rates, or due sudden unfavourable exchange rate movements, like deep depreciations in their host countries or due to any other socio-politico-economic, industry or market shocks.

Apart from the above most prominent risks, all other macro economic factors like inflation, fuel prices, interest rates, economic growth, economic slowdown, do influence stock markets.

8.4 Overview of Equity Market

Equity securities represent ownership claims on a company's net assets. A thorough understanding of the equity market is required to make optimal allocation to this asset class. The equity market provides various choices to investors in terms of risk-return-liquidity profile. There are opportunities in listed as well as unlisted equity space available.[6] There are about 66,000 unlisted public limited companies and over 5,000 listed domestic companies. Investments in listed companies are relatively more liquid than investment in unlisted companies. Listed companies have to abide by the listing norms, making this investment space more regulated with better disclosures.

8.5 Equity research and stock selection

As there are thousands of opportunities available to investors in the equity market, equity research and stock selection process plays a very important role in identifying stocks which suit the risk-return-liquidity requirements of the investors. Equity research involves thorough analysis and research of the companies and its environment. Equity research primarily means analysing the company's financials and non-financial information, studying the dynamics of the sector the company belongs to, competitors of the company, economic conditions etc. The idea behind equity research is to come up with intrinsic value of the stock to compare with market price and then decide whether to buy or hold or sell the stock. There are many frameworks/methodologies available for stock selection. Analysts use fundamental analysis -

[6] Listing is a process through which the companies fulfilling the eligibility criteria prescribed by the Exchange are admitted for trading on the Exchange.

top-down approach or bottom-up approach - quantitative screens, technical indicators etc., to select stocks.

8.5.1. Buy side research versus Sell Side Research

Though both Sell-side and Buy-side researchers and analysts take up similar works, but they differ in terms of for whom they work, how accurate they need to be, and for what are they paid.

Sell-side Analysts work for firms that provide investment banking, broking, advisory services for clients. They typically publish research reports on the securities of companies or industries with specific recommendation to buy, hold, or sell the subject security. These recommendations include the analyst's expectations of the earnings of the company and future price performance of the security ("price target"). In essence the sell-side analysts are paid for providing useful information to be acted upon. In this regard the expectations from the sell-side research is broad guidance on multiple sectors, rather than accurate price predictions.

Buy-side Analysts work for fund managers like those of mutual funds, hedge funds, pension funds, or portfolio managers that purchase and sell securities for their own investment accounts or on behalf of their clients. These analysts generate investment recommendations for their internal consumption viz. use by the fund managers within organization. Research reports of these analysts are generally circulated among the top management/investment managers of the employer firms as these reports contain recommendations about which securities to buy, hold or sell. Therefore the buy-side researchers need to be more accurate and they are paid for their investment recommendations.

8.5.2. Fundamental Analysis

Fundamental analysis is the process of determining intrinsic value for the stock based on the fundamentals that drive its intrinsic value. These values depend on underlying economic factors such as future earnings or cash flows, interest rates, and risk variables. By examining these factors, intrinsic value of the stock is determined. Investors should buy the stock if its market price is below intrinsic value and do not buy, or sell, if the market price is above the intrinsic value, after taking into consideration the transaction cost. Investors who are engaged in fundamental analysis believe that intrinsic value may differ from the market price but eventually market price will merge with the intrinsic value. An investor or portfolio manager who can do a superior job of estimating intrinsic value will generate above-average returns by acquiring undervalued securities. Fundamental analysis involves Economy Analysis, industry analysis, company analysis.

Top Down approach versus Bottom up Approach

Analysts follow two broad approaches to fundamental analysis – top down and bottom up. The factors to consider are economic (E), industry (I) and company (C) factors. Beginning at company-specific factors and moving up to the macro factors that impact the performance of the company is called the bottom-up approach. Scanning the macro economic scenario and then identifying industries to choose from and zeroing in on companies, is the top-down approach.

EIC framework is the commonly used approach to understanding fundamental factors impacting the earnings of a company, scanning both micro and macro data and information.

8.5.3. Stock Analysis Process

The value of an investment is determined by its expected cash flows and the investor's/analyst's required rate of return (i.e., its discount rate). The expected cashflows as well as required rate of return are influenced by the economic environment. The analyst needs to have a good understanding of important economic variables and economic series. The macroeconomic analysis provides a framework for developing insights into sector and company analysis.

Economy Analysis

Macro-economic environment influences all industries and companies within the industry. Monetary and fiscal policy influences the business environment of the industries and companies. Fiscal policy initiatives like tax reduction encourages spending while removal of subsidies or additional tax on income discourage spending. Similarly, monetary policy may reduce the money supply in the economy affecting the expansionary plans and working capital requirements of all the businesses. Hence a thorough macro-economic forecast is required to value a sector/firm/equity.

Any macro-economic forecast should include estimates of all of the important economic numbers, including:

- Gross Domestic Product
- Inflation rates
- Interest rates
- Unemployment

The most important thing an analyst does is to watch for releases of various economic statistics by the government, Reserve Bank of India and private sources. Especially, they keep a keen eye on the Index of economic indicators like the WPI, CPI, monthly inflation indices, Index of Industrial Production, GDP growth rate etc. Analysts assess the economic and

security market outlooks before proceeding to consider the best sector or company. Interest rate volatility affects different industries differently. Financial institution or bank stocks are typically placed among the most interest-sensitive of all sectors. Sectors like pharmaceuticals are less affected by interest rate change.

The economy and the stock market have a strong and consistent relationship. The stock market is known as a leading economic indicator. A leading economic indicator is a measure of economic recovery that shows improvement before the actual economy does because stock price decisions reflect expectations for future economic activity, not past or current activity.

Industry/Sector Analysis

Industry analysis is an integral part of the three steps of top-down stock analysis. Industry analysis helps identify both unprofitable and profitable opportunities. Industry analysis involves conducting a macroanalysis of the industry to determine how different industries relate to the business cycle.

Performance of industries is related to the stage of the business cycle. Different industries perform differently in different stages of the business cycle. On the basis of the relationship different sectors share with the business cycles, they are classified as cyclical and noncyclical sectors. For example, banking and financial sector perform well towards the end of a recession. During the phase of recovery, consumer durable sectors like producers of cars, personal computers, refrigerators, tractors etc., become attractive investments. Cyclical industries are attractive investments during the early stages of an economic recovery. These sectors employ high degree of operating costs. They benefit greatly during an economic expansion due to increasing sales, as they reap the benefits of economies of scale. Similarly, sectors employing high financial leverage also benefit during this phase, as debt is good in good times.

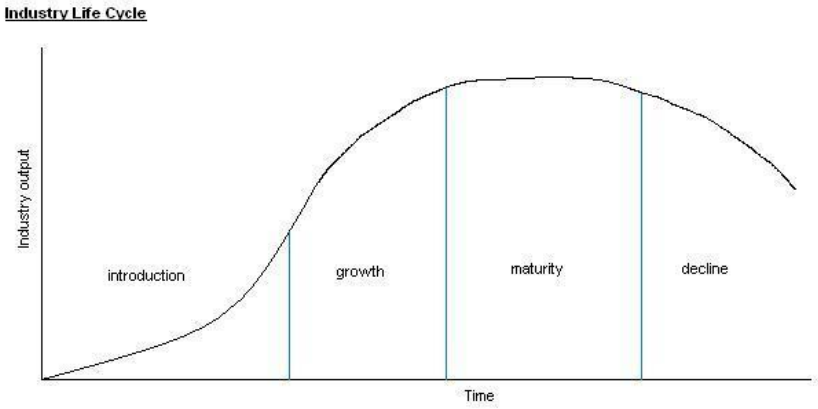
At the peak of the business cycle, inflation increases as demand overtakes supply. Inflation impacts different industries differently. There are industries, which are able to pass on the increase in the costs of products to their consumers by increasing prices. Their revenue and profits may remain unaffected by inflation. Industries producing basic materials such as oil and metals benefits the situation. Rising inflation doesn't impact the cost of extracting these products. These industries can increase prices and experience higher profit margins. However, there are industries that are not able to charge the increased costs of production to their consumers. Their profitability suffer due to inflation.

During a recession phase also, some industries do better than others. Defensive industries like consumer staples, such as pharmaceuticals, FMCG, outperform other sectors. Even

though the spending power of consumer is going down, people still spend money on necessities.

Analysts also see the stage of the Industry is in its life cycle. The number of stages in the life cycle of the industry are depicted in Figure 8.2:

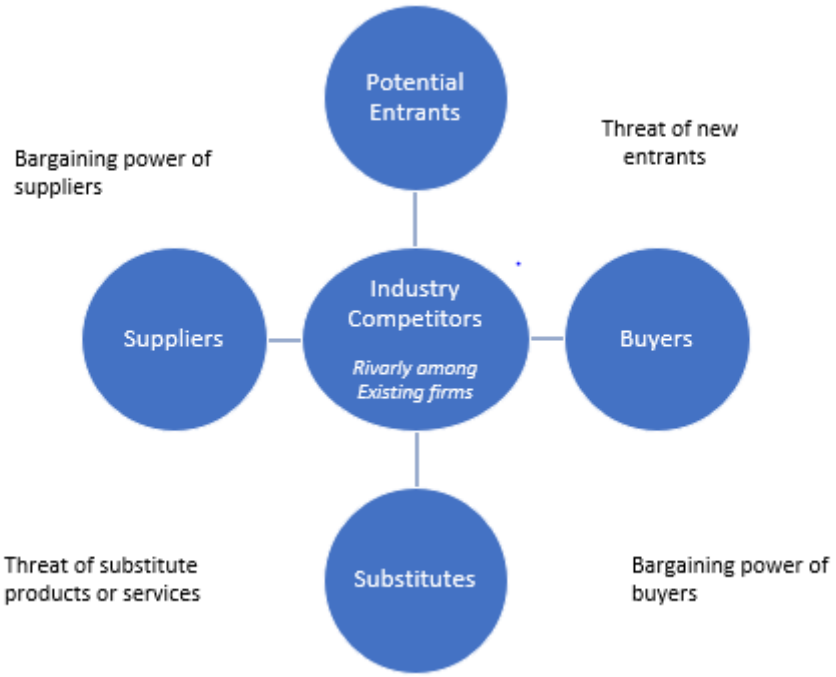
Figure 8.2: Industry Life Cycle



- Introduction: during this stage industry experiences modest sales and very small or negative profit. The market of the products of the industry is small and the firms in the industry may have high development costs.
- Growth: during this stage, market develops for the products or services of the industry. Number of firms in the industry is less during this phase and hence they may have little competition. Profit margins at this stage are generally high. This stage is followed by mature industry growth. The rapid growth of the earlier phase attracts competitors contributing profits margins to go to normal levels.
- Maturity: This is generally the longest phase in the life cycle of the industry. During this stage, growth rate in the industry normally matches with the economy's growth rate. Firms in the industry differ from one another given their cost structure and ability to control costs. Competition is high during this stage reducing the profit margin to normal levels.
- Deceleration of growth and decline: This stage observes decline is sales due to shift demand. Profits margins are under pressure and some firms may even witness negative profits.

Similar to life cycle analysis, competitive structure of the industry is to be analysed by the analysts. It is a key factor affecting the profitability of the firms in the industry. Competition influences the rate of return on invested capital. If the rate of return is "attractive" it will encourage investment. Michael Porter looked at forces influencing competition in an industry and the elements of industry structure. He described these forces as the industry's micro-environment.

Figure 8.3 Porter's Model



Michael Porter suggests that five competitive forces determine the intensity of competition in the industry. Which in turn affects the profitability of the firms in the industry. The impact of these factors can be different for different industries.

The first factor is rivalry among the existing competitors. Every industry is analyzed to determine the level of rivalry amongst its firms. Rivalry increases when the industry has many firms of the same size. And hence firms may compete very hard to sell at full capacity. Generally, when rivalry is very high the rates of return would be low.

The second factor is the threat of new entrants. The entry barriers influence the entry of new player to the industry. The analysts examine them, as they influence the future competitive structure of the industry and in turn profitability of existing firms. Generally, when an industry is well protected by high level of entry barriers, then the existing players can sustain higher growth rates and profitability.

The third factor is the threat of substitute products. Substitute products influence the prices firms can charge for their products. Greater the substitutability of the product, lower the sustained earnings growth rate, and profit margins.

The fourth factor is bargaining power of the buyers, which influences the profitability. Buyers can influence the profitability of an industry when they are in position to demand lower prices or higher quality by showing a susceptibility to switch among competitors. Higher the bargaining power lower the ability of the company to set the prices and hence profits.

The fifth factor is the bargaining power of the supplier. Suppliers are more powerful if they are few and large in size. They can influence future industry returns if they increase prices or reduce the quality of the product. Hence higher the power of supplier, higher would be the cost of production and operation thereby decreasing profits.

Company Analysis

Company analysis is the final step in the top-down approach to Stock Analysis. Macroeconomic analysis prepares us to understand the impact of forecasted macro-economic environment on different asset classes. It enables us to decide how much exposure to be made to equity. Industry analysis helps us in understanding the dynamics of different industries in the forecasted environment. It enables us to identify industries that will offer above-average risk-adjusted performance over the investment horizon. If trends are favourable for an industry, the company analysis focusses on firms in that industry that are positioned to benefit from the economic trends. The final investment decision to be made is with regard to which are the best companies in the desirable industries? And are they attractive investments in terms of risk-adjusted returns.

Company analysis is to be differentiated from stock valuation. Company analysis is conducted to understand its strength, weaknesses, opportunities and threats. These inputs are used to determine the fundamental intrinsic value of the company's stock. Then this value is compared with the market price of the stock. If the intrinsic value is higher than the market price, the stock is bought and vice versa. It is very important to note that stocks of good companies need not make good investment opportunities. The stock of a good company with superior management and strong performance measured by current and future sales and earnings growth can be trading at a price much higher to its intrinsic value. It may not make a good investment choice.

Company analysis is needed to determine the value of the stock. There are many components to company analysis. Financial statement analysis of the company is often the starting point in analysing a company. Analysing the profit and loss account, balance sheet and the cash flow statement of the company is imperative. The financial performance numbers of a company, as presented in the financial statements, can be used to calculate ratios that give a snapshot view of the company's performance. The ratios of a company have to be seen in conjunction with industry trends and historical averages.

Another important component of company analysis is SWOT Analysis. SWOT analysis involves examination of a firm's strengths, weaknesses, opportunities, and threats. Strengths and weaknesses deal with a company's internal ability, like a company's competitive advantage or disadvantages. Opportunities and threats deal with external situations and factors the company is exposed to. Opportunities include a favourable tax environment, favourable change in consumer preference. An example of threat is stringent government regulation, or

a big sized competitor, or changing technology etc.

Company analysis also involves analysing its competitive strategies. A firm may follow a defensive strategy. A defensive strategy is one where the firm positions itself in such a way that its capabilities provide the best means to deflect the effect of competitive forces in the industry. Alternatively, a firm may follow an offensive strategy in which the firm attempts to use its strengths to affect the competitive forces in the industry.

Michael Porter suggests two major strategies: Cost Leadership and Differentiation.

Cost Leadership: under this strategy the firm seeks to be the low-cost producer, and hence the cost leader in its industry. Cost advantages vary from industry to industry.

Differentiation Strategy: Under this strategy, the firm positions itself as unique in the industry. Again, the possibilities of differentiation differ from industry to industry.

Another very important component of company analysis is understanding the business model of the company. As part of it the following questions need to be asked.

- What does the company do and how does it do?
- Who are the customers and why do customers buy those products and services?
- How does the company serve these customers?

Almost all successful investors and fund managers repeat this thought that one must invest only in such firms where one understands the business. In the checklist for research, this is one of the most prominent questions – 'Do I understand the business?' No analyst should move to the next question if he/she can't address what a company does in a line with preciseness and clarity.

There are over 5,000 companies listed on Indian exchanges. It is not possible to track and understand all of them. Investors should consider buying shares of few companies they understand rather than invest in a number of companies they don't understand.

Further, each sector has its own unique parameters for success, sales growth and profitability. For the retail sector, footfalls and same store sales (SSS) are important parameters, whereas for banking it is Net Interest Income (NII)/ Net Interest Margin (NIM). For telecom, it is Average Revenue per User (ARPU) and for hotels, it is average room tariffs and room occupancy etc. Analysts must possess an in-depth knowledge of the sectors while researching companies.

Further, each company will have its unique way of doing business. The efficiency with which products and services are produced and delivered to the customers may vary from one business to another and will significantly impact its earnings. Therefore, it becomes imperative for analysts to understand the entire business model of companies.

8.5.4. Estimation of intrinsic value

Once the analysis of the economy, industry and company is completed, the analyst can go ahead with estimating intrinsic value of the firm's stock. Price and value are two different concepts in investing. While price is available from the stock market and known to all, value is based on the evaluation and analysis of the entity that is undertaking the valuation of the stock at a point in time. It may be noted that Price is a Fact but Value is an Opinion. There are various approaches to valuation. They are explained in the subsequent paragraphs. There are uncertainties associated with the inputs that go into these valuation approaches. As a result, with due diligence, the final output can at best be considered an educated estimate. That is the reason, valuation is often considered an art as well as a science. It requires the combination of knowledge, experience, and professional judgment in arriving at a fair valuation of any asset. The purpose of valuation is to relate the market price of the stock to its intrinsic value and judge whether ~~if~~ it is fairly priced, over-priced or under-priced.

Three most popular approaches to valuation viz., discounted cashflow approach, asset based approach and relative multiple based approach are discussed below.

8.5.4.1. Discounted Cash Flow Model

Conceptually, discounted cash flow (DCF) approach to valuation is the most appropriate approach for valuations when three things are known:

- Stream of future cash flows
- Timings of these cash flows, and
- Expected rate of return of the investors (called discount rate).

Once these three pieces of information are available, it is simple mathematics to find the present value of these cash flows which a potential investor would be willing to pay today to receive the expected cash flow stream over a period of time.

Typically, any investment involves the outflow of cash. Later the investor expects, cash inflows during the investment horizon. Finally, at the time of disinvestment, the investor expects a large cash inflow - preferably larger than the original investment - representing the return of original investment with some appreciation. The same framework can be applied to valuing businesses. Popularly, profits are compared to the regular inflows from traditional investments. However, it should be appreciated that profits are accounting estimates rather than facts. Because accounting standards and tax authorities permit accrual accounting, there can be many valid adjustments to the figure of profit without any involvement of cashflows. Therefore profits in business and returns in the form of cashflows in financial investments are not comparable. This gave birth to the philosophy of estimating cashflows in business from the profit figures.

Business valuation professionals applied the philosophy of discounting to valuation of business entities, drawing from the postulates of time value of money and the fundamental framework, that “the intrinsic value of any asset, should be equal to the present value of future benefits that accrue from owning it”. For instance, when one holds a real asset, like land and buildings, its value should logically depend on the future rental income and resale value that could be generated from it, measured in present value terms. In case of a Bond, the intrinsic value of a bond should depend on the future coupons and the redemption value, measured in present value terms. In both the cases, the entity that estimated the intrinsic value, uses a particular discounting rate, which includes, the minimum risk free rate, the compensation for the term period of the investment, the premia for the asset specific risks, the transaction costs, and the taxes. The aggregate of all these components are referred to as required rate of return. However, in common parlance the transaction costs and taxes are taken as given, so they are ignored.

Extending the logic to business valuation or equity valuation, the investor should logically discount the future benefits accruing to the business or by being an equity investors. In case of a business that has not taken any debt in its capital structure, the entire profits belong to the owners. However when the company engages borrowed capital in the business, then the lenders also have a claim in the assets and profits of the business. If booked profits are considered to be the future benefits, then Earnings Before Interest Tax Depreciation and Amortisation (EBITDA) are the profits left for both the lenders and owners to share along with government for tax. Earnings of After Tax (EAT or PAT) are the profits left for only the owners of the business, as other stakeholders (lender, and government) have taken away their dues. As discussed earlier, the inherent weaknesses with the EBITDA and EAT figures, valuation experts preferred cashflow versions of the two accounting figures mentioned above.

FCFF represents the cashflow left for both the lenders and owners, out of which lenders can take their interest and principal repayments, and the owners can take their dividends. FCFE represents the cashflow left only for the owners of the business. Therefore depending on the purpose of valuation, i.e. to value a firm or equity, either FCFF or FCFE is used, respectively.

FCFF for a future year is calculated as = Expected EBIT (1-Tax Rate) + Expected Depreciation + Expected Non-Cash Expenses – Expected Capex by the firm –Expected Increase in Working Capital

FCFE for a future year is calculate as = [(Expected EBIT – INTEREST EXPENSE) * (1 – Tax Rate)] + Expected Depreciation + Expected Non-Cash Expenses – Expected Capex by the firm – Expected Increase in Working Capital – Expected Debt Repayments + Expected Fresh Borrowings

OR

FCFE = Expected FCFF – (Interest Expenses * (1- Tax Rate)) + (Expected Fresh Borrowings – Expected Debt Repayments)

OR

FCFE = Expected FCFF – (Interest Expenses * (1- Tax Rate)) + Expected Net Debt Issues

OR when the company has preference shares also in the capital, it is calculated as

FCFE = Expected FCFF – (Interest Expenses * (1- Tax Rate)) – Expected Preference Dividend + Expected Net Debt Issues + Expected Net Preference Share Issues

Apart from depreciation, other non-cash charges include amortization of intangible assets and loss on sale of assets, which are added back. Unrealised Gains on assets are deducted from the FCFF and FCFE calculations.

The FCFF and FCFE figures are known as “free” because all the other stakeholders, leaving the financiers of the business, are paid their dues before arriving at the figures. Further, the business is also treated as a stakeholder, and the funds required for its growth and sustenance are also provided in the form of CAPEX, and working capital. Therefore what is left is for the financiers’ to claim free of all encumbrances.

Rarely, FCFF may be negative, but there are reasonable chances that FCFE may be negative. In such cases the FCFF may be used for valuing the firm, and then the value of equity can be calculated by deducting the value of debt from it.

Valuation requires forecasting cashflows into the future. This can be done by applying historical growth rate exhibited by company or a rate estimated by the analysts based on their information and analysis. A firm may show a period of high growth in revenues, profitability, capex and other performance parameters, and then stabilize to a steady growth. It may be noted that growth rate in one parameter like sales, should not be considered as growth in assets, similarly the growth in assets cannot be considered as growth in profits or cashflows. However a good proxy that is used in the valuation industry for growth in profits is the product of retention ratio and return on equity as follows

Growth in profits in a dividend paying firm = Retention Ratio * Return on Equity OR (1 – DPR) * ROE

SInce equity is for perpetuity and it is not possible to forecast the cash flows forever, the practice is to calculate a terminal value of the firm. This terminal value is calculated as at the end of the year, till which time one could comfortably forecast the cash flows with all the available information. The terminal value may be calculated using the formula of a perpetually growing annuity. In this case cash flows are expected to grow, forever, at a steady though

modest rate. The average long term GDP growth rate or inflation rate is a good proxy for this growth rate. The terminal value is calculated by multiplying the cash flow for the last year of forecasted period, by (1+ Normal Growth rate) and dividing the resultant value by (Discounting rate- Growth rate). The terminal value is added as an additional independent component, to the stream of cash flows projected during the growth period or the projection period, and then aggregate of all these cashflows are discounted to today (the day of valuation).

Say for instance one could confidently forecast cashflows for the next 5 years. Then 5th year is the last year of the confident forecast, and from the 6th year onwards the cashflows are expected to grow constantly at a particular rate as described above. The terminal value is calculated as at the end of 5th year and finally this value is discounted to today, when the valuation exercise is undertaken.

The other method to calculate the terminal value is by applying a multiple to either a financial or non-financial metric of performance of the firm, such as the EBITDA, at the end of the confident forecasted year. Meaning in the 5th year as discussed in the previous paragraph. The multiple of a comparable firm is used for the purpose.

The discount rate used in the DCF valuation should reflect the risks involved in the cash flows and also the expectations of the investors.

In most of the valuation exercises, cost of debt is taken as the prevailing interest rates in the economy for borrowers with comparable credit quality. And, cost of equity is the rate of return on investment that is required by the company's common shareholders. Capital Asset Pricing Model - CAPM, which establishes the relationship between risk and expected return forms the basis for cost of equity.

As per Capital Asset Pricing Model (CAPM), the cost of equity is computed as follows:

$K_e = R_f + \beta * (R_m - R_f)$

Where:

R_f = Risk Free Rate, (usually the ongoing 10 years government bond yield),

$(R_m - R_f)$ = Market risk premium (MRP), and (which is a historical average value for a particular market or country)

β = Beta (it is the sensitivity of a security's return to an index's return, which is chosen as a proxy for market portfolio)

The Weighted Average Cost of Capital of the firm (WACC) is then calculated as under:

WACC = [K_e * Equity / (Equity+ Debt)] + [K_d * (1-Tax)* Debt / (Equity+ Debt)]

= [K_e * W_e] + [K_d * (1-Tx)*W_d]

Where Ke = Cost of Equity, K_d = Cost of Debt, W_d = Weight of Debt, W_e = Weight of Equity

To calculate the value of the firm, its FCFF is discounted by the weighted average cost of capital (WACC). To calculate the value of equity, its FCFE is discounted using the cost of equity.

$$Value\ of\ a\ Firm = \sum_{i=1}^{n} \frac{FCFF_i}{(1+wacc)^i} + \frac{Terminal\ Value_{n+1}}{(1+wacc)^i}$$

Where,

i = the period for which confident projects of cashflows are done, starting from 1 to n number of years in future

n = the last year for which the cashflows are projected year wise

'FCFF' and 'wacc' are as explained above

$$Terminal\ Value = \frac{FCFF_{n+1}}{wacc\ -\ g}$$

Where 'g' = is the constant growth rate of the FCFF in future.

The same equations are used to calculate the value of equity of the firm. The only changes are 'FCFF' is replaced with 'FCFE'; 'wacc' is replaced with 'ke'; 'g' is the constant growth rate of 'FCFE'

8.5.4.2. Asset Based Valuation

Asset Based valuation methodology is used in some businesses where the business is asset heavy, and the assets are usually reflected in the financial statements at fair market value, like financial institutions, firms in real estate and gold, gems and jewellery. Under this method the value of the firm is equal to the "adjusted current market values of Net Tangible, intangible, Financial, and Net Current Assets". Value of equity is "value of firm less value of all outsider liabilities". Significantly the issue with this approach is that it does not recognise the value of future profits and cashflows of the firm, and all future possible value creation the firm can do due to its research and innovation.

8.5.5. Relative Valuation

These values are then converted into standardized values which are in form of multiples, w.r.t

any chosen metric of the company's financials, such as earnings, cash flow, book values or sales. These multiples are then applied to the respective financials of the target company for valuation. Based on the value arrived and the market price of the equity shares of the company it is decided whether it is over-valued or under-valued. Relative valuation techniques implicitly contend that it is possible to determine the value of an economic entity by comparing it to similar entities on the basis of several important ratios.

8.5.5.1. P/E Ratio

The most common stock valuation measure used by analysts is the price to earnings ratio, or P/E. For computing this ratio, the stock price is divided by the EPS figure. For example, if the stock is trading at Rs. 100 and the EPS is Rs. 5, the P/E is 20 times.

Historical or trailing P/Es are computed by dividing the current market price of the equity share by the sum of the last four quarters ' EPS. Forward or leading P/Es are computed by dividing the current market price of the equity share by the sum of the expected next four quarters of EPS. Current P/E Ratio is current market price of the equity share divided by the current or the immediate recent annual EPS of a company.

For example, consider a company whose fiscal year ends in March every year. In order to compute the forward P/E for the financial year ending 2019 (technically called FY19), an investor would add together the quarterly EPS estimates for future quarters ending June 2019, September 2019, December 2019 and March 2020. Then the current market price of equity is divided by this number aggregate number to get a forward P/E Ratio.

A stock's P/E tells us how much an investor is willing to invest in an equity share, per rupee of earnings. Therefore a P/E ratio of 10 suggests that investors in the stock are willing to invest Rs. 10 for every Re. 1 of earnings that the company generates.

For judging whether the target firm is fairly valued, undervalued or overvalued, its PE ratio is compared with the market PE ratio (i.e. of Nifty 50, S&P Sensex, SX40, among others), or the average PE ratio of the industry to which it belongs, or with the PE ratios of peer group companies. For example the PE Ratio of the target company is 18, and that of the industry, market or the comparable firms is 22, then the firm is judged to be undervalued.

There are certain limitations to using the PE ratio as a valuation indicator. The projected P/E ratios are calculated based on analyst estimates of future earnings that may not be accurate. PE ratios of companies that are not profitable, and consequently have a negative EPS, are difficult to interpret. P/E ratios change constantly and the ratio needs to be recomputed every time there is a change in the price or earnings estimates.

The average P/E ratio in the market and among industries fluctuates significantly depending on economic conditions.

As a general guidance one is advised to approach relation valuation in this manner. For example, all things being equal, a Rs.10 stock is enjoying a P/E of 75, then it is should be considered "expensive" than a Rs.100 stock with a P/E of 20.

8.5.5.2. Price to Book Value Ratio

Price to Book Value (P/BV) is another relative valuation ratio used by investors. It compares a stock's price per share (market value) to its book value of equity per share. The P/BV ratio is an indication of how the market is valuing the book value of equity or how much more less are the shareholders valuing the equity to be. The market price being above or below the book value is much to do with market players and investor's expectations of the value currently not recognised in the books.

$$\text{Price/Book Value Ratio} = \frac{\text{Stock Price per Share}}{\text{Shareholders' Equity per Share}}$$

The book value per share is calculated by dividing the reported shareholders' equity by the number of equity shares outstanding. Care should be taken, to exclude any existing miscellaneous assets in the balance sheet from the reported shareholder's equity value. Because the value equity has already been eroded as per books, to the extent of value of miscellaneous assets.

If a company's stock price (market value) is lower than its book value, it can indicate one of two possibilities. The first scenario is that the stock is being incorrectly undervalued by investors due to lack of information, and hence the company's stock represents an attractive buying opportunity. On the other hand, if the company is being correctly valued in the opinion of the investors, then it is due to, the existence of some "value less" assets in the books or fictitious profits or reserves in the shareholder's equity.

The use of book value as a valuation parameter also has limitations because a company's assets are recorded at historical cost less depreciation. Depending on the age of these assets and their physical location, the difference between current market value and book value can be substantial. Also, assets like intellectual property are difficult to assess in terms of value. Hence, book value may undervalue these kinds of assets.

Though P/B ratio has its shortcomings but is still widely used as a valuation metric especially in valuing financial services and banking stocks where the assets are marked to market.

8.5.5.3. P/S Ratio

The price-to-sales ratio (Price/Sales or P/S) is calculated by taking a company's market capitalization (the number of outstanding shares multiplied by the share price) and dividing it by the company's total sales or revenue over the past 12 months. The logics applied for identifying the undervalued and overvalued shares are similar in this multiple too. Sometimes concerns are raised regarding the tendency of the firms to manipulate earnings. In such

situations, price to sales ratio can be used instead of earning based ratios as sales are less prone to manipulation. Also, in case of companies not earning profits yet, or companies in high volume low margin businesses instead of earning based ratios investors can look at the P/S ratio to determine whether the stock is undervalued or overvalued. Typically the forward Price to Sales ratio is given as below:

$$\frac{P}{S} = \frac{P_t}{S_{t+1}}$$

P_t = end of the year stock price for the firm

S_{t+1} = expected annual sales per share for the firm for the next year.

8.5.5.4. PEG Ratio

This valuation measure takes three factors into account - the price, earnings and earnings growth rates. The formula used to compute the PEG ratio is as below:

$$\text{PEG Ratio} = \frac{\text{Price/Earnings (P/E) Ratio}}{\text{Earnings Per Share (EPS) Growth}}$$

(EPS is calculated as Profit after tax (PAT)/Number of outstanding common shares of the company)

This ratio may be interpreted as the price that an investor is willing to pay for a company, ~~is~~ as justified by the growth in earnings. The assumption with high P/E stocks is that investors are willing to buy at a high price because they believe that the stock has significant growth potential. The PEG ratio is an improvisation of the PE ratio using a companion variable called growth. Using either the industry or the comparable firms' PEG ratios one can decide whether the target firm's equity is overvalued or undervalued. The PEG ratio may show that one company, compared to another, may not have the growth rate to justify its higher P/E, and its stock price may appear overvalued.

The thumb rule is that if the PEG ratio is 1, it means that the market is valuing a stock in accordance with the stock's estimated EPS growth. If the PEG ratio is less than 1, it means that the stock's price is undervalued given its growth rate. On the other hand, stocks with ~~high~~ PEG ratios greater than 1 can indicate just the opposite - that the stock is currently overvalued. This is based on an assumption that P/E ratios should approximate the long-term growth rate of a company's earnings.

The efficacy of the PEG ratio as a valuation measure will depend upon the accuracy with which the earnings growth numbers are estimated. Overestimation or underestimation of future earnings will lead to erroneous conclusions about the valuation of the share.

8.5.5.5. EVA and MVA

There are many ways analysts can estimate the value of a company. EVA and MVA are the most common metrics used to determine a company's value.

Economic value added (EVA) attempts to measure the true economic profit produced by a company. It is also referred to as "economic profit". Economic profit can be calculated by taking a company's net after-tax operating profit and subtracting from it the product of the company's invested capital multiplied by its percentage cost of capital.

EVA provides a measurement of a company's economic success over a period of time. This measure is useful for investors who wish to determine how well a company has produced value for its investors.

Market Value Added (MVA) is the difference between the current market value of a firm and the original capital contributed by investors. If the MVA is positive, the firm has added value. If it is negative, the firm has destroyed value. The amount of value added needs to be greater than the firm's investors' opportunity cost. The opportunity cost is calculated by estimating the return the investors would have got by investment in the market portfolio adjusted for the leverage of the firm.

8.5.5.6. EBIT/EV and EV/EBITDA Ratio

Enterprise Value is an important component of many ratios analysts use to compare companies, such as the EBIT/EV multiple and EV/EBITDA.

The EV of a business is: Market capitalization of equity + Market Value of Debt - Excess cash and cash equivalents

There can be two ways to understand EV. One is to understand how much capital is actually committed in the enterprise that is revenue generating. The other is when some entity is interested to acquire another firm, how much cash would be required to buy the target firm. The assumption is that no entity would be interested in paying cash to acquire cash.

EV can be related to Earnings/Cash from Operations available to the (entire fund providers i.e. equity and debt holders) The appropriate financial metric would be - Earnings before Interest and Taxes EBIT. However EBIT is again influenced by the accrual mechanics of the accounting system, and hence to adjust it to make it a cashflow based measure, analyst have coined EBITDA (Earnings Before Interest Tax Depreciation and Amortisation). The EV/EBITDA multiple is extremely useful in valuing firms which are highly capital intensive and they are not yet making book profits at PAT level or at EBIT level, however, at a gross level and in terms of cash available to the fund providers (i.e. EBITDA) it is surplus. If one goes by the P/E ratio, then unless the company is profitable, the P/E ratio would not be meaningful at all for valuation. Though the company is listed and has a good price in the market, the earnings per

share is negative, which is not intuitive to analysts and investors. Investors can still be bullish and positive about such companies, because they understand the need to wait till the company breaks-even or till the impact of capital expenditure on the revenues and profits kicks off. EV/EBITDA accommodates this thought process, it can be used to judge whether the firm it is overvalued or undervalued by comparing its EV/EBITDA value with that of the industry average, or its relevant decile or quintile.

8.5.5.7. EV/S Ratio

Enterprise value-to-sales (EV/sales) compares the enterprise value (EV) of a company to its annual sales. The EV/sales multiple enables investors to value a company based on its sales, while taking account of both the company's equity and debt. This ratio is more comprehensive than Price to Sales Ratio because it takes into consideration company's debt while P/S does not take into account the company's equity and debt when valuing the company. This ratio is more meaningful when the firm is highly capital intensive and its sales and profits cannot be ascribed only to equity investments.

8.5.5.8 Dividend yield

The dividend yield is obtained by dividing the dividend per share declared by the company by the market price of the company. Thus it will show what would be return from dividend for an investor why buys the shares of the company at the current market price. The dividend yield gives a better picture of the return from dividend for the investor as compared to just looking at the dividend per share.

Dividend yield = Dividend per share/ Market price of the share *100

For example a company which is trading at Rs 40 and declaring a dividend of Rs 2 per share will have a dividend yield of 5 per cent.

8.5.5.9 Earnings yield

The earnings yield for a company is determined by dividing the earnings per share of a company by the market price of the company. This shows the earnings that are generated by the company at the current market price. It is one of the factors that is seen to determine the undervaluation or overvaluation of a stock.

Earnings yield = Earnings per share/Market price per share * 100

For example, a company with an earnings per share of Rs 2.5 when the market price if Rs 25 gives an earnings yield of 10 per cent. This ratio is the inverse of the P/E ratio.

8.5.5.10. Industry/sector specific valuation metrices

As discussed above, there are different valuation tools. No one method is perfect for all the sectors and companies. Different sectors are valued on different metrices. Non-cyclical sectors like FMCG and Pharma which generate predictable cashflows can be valued using

discounted cashflow technique. Replacement cost method is applied for valuing businesses which are capital intensive like cement and steel. Relative valuation tools like P/E Ratio are used as add on metrics across all sectors. It is also popularly used to comment on the valuation of market, comparing it with other markets and also doing comparison over a period of time. Often newspapers and media report the P/E ratio of the market and comment that it is expensive or cheap, compare to other emerging markets. P/B ratio is very popular among banks and financial service sector. Investors/analyst should understand the characteristics and attributes of the sector before they select a particular valuation tool.

8.6 Combining Relative Valuation And Discounted Cash Flow Models

Discounted cash flow models are used to estimate the intrinsic value of the stock or entity. The relative valuation metrices are used to determine the value of an economic entity (i.e., the market, an industry, or a company) by comparing it to similar entities. Discounted cash flow models are dependent on (1) the growth rate of cash flows and (2) the estimate of the discount rate. Relative Valuation techniques compare the stock price to relevant variables that affect a stock's value, such as earnings, cash flow, book value, and sales etc.,

A deeper look into the two techniques will reveal that multiples are merely a simplified version of DCF. All of the fundamental drivers of business value are incorporated in both techniques.

Let us look at the P/E ratio to understand the connection between discounted cash flow techniques and relative valuation metrices:

P/E Ratio = Price / Expected Earnings Per Share

This ratio compares the price of the stock to the earning it generates. The rationale lies in the fundamental concept that the value of an asset is the present value of its future return.

This ratio is also influenced by the same variables that influence the value under the discounted cash flow techniques.

Intrinsic value is calculated as follow:

Price is calculated as follow:

$$P = \frac{D_1}{k - g}$$

D_1= next period dividend calculated as D_0*(1+g) where g denote expected growth in dividend, and D_0 indicates current dividend, k is the discount rate.

By dividing both the sides of the equation by (expected earnings during the next time

period) we will get-

$$P / E_1 = \frac{D_1 / E_1}{k - g}$$

Thus P/E Ratio is affected by two variables:

1. Required rate of return on its equity (k)

2. Expected growth rate of dividends (g)

Higher the expected growth rate of dividends, higher would be the P/E ratio. Higher the required rate of return on equity, lower would be the P/E ratio.

Hence, we can conclude that these two approaches to valuation are complementary in nature rather than competing with each other. It often happens that the calculated intrinsic values are substantially above or below prevailing prices. As a small change in estimation of growth rate or discount rate, can have a significant impact on the estimated value. In these models, inputs are very critical as the saying goes "GIGO: garbage in, garbage out!" In such situations, relative valuation metrics can help in understanding the gaps. Relative valuation techniques provide information about how the market is currently valuing stock.

8.7 Technical Analysis

Technical analysis is based on the assumption that all information that can affect the performance of a stock, company fundamentals, economic factors and market sentiments, is reflected already in its stock prices. Accordingly, technical analysts do not care to analyse the fundamentals of the business. Instead, the approach is to forecast the direction of prices through the study of patterns in historical market data - price and volume. Technicians (sometimes called chartists) believe that market activity will generate indicators in price trends that can be used to forecast the direction and magnitude of stock price movements in future.

There are three essential elements in understanding price behaviour:

1. The history of past prices provides indications of the underlying trend and its direction.
2. The volume of trading that accompanies price movements provides important inputs on the underlying strength of the trend.
3. The time span over which price and volume are observed factors in the impact of long term factors that influence prices over a period of time.

Technical analysis integrates these three elements into price charts, points of support and resistance in charts and price trends. By observing price and volume patterns, technical

analysts try to understand if there is adequate buying interest that may take prices up, or vice versa.

Technical Analysis is a specialized stream in itself and involves study of various trends- upwards, downwards or sideways, so that traders can benefit by trading in line with the trend. Identifying support and resistance levels, which represent points at which there is a lot of buying and selling interest respectively, and the implications on the price if a support and resistance level is broken, are important conclusions that are drawn from past price movements. For example, if a stock price is moving closer to an established resistance level, a holder of the stock can benefit by booking profits at this stage since the prices are likely to retract once it is close to the resistance level. If a support or resistance is broken, accompanied by strong volumes, it may indicate that the trend has accelerated and supply and demand situation has changed. Trading volumes are important parameters to confirm a trend. An upward or downward trend should be accompanied by strong volumes. If a trend is not supported by volumes or the volumes decrease, it may indicate a weakness in the trend.

Technical analysis converts the price and volume data into charts that represent the stock price movements over a period of time. Some of the charts used include line charts, bar charts, candlestick chart. The patterns thrown up by the charts are used to identify trends, reversal of trends and triggers for buying or selling a stock. Typically, chartists use moving average of the price of the stock to reduce the impact of day to day fluctuations in prices that may make it difficult to identify the trend.

8.7.1 Assumptions of technical analysis

From the above discussion on what technical analysts do, the following assumption are delineated:

1. The market price is determined by the interaction of supply and demand.
2. Supply and demand are governed by many rational and irrational factors.
3. Price adjustments are not instantaneous and prices move in trends
4. Trends persist for appreciable lengths of time.
5. Trends change in reaction to shifts in supply and demand relationships.
6. These shifts can be detected in the action of the market itself.

8.7.2 Technical versus Fundamental Analysis

Fundamental analysis involves determining the intrinsic worth of the stock and comparing it with the prevailing market price to make investment decisions. Fundamental analysts believe that prices will move towards their intrinsic value sooner or later. Technical analysis is not concerned whether the stock is trading at a fair price relative to its intrinsic value. It

limits itself to the future movements in prices as indicated by the historical data. It is used for short-term term trading activities and not necessarily long-term investing.

8.7.3 Advantages of technical Analysis

Technicians feel that the major advantage of their method is that it is not heavily dependent on financial accounting statements. They feel that a great deal of information is lacking in financial statements. They also contend that a lot of non-financial information and psychological factors do not appear in the financial statements.

Technicians also feel that unlike fundamental analysts, they do not need to collect information to derive the intrinsic value of the stocks. They only need to quickly recognize a movement to a new equilibrium value for whatever reason. Hence, they save time in collecting enormous information and data which is a prerequisite for fundamental analysis.

8.7.4 Technical Rules and Indicators

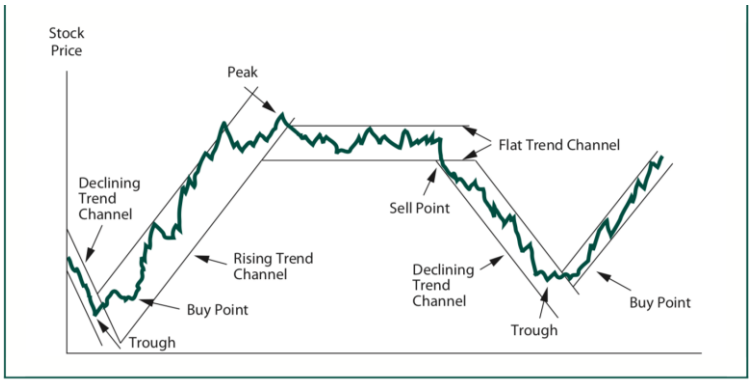
There are numerous trading rules and indicators. There are indicators of overall market momentum, used to make aggregate market decisions. There are trading rules and indicators to be applied for individual securities. Some of the popular ones are:

- Trend-line analysis
- Moving averages
- Bollinger-Band Analysis

Trend-Line Analysis

The graph shows a peak and trough, along with a rising trend channel, a flat trend channel, a declining trend channel, and indications of when a technical analyst would ideally want to trade.

Stock price trend line



Moving-Average Analysis

Moving-Average Analysis is the most popular technical indicator. The moving average of a time series of past prices can provide a nonlinear graph of price movements. Generally, a 5, 10, 30, 50, 100, and 200 days moving averages are calculated. One simple strategy for using the moving-average analysis is to buy when the price is sufficiently below the moving average and sell when the price is sufficiently above the moving average.

Bollinger-Band Analysis

Bollinger bands use normal distribution to calculate the deviation of the market price from the moving average. For example, when the price goes two standard deviations above the moving average, the stock might be regarded as overbought. If the price goes two standard deviations below the moving average, the stock might be regarded as oversold.

8.7.5 Fixed income securities and Technical analysis

Technical analysts use past prices and trading volume or both to predict future prices. A broad range of techniques and indicators based on price and volume data such as chart analysis, moving averages, filters and oscillators are used to identify predictable patterns in stock prices. The techniques depicted above can also be applied to the fixed income securities as long as price and volume data is available. The theory and rationale for technical analysis of bonds are the same as for stocks, and many of the same trading rules are in fact used by analysts in bond markets.

8.8 Qualitative evaluation of stocks

While analysing companies, the qualitative aspects of the companies are equally important if not more. Corporate governance practices are the cornerstone in evaluating a business. Corporate governance has become a well-discussed topic in the business world. Newspapers and media report detailed accounts of corporate fraud, accounting scandals, and excessive compensation etc., some leading to even bankruptcy of the companies fraught in such mis governance.

Corporate governance includes a wide array of mechanisms and expectations that are of importance to businesses, the economy, and society. World over economies are dominated by companies of different sizes. How these companies are governed affects not only the shareholders of the companies but also thousands of people who work with such companies, buy products of these companies or are affected by them implicitly.

Governance aspects are reflected in acts, rules and regulations, contracts, and in important institutions such as stock exchange listing standards and the audit process.

The components of corporate governance vary by country, over time, and by company type, size, and ownership. Analysts and investors play a very important role in driving good practices and highlighting companies with poor governance practices. There are some important aspects analysts should look for. For example, they should also pay attention to the quality of independent directors in a business. Analysts should focus on the qualifications and experiences of these independent directors, how many meetings they attend and what are their contributions to the business. It may be good practice to interact with some of them to understand them better. Good governance practices can also be used as filters for selecting the investment universe.

CHAPTER 9: INVESTING IN FIXED INCOME SECURITIES

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Debt market and its need in financing structure of Corporates and Government
- Know the Bond market ecosystem
- Various kinds of risks associated with fixed income securities
- Pricing of bond
- Traditional Yield Measures
- Concepts of Yield Curve
- Concept of Duration
- Introduction to Money Market
- Introduction to Government Debt Market
- Introduction to Corporate Debt Market
- Small-savings instruments

9.1 Debt market and its need in financing structure of Corporates and Government

The Debt market refers to the market where the borrowers issue new debt securities and investors buy those new securities or buyers buy the already issued debt securities and sellers sell the various debt instruments already issued by entities like Governments and private firms in lieu of funding availed by them. The development of a vibrant debt market is essential for a country's economic progress as the debt market helps to reallocate resources from savers to investors (high-risk takers). The banking channel is safer for savers as bank failures are not very common, but the debt market is a market for direct transfer of risk to the lenders. However, unlike the equity market, the debt market exposes an investor or lender to relatively moderate risk as the physical assets of the company are typically secured against such debt. The equity market that operates majorly through electronic trading platforms with efficient price discovery and significant involvement of intermediary brokers, the debt market is more like an opaque Over the Counter (OTC) market with institutions mostly trading directly with other institutions. Debt market is a large value market with a small number of entities but the equity market deals with a large number of investors with a smaller average stake.

In order to expand and achieve faster economic and commercial growth, it is necessary for firms to get financial resources at a reasonable cost. Business owners can utilize a variety of financing resources, generally divided into two broad categories: debt and equity. "Debt" involves borrowed money to be repaid, plus interest, while "Equity" involves raising money by selling interests in the company. Debt is a charge on income for the firm while the return on equity is an allocation / appropriation of profit made by the company. Debt investors do

not share profit while equity investors have a right over it. Similarly, governments also borrow so that they can finance higher spending for development of the society and country. Borrowing at both firm and government levels can be either to fund temporary liquidity shortfall or for funding long-term asset creation. Depending upon the duration and purpose of borrowing, a variety of debt instruments can be used for raising the funds. The debt market facilitates borrowing of funds using such instruments to investors having varied risk appetite.

In any economy, the Government generally issues the largest amount of debt to fund its expenditure. The well developed debt market helps the Government to issue papers at a reasonable cost. A liquid debt market lowers the borrowing cost for all and it provides greater pricing efficiency. Equity and debt are two useful sources of financing for the corporate sector that cater to investors having different risk appetites and requirements. Investors in debt are typically very long investors, specifically investors on long gestation infrastructure projects which require substantial debt funding, while traditionally the equity holders look for short term gains. Debt is funded either by bank loans or bond issuances. A corporate bond market dealing in issuance of pure corporate papers helps an economic entity to raise funds at cheaper cost vis-à-vis syndicated loans from banks. The debt market brings together a large number of buyers and sellers to price the debt instruments efficiently. A well-developed debt market provides a good alternative to banking–support business models as risk is well distributed among many investors while in the banking support economy, the huge risk is on the banks. Since banks raise funds through deposits which are generally short or medium term, their obligations are generally short and medium term and hence these banks may not be able to fund very long period capital expenditure of corporates through bank loans. However, banks can easily invest in debt instruments issued by corporates and a well-developed debt market helps these investors to liquidate the instruments easily. The development of a liquid and well-functioning corporate debt market helps to channelize the collective investment schemes to invest in the market and also facilitate in bringing retail investors to invest directly in quality debt. The well developed and liquid debt market also helps various long term investors like pension funds, insurance companies which have different investment objectives as they invest very long term to match and immunize their liabilities. A well-functioning and liquid debt market makes the cost of debt efficient and cheaper.

The primary debt market helps the Government and corporates to directly sell their securities to investors. Typically, Governments issue debt through “Auctions” while corporates issue debt papers through “Private Placement”. The secondary debt market provides an exit route to the investors and it also provides important information not only on price discovery but also on many other factors like credit risk appetite, spread, default probability, etc. The tradability of bonds issued by a borrower helps the market in getting required information on the firm. Traditionally, commercial banks have been providing capital to corporates and these banks play a very dominant role in developing and emerging market economies where the

debt markets are not very well developed. A liquid corporate debt market requires well defined insolvency codes / laws while availability of well-defined credit migration history / details help international investors compare the relative riskiness of the debt markets across the world. The establishment of a good Credit Default Swap (CDS) market helps investors to buy insurance against failures of companies and these investors participate in unbundling the inherent credit risk and reselling the same at the market driven rates. The failures of the companies can be well priced in the market through risk transfer.

However, in practice, issuance of debt is a multi-level process adhering to various regulations. It may involve underwriting, credit rating, listing with stock exchanges, coordinating with issue managers to distribute to the right investors, liquidity in the market, banking support. A well-functioning debt market would require a developed and sustainable legal framework with clear bankruptcy codes. The regulatory cost of the debt can be at times prohibitive for smaller borrowers. Hence, small and medium firms usually prefer bank borrowing vis-a-vis debt issuances.

Indian Debt market has typically has three distinct segments – (a) Government debt, known as "G-sec" market with Government of India issuing dated papers, Treasury Bills and State governments issuing State Development Loans of various maturities; (b) Public sector units (PSU) and Banks issuing instruments to raise resources from the market; and (c) private sector raising resources through issuance of debt papers. Government of India also issues Floating Rate Bonds, Inflation Indexed Bonds, Special Securities, and Cash management Bills while State Governments raise funds using UDAY Bonds. PSU Bonds are popular among investors because of their perceived low risk and Commercial Banks issue short term papers like Certificate of Deposits (CDs) as well as long term bonds to fund their various business needs. The private corporates issue instruments like Bonds, Debentures, Commercial Papers (CPs), Floating Rate Notes (FRNs), Zero Coupon Bonds (ZCBs), etc.

9.2 Bond market ecosystem

Since bonds create fixed financial obligations on the issuers, they are referred as fixed income securities. The issuer of a bond agrees to 1) pay a fixed amount of interest (known as coupon) periodically and 2) repay the fixed amount of principal (known as face value) at the date of maturity. The fixed obligations of the security are the most defining characteristic of bonds. Most bonds make semi-annual interest payments, though some may make annual, quarterly or monthly interest payments (except zero coupon bonds which make no interest payment). Typically, par value of the bond is paid on the maturity date. Bonds have fixed maturity dates beyond which they cease to exist as a legal financial instrument. (except perpetual bonds, which have no maturity date). On the basis of term to maturity, bonds with a year or less than a year maturity are terms as money market securities. Long-term obligations with maturities in excess of 1 year, are referred to as capital market securities. Thus, long term bonds as they move towards maturity become money market securities.

The coupon, maturity period and principal value are important intrinsic features of a bond. The coupon of a bond indicates the interest income/coupon income that the bond holder will receive over the life (or holding period) of the bond.

The term to maturity is the time period before a bond matures (or expires). All G-Secs are normally coupon (interest rate) bearing and have semi-annual coupon or interest payments with a tenor of between 5 to 30 years. Maturity period is also known as tenor or tenure.

The principal or par value of the bond is the original value of the obligation. Principal value of the bond is different from the bond's market price, except when the coupon rate of the bond and the prevailing market rate of interest is exactly the same. When coupons and the prevailing market rate of interest are not the same, market price of the bond can be lower or higher than principal value. If the market interest rate is above the coupon rate, the bond will sell at a discount to the par value. If the market rate is below the bond's coupon, the bond will sell at a premium to the par value. The interest rate here is assumed to be for the remaining maturity of the bond.

Another interesting thing about bonds is that unlike equity, companies can issue many different bond issues outstanding at the same time. These bonds can have different maturity periods and coupon rates. These features of the bonds will be part of the indenture.[7]

Bonds with options

Bonds can also be issued with embedded options. Some common types of bonds with embedded options are: bonds with call option, bonds with put option and convertible bonds.

A callable bond gives the issuer the right to redeem all or part of the outstanding bonds before the specified maturity date. Callable bonds are advantageous to the issuer of the securitybut they present investors with a higher level of reinvestment risk than non-callable bonds. The issuer will call the bond before its maturity only when the interest rates for similar bonds fall in market. The investor will receive the face value of the bond before its maturity, and will be forced to reinvest that money for the remaining period lower interest rates. This is called reinvestment risk.

A put provision gives the bondholders the right to sell the bond back to the issuer at a pre-determined price on specified dates. Puttable bonds are beneficial to the bondholder by guaranteeing a pre-specified selling price at the redemption dates.

[7] Indenture is the legal agreement between two parties, in case of bond indenture the two parties are the bond issuer (borrower) and the investors (lender).

A convertible bond is a combination of a plain vanilla bond plus an embedded equity call option. It gives the bondholder the right to exchange the bond for a specified number of common shares of the issuing company.

9.3 Risks associated with fixed income securities

Investors need to understand the risks involved in a fixed income asset before investing in it. Government bonds are considered as risk free and hence provide low return on investment while corporate bonds in general being riskier provide higher returns to the investor (assuming both were held from issue date till the maturity date). Entities like public sector undertakings or banks are relatively less risky vis-à-vis the pure corporate firms and thus provide returns higher than the government bonds but lower than the corporate papers. Understanding the relative risk involved in fixed income assets helps investors to decide the type of risk they are willing to take while investing. Major risk comes from changes in interest rate levels in the economy and change in the creditworthiness of the borrower. The first group of risk is known as Market Risk while the second group of risk is known as Credit Risk or Default Risk. However, investors can hedge various risks in the fixed income assets by entering into various derivative contracts.

9.3.1 Interest Rate Risk

The bonds are subject to risk emanating from interest rate movements. The price of the bond is inversely related to the interest rate movement. If the interest rate rises, the price of the bond will fall.

Any investment in bonds has two risks – market risk and credit risk. Market risk can be explained by the change in the price of the bond resulting from change in market interest rates. Further, the coupons that would be received at different points in time in future need to be re-invested at the rate prevailing at the time of receipt of such coupons. An investors holding bonds would face an erosion in value if the interest rates rise and this can lead to a capital loss if the bonds are sold below their purchase price. On the other hand, a fall in interest rates would push up the bond prices and this can raise the overall returns for the investor.

9.3.2. Call risk

The Call risk is the risk of a bond being prematurely called or repaid by the issuer exercising the right provided in the indenture of the issuance. The Call risk gives the right to the issuer to call back the bond and repay all the required amount under the indenture specifications. This typically happens when a company decides either to go as a zero debt company or wants to refinance its liabilities with low cost of borrowing. This low cost of borrowing may be possible if the company's credit rating has improved or if the market condition has changed in a manner that would help the company to source funds at a low interest rate. The call risk makes the bond unattractive to the investor vis-à-vis a non-embedded option bond. The call

risk increases uncertainties for the investor. The issuer has to pay a risk premia for the comfort or right it enjoys for repaying the debt when the market replacement cost falls. In order to compensate for the call risk, the investor would receive a higher return on the callable bond vis-à-vis a non-callable one.

Callable Bonds carry “Call Premia” as it is in favour of the issuer and if the interest rate falls, the issuer can refinance the loan with lower interest rate from the market. The same will happen when the interest rate falls and the price of the bond appreciates in value. Investor loses the chance of making money out of the bond as it is called back by the issuer.

9.3.3. Reinvestment Risk

Reinvestment risk arises when the periodic income received from bonds or other fixed income securities are reinvested after their receipt at the rate prevailing in the market at the time of such receipts. If the interest rate is higher at the time of receipt of periodic coupon, the reinvestment would happen at a higher rate that would be beneficial to the investor but if the market interest rate is low at the time of receipt of the coupons, the investor would be reinvesting the coupons at a lower rate. However, it may be remembered that higher interest rate vis-à-vis the coupon would mean capital loss in the market value of the bond if the investor wants to sell in the market. Therefore, reinvestment risk is the risk that interest rates may decrease during the life of the bond. If an investor wants to hold the security till maturity, then reinvestment risk is very high. Reinvestment risk is an important part of bond investment.

9.3.4. Credit Risk

Bonds are essentially certificates of debt or in other words loans from the investors to the issuers who promise to repay the principal amount with periodic interest/coupon payments. Particularly for bonds issued by non-government corporates, the repayment of the principal back to the investor relies heavily on the issuer’s ability to repay that debt. The price of these bonds depend on the credibility of the company issuing it and often offer a yield higher than the risk-free government bonds as the investors are at a risk of losing their capital if the financials of the issuer deteriorate. For example, in India, Corporate Deposits and NCDs offer higher rates on investment.

Types of credit risk include: Downgrade Risk, Spread Risk and Default Risk

9.3.4.1. Downgrade Risk

A company's ability to operate and repay its debt (and individual debt) issues is frequently evaluated by major ratings agencies. Downgrade risk arises for investors when the rating of an issuer is lowered after they have purchased its bonds. If a company's credit rating is

downgraded by the rating agency on account of deterioration in its financials, the issuing company faces higher cost for raising new resources. The existing bond holders would be facing this drop in price of their bonds issued by this company as the cost of funds for the company increases in the market. An example of this is the cascading effect of the rating downgrades in the IL&FS case in July-August 2018.

9.3.4.2. Spread Risk

Corporate bonds or non-Government bonds pay a spread (depending on its Credit rating) over comparable Government securities as the risk increases. The spread keeps on changing dynamically as the situation changes in the market. In good times when the business is doing very well and there is no shortage of liquidity in the system, the risk of corporate failures due to market conditions is very rare. A corporate can fail to perform the debt service or equity service to investors only when the performance of the company drops significantly due to bad management or bad market conditions or both. In such situations, the riskiness of the company's instruments in the market increases. Bad performance means the company would face cash flow problems and may not be able to meet its obligations of interest payment and redemption payments. This would make the company's debt very costly. The spread over comparable Government securities would change keeping in mind the possible default of the company. The spread charged for higher rated papers would be far lower compared to the lower rated papers in the market. In tight liquidity situations or when the general market condition is bad, the risk appetite drops in the market and the spread increases.

9.3.4.3. Default Risk

Default risk is the possibility of non-payment of coupon or principal when due. Default arises when the company fails to meet its financial obligations towards interest and principal repayments. While credit ratings help to measure an issuer's risk of default, there is still always a risk that some unforeseen event can force the issuer to default. The spread measures the default risk of a bond. If the market considers the possibility of default for a bond, the interest rate for the bond would increase in the market. Junk bonds with very high credit risk or default risk pay very high interest rates to investors.

9.3.5. Liquidity Risk

Liquidity risk is the risk involved with an instrument that the investor would not be able to sell the investment at the time of need. Every investment is an action to defer the present consumption by an investor for a future date. Hence, when the consumption time arises, the investor must be able to monetize the investment and convert the same to cash without loss of much of its intrinsic value. If the market is liquid to absorb the selling, then the investor would not lose substantially as there would be other investors willing to take the risk on the

asset by buying the same from one investor selling the asset. When liquidity is tight in the market, investors find it difficult to sell the asset and at times, the investors have to fire sell the asset at a much lower price. Hence, liquidity risk is very common on long-term bonds. Short-term instruments are more liquid as they are like cash instruments whose cash flows would come to the investors shortly but long-term investments pose risk of selling.

9.3.6. Exchange Rate Risk

Bonds issued in foreign currency are exposed to currency risk or exchange rate risk. When the issuer of a foreign currency bond has to pay back the bond principal or pay a promised periodic coupon, the company has to acquire foreign currency from the market to fulfil its obligations. The cost of acquiring such foreign exchange may increase if the domestic currency has depreciated against the currency in which bonds have been issued. Currency risk is an inherent risk for bonds issued in non-domestic currency by domestic borrowers in the international market. Masala Bonds issued by Indian entities expose the investors to the Exchange rate risk as the Rupee amount if fixed and the investors who are foreign entities would receive Indian Rupee and have to buy the foreign currency for repatriation. Exchange rate risk is very important for foreign currency denominated bonds.

9.3.7. Inflation Risk

Inflation risk is the risk faced by an investor of inadequacy of funds received from the bond investment to fulfil the deferred needs. While investing in the bond, the investor expected a return level keeping in mind the stable interest rate as the assumption of stable inflation would have helped him in such assumptions. However, if suddenly the inflation rate increases, the cost of goods would increase and the real return comes down. The nominal return may remain the same but the real income after adjustment of inflation would be far lower. A fixed rate bond does not take into account changing future scenarios while a floating rate bond can take care of such changes as the new interest rate would be keeping in sync with the market rate. When expected inflation levels are higher, investors prefer floating rate bonds or inflation-indexed bonds to save themselves from the risk of higher inflation.

9.3.8. Volatility Risk

Volatility risk affects the bonds with embedded options. The pricing of an embedded option bond takes into account the volatility level to price the same. However, a normal plain vanilla bond is not exposed to interest rate volatility. However, if an investor wants to buy a credit default swap against the investment, the price can be substantially high if the volatility is high. If volatility is low, the credit default swap would be cheaper.

9.3.9. Political or Legal Risk

The bonds with tax benefits would be exposed to such risks. Tax free bonds become taxable because, changes in Government rules would impact the price of such tax free bonds. Further, if a Government decided not to pay a coupon due to its tight cash position or plan to roll over its debt or pay a coupon in the form of new bonds, this can lead to substantial value change for the bonds as investors face higher risk of non-receipt of required cash on planned dates. Government changing repatriation rules may affect the foreign bond investors in a domestic economy.

9.3.10. Event Risk

An event risk refers to an unexpected or unplanned event that forces the value of an investment to drop substantially. Certain events may force companies to seek moratorium on repayment as their business gets affected by such unplanned events. For example, during the recent Covid-19 pandemic, the travel industry was severely impacted and many companies could not service their debt. This type of risk is different for each sector and the amount of exposure depends on the sector.

9.4 Pricing of Bond

The value of bonds can be determined in terms of rupee values or the rates of return they promise under some set of assumptions. Since bonds are fixed income securities, generating a series of pre-specified cashflows, we determine the value of the bond using the present value model. The present value model computes the value for the bond using a single discount rate. Alternatively, the yield model can be applied, which computes the promised rate of return based on the bond's current price and a set of assumptions.

9.4.1 Par Value

"Par" is the Face value of a debt instrument which is promised to be paid as Principal at the maturity of the debt instrument. Typically, it is ₹100 for a Government bond but ₹10000 for a corporate bond. This is the amount that an issuer is bound to pay back to the bond investor as per the indenture of the debt issuance. The periodic interest/coupon paid on a debt instrument is on the basis of the Face value. The Face Value is also known as the redemption value for a plain vanilla bond.

The market trades bonds as a percentage of price. If a trader quotes a Bid price of 106.35, the trader is willing to buy the security at 106.35% of the Face Value of the security. Bonds are considered as premium ones when they trade above their Face value or Par value and are known as discount bonds when they trade below the Face Value. During the life of the bond (from the date of issuance to date of maturity), the bond price may move from Par value to Premium or Discount but at the end, the bond will be pulled to the Par value of 100.

Many debt instruments are issued at a discount to the Par value – Treasury Bills, Commercial papers, etc. are always issued at a discount to the Par value and the investor pays less than Par value at the time of buying the instrument but at the maturity receives Par value. The difference between the Par Value and the purchase price is the return that the investor gets for the investment.

9.4.2 Determining Cash Flow, Yield and Price of bonds

A bond is valued using future known cash flows. The future cash flows are calculated using the promised coupon on the Principal. We will use the below equation to price a bond. Let us assume an Annual coupon paying Bond with a 10% promised rate at the time of issuance and the residual maturity is 5 years from today. Currently, the similar type of securities are available in the market at the yield or interest rate of 8% in the market. Now we have to find the cash flows, discount factors and ultimately the price of the bond assuming a Face Value or Par Value of 100.

The cash flows are: Yearly 10 and in the last year at the time of maturity, we get back 100 along with the last coupon. Now the Year 1 Discount Factor would be

This means 1 Rupee to be received after 1 year from now would be valued at 0.9259 today with 8% current interest rate. The same way we compute Discount Factors as follows:

Year	Discount factors using 8% Yield
1	0.9259
2	0.8573
3	0.7938
4	0.7350
5	0.6806

The Cash flows to be received in future years would be as follows along with their respective Present value using the present yield of 8% for such investment:

Year	Discount factors using 8% Yield (DF)	Cash flows	Value=DF*Cash flow
1	0.9259	10	9.2593
2	0.8573	10	8.5734
3	0.7938	10	7.9383
4	0.7350	10	7.3503
5	0.6806	110	74.8642

Now the value of the bond in our example would be sum of all discounted value of future cash flows as given in the above table. The same would work out as follows:

Year	Discount factors using 8% Yield (DF)	Cash flows	Value=DF*Cash flow
1	0.9259	10	9.2593
2	0.8573	10	8.5734
3	0.7938	10	7.9383
4	0.7350	10	7.3503
5	0.6806	110	74.8642
	3.9927		107.9854

The sum of all Discount Factors (3.9927) in this case would be known as PVIF or Present value interest factor. This 3.9927 is arrived at using (8% , 5) with annual cash flows. We can use the above PFIV to calculate the bond as follows:

Value = Annual Coupon cash flow * PVIF + Par Value or Face value or Redemption Value * PV of last maturity

Or

Value of the Bond with 10% Coupon with 5 years maturity and present yield of 8% = 10*3.9927 + 100*0.6806 = 39.9271 +68.0583 = 107.9854.

Bond Pricing

The price of a bond is sum of the present value of all future cash flows of the bond. The interest rate used for discounting the cash flows is the Yield to Maturity (YTM) of the bond.

$$P_m = \sum_{t=1}^{2n} \frac{C_i/2}{(1+i/2)^t} + \frac{P_p}{(1+i/2)^{2n}}$$

P_m= Market Price of the of bond

C_i = annual interest payable on the bond

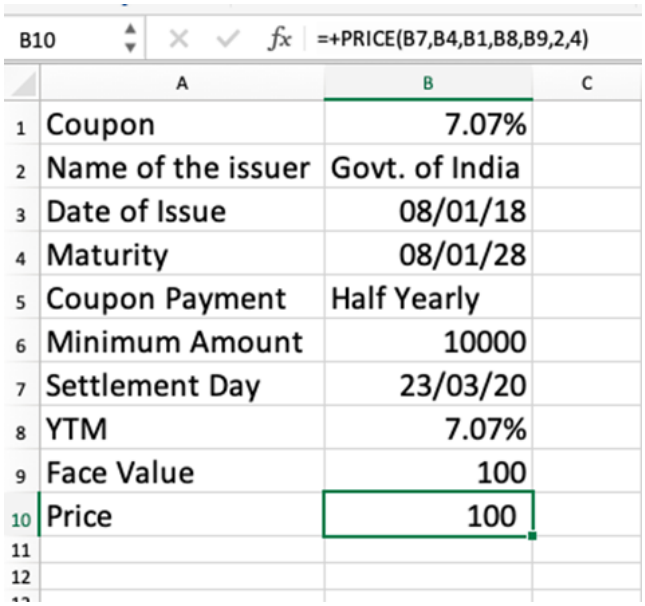
P_p= Par value of the bond

i = discount factor (The prevailing yield to maturity)

n= maturity of the bond in years

Price of a bond can be also calculated using the excel function ‘price’ (Illustration 9.1).

Illustration 9.1: Calculating Price of a Bond in excel



	A	B	C
1	Coupon	7.07%	
2	Name of the issuer	Govt. of India	
3	Date of Issue	08/01/18	
4	Maturity	08/01/28	
5	Coupon Payment	Half Yearly	
6	Minimum Amount	10000	
7	Settlement Day	23/03/20	
8	YTM	7.07%	
9	Face Value	100	
10	Price	100	
11			
12			

Bond Yield Measures

Bond holders receive return from one or more of the following sources, when they buy bonds:

1. The coupon interest payments made by the issuer;
2. Any capital gain (or capital loss) when the bond is sold/matured; and
3. Income from reinvestment of the interest payments that is interest-on-interest.

There are yield measures commonly used to measure the potential return from investing in a bond are briefly described below:

Coupon Yield

The coupon yield is the coupon payment as a percentage of the face value. It is the nominal interest payable on a fixed income security like G-Sec.

Coupon yield = Coupon Payment / Face Value

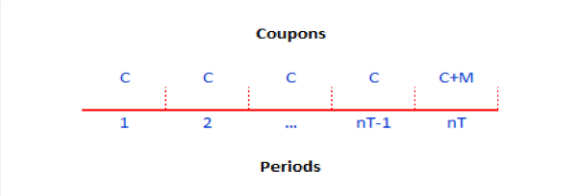
Illustration:

Coupon: Rs. 8.24
Face Value: Rs. 100

Market Value: Rs. 103.00
Coupon yield = 8.24/100 *100= 8.24%

9.4.3 Valuation and pricing of bonds

Consider a bond paying coupons with frequency n maturing in year T. The cash flows associated with the bond are: coupon C paid with frequency n up to year T, plus the principal M, paid at T.



We can use the same bond price equation to describe the value of a Semi-annual coupon paying Bond. If the bond is paying a coupon twice in a year, then the investor will receive only 5 (half of 10) every 6 months and the same can be reinvested at the current market interest rate of 8%.

Valuation of bonds with semi-annual compounding is given in the table below:

Year	Discount Factors using 8% Yield (DF)	Cash flows (₹)	Value = Cash Flow * DF (₹)
0.5	0.961538462	5	4.8077
1	0.924556213	5	4.6228
1.5	0.888996359	5	4.445
2	0.854804191	5	4.274
2.5	0.821927107	5	4.1096
3	0.790314526	5	3.9516
3.5	0.759917813	5	3.7996
4	0.730690205	5	3.6535
4.5	0.702586736	5	3.5129
5	0.675564169	105	70.9342
SUM of DF	8.110895779	Total Value	108.1109

The Discount Factor for the first period is calculated as = 0.9615

The bond can be valued as 5 * PVIF + face value * DF for the maturity year.

The same would be = 5*8.1109 + 100*0.675564 = 40.5545 + 67.5564 = ₹108.1109. The semi-annual coupon paying bond is valued more at 108.1109 than the annual coupon paying bond at 107.9854 with similar maturity, yield and coupon rate due to the greater frequency of compounding.

The valuation rule for valuing semiannual bonds can be extended to valuing bonds paying interest more frequently – like once in a quarter. Hence, if "n" is the frequency of payments per year, "t" the maturity in years, and, as before, R the present interest quoted on an annual basis, then the formula for valuing the bond would be:

When n becomes very large, this approaches continuous compounding.

Valuation of zero coupon bonds

A zero-coupon bond has a single cash flow resulting from an investment. The zero-coupon pricing formula can be modified to calculate YTM.

$$P = \frac{100}{\left(1 + r * \frac{\text{Days to Maturity}}{365}\right)}$$

$$YTM = \frac{100 - P}{P} * \frac{365}{\text{Days to maturity}} * 100$$

The coupon rate (CR), current yield (CY) and yield-to-maturity (YTM) are related such that:

Bond Selling at	Relationship				
Par	CR	=	CY	=	YTM
Discount	CR	<	CY	<	YTM
Premium	CR	>	CY	>	YTM

Valuing Bonds at Non Coupon Dates

Bonds are generally valued in between coupon dates when they are traded. Hence the concept of Clean price and Dirty price has to be established. The Dirty price is the sum of clean price and accrued interest. In this formula, the accrued interest is not discounted to arrive at the Clean Price as there is no intervening cash flow in the first coupon to be received after an investor buys the bond. The market convention is the amount the buyer would pay to the seller the clean price plus the accrual interest. This amount is often called the full-price or invoice price. The price of a bond excluding accrued interest would be the clean price. The

market typically trades a bond on the basis of clean price. All yield, and price formulas are on the basis of clean price.

In order to price a bond in between coupon days, the following principles are followed. Firstly, take the settlement date (buying date) to the previous coupon date and value the bond using the coupon, yield and the residual maturity from the last coupon date. Secondly, bring the said price or value to the future date (settlement date or buying date) with a Future Value Factor. Thirdly, deduct the accrued interest from the total value to arrive at the clean price or trade price or invoice price.

We will use the following example. Trade value (Settlement) date: 12-Aug-2020, Maturity date: 11-May-2030, Coupon: 5.79%, present yield: 5.90%. The bond pays semi-annual coupon. The market convention for day count is 30/360 European (i.e., every month is 30 days and year is 360 days).

Last coupon Date = 11-May-2020

Time from 11-May-2020 to 11-May-2030 = 10 years

Time between Last coupon date (11-May-2020) and Settlement date (12-Aug-2020) = 91 days = 0.252778 years using 30/360E day count rule.

Price of the bond on the last coupon date (11-May-2020) with 5.90% yield would be Rs. 99.1779. The same is arrived at by using the PVIF of 14.94648 for half of the coupon (2.895*14.94648 = 43.27007) and face value Rs. 100 multiplied by the PV factor or Discount Factor of last maturity (100*0.5590787 = 55.90787). The total of Rs. 43.27007 and Rs. 55.90787 works out to be Rs. 99.1779 for our bond.

Present interest rate being higher than the coupon makes this bond a discount bond at the moment.

Now we will use the Future value factor to determine the value of this Bond at the settlement date taking the value of 11-May-2020 to 12-Aug-2020 using the yield of the Bond at 5.90% for 91 days. This would giving us the Dirty Price of the bond at the settlement date

= Rs. 100.64644.

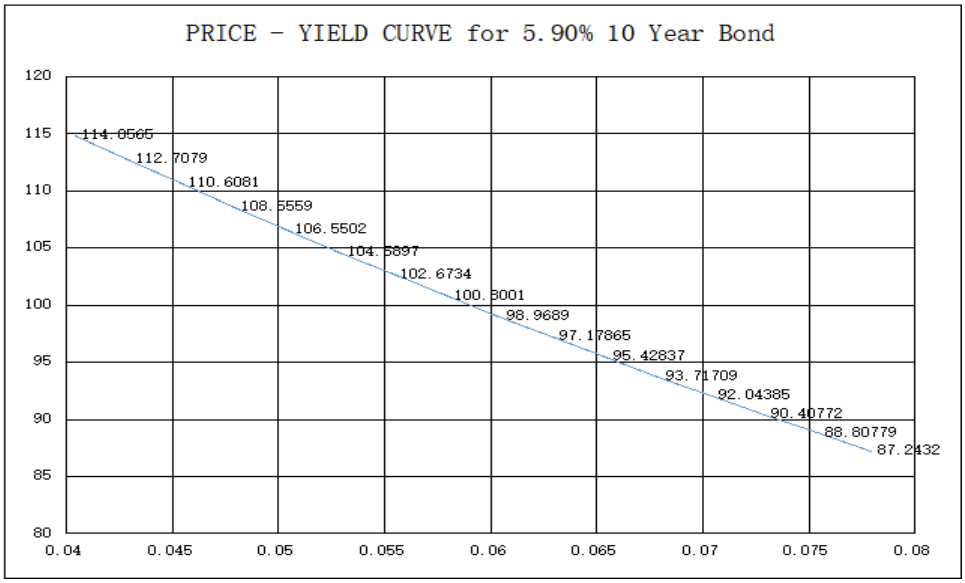
Now for 91 days, the accrued interest will be

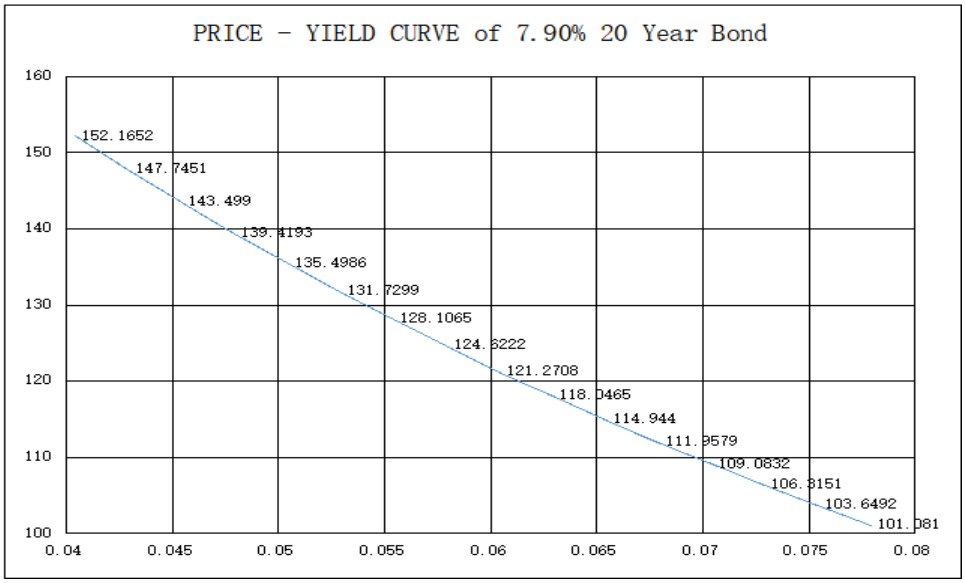
Deducting accrued interest from the dirty price will provide the clean price of the bond.

Clean price would be Rs. 100.64644 – Rs. 1.46358= Rs. 99.18286.

9.4.4 Price-Yield relationship and the Pricing Matrix

The price yield relationship is inverse. When we calculate the relationship, we use the Clean price only and all price and yield formulas use only Clean price. If we want to plot the price – yield relationship of two bonds, we can compare their relative effective riskiness.





The price-yield relationship can be summarized as follows:

- The inverse relation between a bond's price and rate of return is given by the negative slope of the price-yield curve. The movement across the curve is non-linear.

- The bond having larger maturity time would have higher sensitivity to interest rate changes.

- The lower a bond's coupon rate, the greater is its price sensitivity.

Relation between Coupon Rate, Required Rate, Value, and Par Value

Bonds can trade at Par when the coupon and yield are same. But, if the Coupon is lower than the current market yield, then the bond would be trading at Discount. If the coupon is higher than the current market yield, it would be trading at premium.

Bond-Price Relation 1:	if CR = R V_o^b = F: Bond valued at par. if CR < R V_o^b < F: Bond valued at discount. if CR > R V_o^b > F: Bond valued at premium.

9.4.5 Perpetual bonds and pricing of perpetual bonds

A perpetual bond is an instrument that continuously pays the agreed coupons but it never pays the Face value and has no maturity date affixed to the bond. For a simple perpetuity paying regular coupons, the payment is the same as the interest payment of the one-year bond. Hence, a perpetual bond is an instrument issued without any finite maturity date. Perpetual bonds promise to pay a coupon indefinitely as the issuer is not bound to pay back the principal. This Value of a perpetuity would be calculated as:

$$\mathrm{PV} = \frac{\mathrm{Coupon}}{\mathrm{Yield}}$$

If Coupon of a Perpetuity is 8% on a face Value of 100 and if the investor would like to have an annual yield of 6%, then the perpetuity would be valued as (100*8%)/6% = 133.33.

9.5 Traditional Yield Measures

9.5.1 Current Yield

The current yield is the coupon payment as a percentage of the bond's current market price.

Current yield = (Annual coupon rate / current market price of the bond) *100%

Illustration:

The current yield for a 10 year 8.24% coupon bond selling for Rs. 103.00 per Rs. 100 par value is calculated below:

Annual coupon interest = 8.24% x Rs. 100 = ₹8.24

Current yield = (8.24/100) X 100 = 8.24%

9.5.2 Yield to Maturity

Yield to Maturity (YTM) is the discount rate which equates the present value of the future cash flows from a bond to its current market price. It is the expected rate of return on a bond if it is held until its maturity. The price of a bond is simply the sum of the present values of all its remaining cash flows. Present value is calculated by discounting each cash flow at a rate; this rate is the YTM. It is also known as the internal rate of return of the bond.

$$P_m = \sum_{t=1}^{2n} \frac{C_i/2}{(1+i/2)^t} + \frac{P_p}{(1+i/2)^{2n}}$$

P_m= Market Price of the of bond

C_i = annual interest payable on the bond

P_p= Par value of the bond

i = yield to maturity

n= maturity of the bond in years

The calculation of YTM involves a trial-and-error procedure. A calculator or software can be used to obtain a bond's YTM easily.

Illustration

Take a two year bond bearing a coupon of 8% and a market price of Rs. 102 per face value of Rs. 100; the YTM could be calculated by solving for 'r' below. Typically, it involves trial and error by taking a value for 'r' and solving the equation and if the right hand side is more than 102, take a higher value of 'r' and solve again. Linear interpolation technique may also be used to find out exact 'r' once we have two 'r' values so that the price value is more than 102 for one and less than 102 for the other value. Since the coupon is paid semi-annually, there will be 4 payments of half of yearly coupon amount.

Market Price = $C/(1+r/2)^1 + C/(1+r/2)^2 + C/(1+r/2)^3 + (C+FV)/(1+r/2)^4$

In the MS Excel programme, the following function could be used for calculating the yield of periodically coupon paying securities, given the price.

YIELD (settlement, maturity, rate, price, redemption, frequency, basis)

Wherein;

Settlement is the security's settlement date. The security settlement date is the date on which the security and funds are exchanged. Maturity is the security's maturity date. The maturity date is the date when the security expires.

Rate is the security's annual coupon rate.

Price is the security's price per Rs. 100 face value.

Redemption is the security's redemption value per Rs. 100 face value.

Frequency is the number of coupon payments per year. (2 for Government bonds in India)

Basis is the type of day count basis to use. (4 for Government bonds in India which uses 30/360 basis)

[The day count convention is explained in Box 9.1)

Box 9.1: Day Count convention

Day count convention refers to the method used for arriving at the holding period (number of days) of a bond to calculate the accrued interest. As the use of different day count conventions can result in different accrued interest amounts, it is appropriate that all the participants in the market follow a uniform day count convention.

For example, the conventions followed in Indian market for bonds is 30/360, which means that irrespective of the actual number of days in a month, the number of days in a month is taken as 30 and the number of days in a year is taken as 360.

Whereas in the money market the day count convention followed is actual/365, which means that the actual number of days in a month is taken for number of days (numerator) whereas the number of days in a year is taken as 365 days. Hence, in the case of T-Bills, which are essentially money market instruments, money market convention is followed.

In some countries, participants use actual/actual, some countries use actual/360 while some use 30/actual. Hence the convention changes in different countries and in different markets within the same country (e.g. Money market convention is different than the bond market convention in India).

9.5.3 Effective Yield

Deposit taking institutions often quote two quantities when they advertise interest rates on various products they are selling. The first would be the actual annualized interest rate which is nothing but the nominal rate or the stated rate. The second rate would be an equivalent rate that would produce the same final amount at the end of 1 year if simple interest is applied. This is called the "effective yield". A bond paying 4.20% annual coupon would be worth 4.28% if the is coupon is paid every month.

One must bear in mind that multiplying semi-annual yield by 2 will give an underestimate of the effective annual yield. The proper way to annualize the semi-annual yield is by applying the following formula:

$$Effective\ Annual\ Yield = (1 + periodic\ interest\ rate)^n - 1$$

For a semiannual- pay bond, the formula can be modified as follows:

$$EffectiveAnnualYield = (1 + semi\ annual\ interest\ rate)^2 - 1$$

Similarly, semiannual yield is:

$$SemiannualYield = ((1 + Annual\ interest\ rate)^{\frac{1}{2}} - 1) * 2$$

9.5.4 Yield to call

A bond with an embedded call option increases the risk for the investors. Yield to call measures the estimated rate of return for bonds held to the first call date. It is calculated as below:

$$P_m = \sum_{t=1}^{2nc} \frac{C_i/2}{(1+i/2)^t} + \frac{P_c}{(1+i/2)^{2nc}}$$

where:

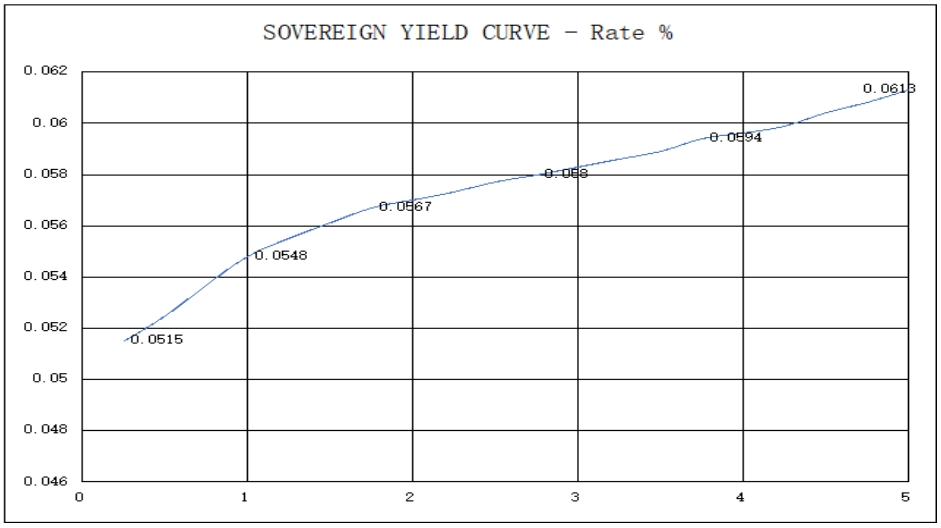
P_m = the current market price of the bond
C_i = the annual coupon payment for Bond i
nc = the number of years to first call date
P_c = the call price of the bond

9.5.5 Yield to Put

Yield to Put is the exact opposite of Yield to call but the principle is the same. It gives the investor the right to redeem the bond if the after a certain date and such papers trade in the market by adjusting their maturity till the first Put option date.

9.6 Concept of Yield Curve

Yield curve is typically an upward sloping curve in a two dimensional surface plotting the relationship between time and interest rate. The slope of the curve gives us the relative risk premia for additional time we are out of money. In the yield curve presented below, taking a higher risk of investing for 2 years as against 1 year results in a risk premia of 22bps. But, if we invest for 3 years as against 2 year, we get a risk premia of only 13bps and the same risk premia is maintained for our investment for 4 years as against 3 years. The risk premia depicts the perception of risk of investment that is depicted in the slope of the yield curve. Typically, in sovereign bond market, we see the yield curve flattens after 5-7 years as the risk of default is zero and investor only want a small premia to cover the liquidity risk of the investment. However, for corporate bonds, the risk premia significantly increases as the time to maturity increases. The slope instead of flattening shows a good upward movement.



The yield curves are never smooth and people have different expectations about the future and may demand different rates for the same maturity investment even if the rating remains the same. If investors are expecting higher inflation in future, they would require higher nominal yield to compensate them for the expected higher expenditure as they are pushing their present consumption to a future date through investing. A positively sloped yield curve is the most preferred yield curve for the economy as the shorter term would demand a lower interest rate while long term would demand a higher interest rate.

Typically, the yield curves take 4 shapes:

1. Normal Yield curve: This is an upward sloping yield curve indicating higher interest rate for higher maturity. Long term rates are higher compared to short term yields as the risk premia is higher for higher maturities.
2. Inverted Yield curve: In this kind of curve, we find the short term rates are higher than the long term rates. At times, the policy rates are kept high to bring down

excess demand and reduce bubbles. At times, severe Asset Liability mismatch may also produce an inverted yield curve.

3. Flat Yield Curve: When the yield remains constant irrespective of time to maturity, such a curve would be flat. There is no difference between short term yield and long term yield.
4. Humped yield curve: At times, yield curves can be humped and the short term and long term yields would be lower than medium term yield.

9.7 Concept of Duration

Bond prices are sensitive to changes in interest rates. As market rates of interest increase (decrease) the market values of the bond portfolios decrease (increase).

Duration (also known as Macaulay Duration) of a bond is a measure of the time taken to recover the initial investment in present value terms. In simplest form, duration refers to the payback period of a bond to break even, i.e., the time taken for a bond to repay its own purchase price. Duration is expressed in number of years.

The price sensitivity of a bond to changes in interest rates is approximated by the bond's duration. The significance of the duration is that greater the duration, more volatile is the portfolio's return in respect to changes in the level of interest rates.

A step by step approach for working out duration is given below.

1. Calculate the present value of each of the future cash flow.
2. The present values of future cash flows are to be multiplied with their respective time periods in years (these are the weights).
3. Add the weighted Present Values of all cash flows and divide it by the current price of the bond.

The resultant value is bond duration in no. of years.

Duration does not increase exponentially with increase in maturity of a bond and stagnates after a maturity level is reached.

Duration is the weighted average term (time from now to payment) of a bond's cash flows or of any series of linked cash flows. It is always less than or equal to the overall life (to maturity) of the bond in years. Only a zero coupon bond (a bond with no coupons) will have duration equal to its remaining maturity. Modified duration shows the change in the value of a security in response to a change in interest rates. It is thus measured in percentage change in price. Modified duration can be calculated by dividing the Macaulay duration of the bond by 1 plus the periodic interest rate, which means a bond's Modified duration is generally lower than its

Macaulay duration. Convexity measures the degree of the curve in the relationship between bond prices and bond yields.

9.8 Introduction to Money Market

The money market provides an avenue for ultra-short term to short-term lending and borrowing of funds with maturity ranging from overnight to one year. Participation in the money market can be broadly divided into two parts: fund raising and asset acquisition. The first refers to short term fund borrowings either by posting collateral or unsecured borrowing using one's credit standing in the market. The second part addresses the market for short maturity assets.

Money market transactions are generally used for including the government securities market and for meeting short term liquidity mismatches. Funding purchase transactions in other markets to tide over these mismatches is the most common reasons for participating in the money market. Being a primary source of funding, a liquid money market is critical to financial stability. In fact, a trigger for the Global Financial Crisis of 2008 was the seizing up of the lending in the international overnight money markets. The money market is integral to a country's financial infrastructure and is the primary transmission channel of the central banks' monetary policy.

9.8.1 Key players in the money market

Participants in the Indian money market include: Public Sector Banks, Private Sector Banks, Foreign Banks, Co-operative Banks, Financial Institutions, Insurance Companies, Mutual Funds, Primary Dealers, Bank cum Primary Dealers, Non-Banking Financial Companies (NBFCs), Corporates, Provident/ Pension Funds, Payment Banks, Small Finance Banks, etc.

9.8.2 Types of Instruments

The various products considered to be the part of the Indian money market are:

Instrument	**Duration**	**Trading & Reporting**	**Settlement**	**Face Value**
Call Money	Overnight	NDS-CALL	RBI	Minimum market order ₹1 lakh
Notice Money	2-14 days	NDS-CALL	RBI	Minimum market order ₹1 lakh
Term Money	15 days - 1 year	NDS-CALL	RBI	Minimum market order ₹1 lakh
Market Repo (G-Sec)	Overnight - 1 year	CROMS	CCIL	Minimum market order ₹1 crore
TREP	Overnight - 1 year	TREPS	CCIL	₹5 lakh and multiples thereof

Corporate Bond Repo	Overnight - 1 year	OTC/Stock Exchanges, Reported on F-TRAC	Authorized clearing houses of Stock Exchanges	Market lot size ₹1 crore
CMBs	Upto 90 days	NDS-OM	CCIL	₹10,000 and multiples thereof
T-Bills	91 day - 364 days	NDS-OM	CCIL	₹10,000 and multiples thereof
CPs	7 days - 1 year	OTC, Reported on F-TRAC	Authorized clearing houses of Stock Exchanges	₹5 lakh and multiples thereof
CDs	Banks: 7 days - 1 year, FIs: 1 year - 3 years	OTC, Reported on F-TRAC	Authorized clearing houses of Stock Exchanges	₹1 lakh and multiples thereof

These are explained briefly below:

Call Money

The call money market is an avenue for unsecured lending and borrowing of funds. This market is a purely interbank market in India restricted only to Scheduled Commercial Banks (SCBs) and the Primary Dealers (PDs). Call money transactions are dealt/ reported on the Reserve Bank of India's (RBI) NDS-CALL platform which is managed by CCIL and are predominantly overnight (tenor of borrowing may be extended to account for weekends and holidays).

Notice Money

This is an extension of the interbank call market with uncollateralized lending and borrowing of funds for a period beyond overnight and upto 14 days. Notice money transactions are dealt/ reported on the RBI's NDS-CALL platform which is managed by CCIL.

Term Money

This is an extension of the interbank call market for uncollateralized lending and borrowing of funds for a period between 15 days and 1 year. Term money transactions are dealt/ reported on the RBI's NDS-CALL platform which is managed by CCIL.

Market Repo

Repo also known as a ready forward contract refers to borrowing funds via sale of securities with an agreement to repurchase the same at a future date with the interest for the borrowings incorporated in the repurchase price. Reverse repo is the exact opposite

transaction which is essentially a collateralized lending of funds. Each repo/ reverse repo deal thus has 2 parts / legs. The repo period is the time between the 2 legs. The interest is computed on the actual amount borrowed by the repo seller which is the consideration amount in the repo's first leg. The lender receives the interest in the second leg when the security is bought back by the borrower at a higher consideration that includes the interest. RBI regulates the repo market in India and major participants are SCBs, PDs, Mutual Funds, NBFCs, Financial Institutions (FIs), Insurance Companies, Corporates, Provident/ Pension Funds, Payment Banks, Small Finance Banks, etc.

Repo transactions against G-secs are traded/ reported on the Clearcorp Repo Order Matching System (CROMS) electronic platform of the Clearcorp Dealing Systems. These are settled by CCIL along with G-secs.

Triparty Repo

"Triparty repo" is a type of repo contract with a third party intermediary between the borrower and lender known as the Triparty Agent (TPA). The TPA does the collateral selection, payment and settlement, custody and management during repo period. Following RBI's authorization to CCIL to act as a TPA, the 'Collateralized Borrowing and Lending Obligation' (CBLO) launched by CCIL on January 20, 2003 was converted into TREP on November 5, 2018. The Tri Party Repo Dealing System (TREPS) anonymous order matching trading platform is provided by Clearcorp Dealing Systems (India) Ltd with CCIL as the Central Counterparty (CCP) for borrowing and lending of funds against government securities in India with a triparty arrangement. All the repo eligible entities can trade on TREPS and the funds borrowed on TREPS are exempted from RBI's CRR/SLR computation and the security acquired under the deal is eligible for SLR. Stock Exchanges have also introduced Triparty Repo on Corporate Bonds for the benefit of investors.

Treasury Bills (T-bills)

In India Treasury bills or T-bills are used for short term borrowing by the Government of India and are considered to be a part of the money market as they mature within a year from issue. These are basically zero coupon securities which are issued at a discount and are redeemed at par. Normally RBI conducts weekly auctions for three tenors of T-bills: 91, 182 and 364 days. The 14 Day T-bills are not available for public consumption. RBI may use the same for parking short term surplus funds of State Governments.

Cash Management Bills (CMBs)

Essentially very short term T-bills, Cash Management Bills (CMBs) are issued by the Government of India to fund the temporary mismatches in its cash flow. CMBs have maturities less than 91 days.

Commercial Paper (CP)

A Commercial Paper (CP) is used by Indian corporates to raise short-term unsecured funds. CPs are also discounted instruments like T-bills and are issued for ₹5 lakh and multiples thereof for maturities between 7 days and one year. CP issuances are governed by RBI regulations. The corporate entities with a good credit rating (typically the minimum is the Second highest credit rating) and required minimum net-worth can issue CPs. It is used as a part of working capital resources for corporates.

Certificate of Deposit (CD)

A Certificate of Deposit (CD) is issued against funds deposited at a bank or eligible FIs. CDs are issued for ₹1 lakh and in multiples of ₹1 lakh thereafter for maturities of 7 days to one year by banks and for 1 year to 3 years by FIs. Banks and Financial institutions issue CDs. Banks issue CDs upto one year while Financial Institutions can issue upto 2 years.

Corporate Bond Repo (CBR)

Repo in corporate bonds was introduced by RBI in 2010 and the eligible securities for CBR include: (i) Listed corporate bonds and debentures, (however, participants cannot borrow against the collateral of their own securities or those of related entities); (ii) CPs and CDs; and (iii) Units of Debt ETFs. Triparty repo in corporate bonds was launched in India in 2017 by stock exchanges and currently includes only select AAA category bonds, A1+ rated CPs and CDs. CBR trading can be done OTC or on stock exchanges.

9.9 Introduction to Government Debt Market

The government securities (G-Sec) market is the most active segment of the Indian fixed income securities market. Regular structural and infrastructural measures by the Government and Reserve Bank of India (RBI) have contributed to its substantial growth and expansion over the last two decades. Along with meeting the governments' funding needs, it provides the benchmark interest rates in the market for pricing of various products and schemes and is also an indirect channel for monetary policy.

9.9.1 Key players in the Government debt market

Primary participants in the Indian G-Sec market are large institutional players like banks, Primary Dealers (PDs) and insurance companies. Historically, commercial banks invest in Government securities because of Statutory Liquidity Ratio (SLR) requirements as well as diversification towards safe assets. However, RBI has made many calibrated changes to SLR requirements giving more operational room to Banks for managing the liabilities and SLR has been reduced keeping in mind the phased implementation of Basel norms. Primary Dealers (PDs) play a very important role in the form of market making and they provide firm two way (buy and sell) quotes for the Government securities. Other participants include Co-operative

Banks (after the change of application of SLR norms for them), Mutual Funds, Corporates, Provident and Pension Funds and Foreign Portfolio Investors (FPIs). Reserve Bank of India is also a very large holder of Government securities as it has to operate market liquidity window.

9.9.2 Types of Instruments

A Government Security (G-Sec) in Indian markets implies a debt instrument issued either by the Central Government of India or the State Governments which is tradeable in nature. The Central Government issues both bills (original maturities of less than one year) and bonds while the State Governments issue only bonds also known as the State Development Loans (SDLs). G-Secs are considered risk-free with nearly no risk of default. Each security is known by a unique number - ISIN (International Security Identification Number) – which is tagged to an instrument at the time of issuance. Over the years a variety of instruments have been introduced to match the diverse risk appetites and investment horizons of the markets participants. These instruments have been discussed in detail below.

Treasury Bills (T-bills)

Treasury bills or T-bills are short term money market instruments issued by the Government of India at a discount to its face value and are zero coupon securities issued to be redeemed at par (100) at maturity. The RBI issues three T-Bills for the investors – 91D, 182D and 364D. RBI conducts weekly auctions for these T-bills. RBI announces issuance calendar every quarter and issues the said T-bills as per the notified amount mentioned in the said issuance calendar.

Cash Management Bills (CMBs)

Cash Management Bills (CMBs) are basically unstructured T-bills maturing within 91 days. It was launched in 2010 in order to meet the temporary shortage in the cash flow for the Government of India. CMBs have been extensively used by RBI for smoothening systemic issues such as liquidity management post demonetization in 2016, forex market volatility in 2013, etc.

Dated G-Secs

Government securities are issued on the basis of issuance calendar notified by RBI in the month of March (for sale of securities between April and September) and in the month for September (for the sake of securities between October and March). The notified amounts are informed to the market well in advance. Long term bonds are usually referred to as dated securities and these are the largest component of the Indian G-Sec market. With maturities ranging from one to forty years, these securities pay a fixed or floating coupon on a semi-annual basis. Public Debt Office (PDO) of RBI handles the issue, makes coupon payment and principal repayment. RBI is the depository of Government securities as per the legal provisions. RBI plays the role of the Merchant banker as well the role of Registrar and Transfer

Agent (RTA) for the issue of Government securities. When coupon payment dates fall on holidays, the coupon amount is paid on the next working day. However, redemption proceeds are paid on the previous working day if a maturity date falls on a holiday. The following types of dated G-Secs have been issued in India.

Fixed Rate Bonds

The largest component within dated securities are fixed coupon securities or fixed rate bonds. These securities pay a fixed coupon over their entire life but all coupons are paid semi-annually. For example: Consider the case of "5.77% GS 2030" issued on August 3, 2020 and maturing on August 3, 2030. This 10-year security pays a coupon every six months i.e. on February 3rd and August 3rd each year till its maturity at 2.8850% (half yearly payment being half of the annual coupon of 5.77%) of the ₹100 face value. Coupons for these bonds are fixed on the date of the issue and typically, the cut-off rate for the bond in the primary auction becomes the Coupon for the security.

Floating Rate Bonds (FRB)

First introduced by the Government of India in September 1995, FRBs pay interest at a variable coupon rate that is reset at pre-announced intervals. While majorly linked to the 6-month rate i.e. the 182 Day T-Bill rate, FRBs coupons at each semi-annual date are currently determined in various ways: (a) As the average of the implicit cut-off yields of the last three 182 Day T-Bill auctions; (b) Base rate equivalent to weighted average yield of last three 182 Day T-Bills auctions of plus a fixed spread; (c) Reset every five years at the prevailing 5 year G-Sec yield as on the last working day prior to commencement of each period of five years. FRBs are not preferred for investment in the market. Since retail participation in the market is very low, the success of FRB is also not satisfactory.

Zero Coupon Bonds (ZCBs)

ZCBs do not pay any fixed coupon and are issued at a discount and redeemed at par like T-Bills. These had last been issued by Government of India in 1996. Currently, these securities are not the favour of the market.

Capital Indexed Bonds (CIBs)

The principal amount of a CIB is linked to an inflation index to protect it from inflation. RBI had experimented with a 5 year CIB issued in December 1997.

Inflation Indexed Bonds (IIBs)

In IIBs both the principal amount and coupon flows are protected against inflation. Globally, while the United Kingdom first introduced IIBs in 1981, in India, the first IIBs (linked to Wholesale Price Index (WPI)) were issued in June 2013. In December 2013, IIBs linked to the

Consumer Price Index (CPI) were issued exclusively for retail customers. However, like the Zero Coupon Bonds and Capital Indexed Bonds these bonds did not find wider acceptance and were discontinued after the initial issues and the Government repurchased most of the bonds that had already been issued.

Bonds with Call/Put Options

The Government of India has also experimented with bonds with embedded options. The first such embedded option bond with both call and put option - 6.72% GS 2012 was issued on July 18, 2002 in which the Government had the right to buy-back the bond (call option) at par while the investors had the right to sell back the bond (put option) to the Government at par on any of the semi-annual coupon dates beginning July 18, 2007. Currently, Government does not issue any embedded option bonds.

Special Securities

Occasionally, the Government of India may issue bonds as compensation in lieu of cash subsidies to entities like the Food Corporation of India, Oil Marketing Companies, Fertilizer Companies, etc. (also known as food, oil bonds and fertilizer bonds respectively). Government of India also issues Bank recapitalization bonds under the special securities. These are not eligible as SLR securities and thus pay a marginally higher coupon over the yield of the similar maturity G-Secs.

Separate Trading of Registered Interest and Principal of Securities (STRIPS)

STRIPS are essentially separate ZCBs created by breaking down the cash flows of a regular G-Sec. For example, when ₹100 of the 5.77% GS 2030 mentioned earlier is stripped, the ₹100 principal payment at maturity becomes a principal STRIP while each coupon cash flow (₹2.885) becomes a coupon STRIP, which can all then be traded separately as independent securities in the secondary market. STRIPS can be created out of all existing fixed coupon SLR eligible G-Secs. STRIPS can be attractive to retail/non-institutional investors as being ZCBs, they have zero reinvestment risk.

Sovereign Gold Bond (SGB)

SGBs are unique instruments with commodity (gold) linked prices. Part of budgeted borrowing, these are issued in tranches and are denominated in units of one gram of gold and multiples thereof. They pay a fixed coupon per annum on the nominal value paid on semi-annual basis and are redeemed at simple average of closing price published by the India Bullion and Jewellers Association Limited of gold (999 purity) of the previous 3 business days from the date of repayment.

Savings (Taxable) Bonds

Specially issued for retail investors at par for a minimum amount of ₹1,000 (face value) and in multiples thereof, while these bonds have no maximum limit for investment, the interest paid is taxable under the Income Tax Act, 1961. From FY21, these bonds bear a floating rate of interest which is reset every 6 months.

State Development Loans (SDLs)

Market borrowings of State Governments / Union Territories through semi-annual coupon paying dated securities are known as State Development Loans (SDLs). These are eligible for SLR and borrowing under the LAF window. Uday bonds were special securities issued by State Governments for financial turnaround of power distribution companies (DISCOMs). Uday bonds are not eligible for SLR status.

9.10 Introduction to Corporate Debt Market

Corporate debt continues to have a low share of the total debt issuance in India. Investment demand is largely restricted to institutional investors whose investments are in turn limited by prudential norms for investment issued by their respective regulators. On the other hand, the multitude of steps to be adhered to, push the potential suppliers i.e. the corporates to opt for bank financing or overseas borrowing to meet their funding requirements in a time constrained fund raising environment.

Despite these inherent constraints, the Indian corporate debt market has witnessed significant growth in recent years due to the regulators' focus on enhanced transparency, expanded issuer and investor base as well as availability of better market infrastructure. Low outstanding stock of individual debt issuances and non-availability of trading platforms with guaranteed central counterparty (CCP) facility are primary obstacles to an active secondary market.

9.10.1 Key Players in the Corporate Bond Ecosystem in India

Issuer

The "Issuer" is the entity that issues a debt instrument to borrow money from the investors against a promise of paying back the principal on the maturity date along with the periodic interest. The issuer may issue the bond either using a private placement option or using public issue protocol of SEBI. If issued to the public, then it must be listed in a stock exchange for liquidity purposes. Privately placed debt may or may not be listed in a stock exchange.

Debenture Trustee

In India, the terms 'debenture' and 'corporate bond' are used interchangeably and both are identified as the same in the Companies Act. Like a bond, a debenture is also a debt instrument issued by a company to repay the borrowed sum at a specified date along with payment of interest. A Debenture Trustee (DT) is registered with SEBI. A DT holds the secured property on behalf of the debt issuer and for the benefit of debenture holders who though the beneficiaries, have no access to the mortgaged property. Scheduled banks carrying on commercial activity, insurance companies, public financial institutions or corporate bodies can act as DTs.

DTs have the responsibility to protect the interest of the debenture holders as they have to ensure that the property charged is available and sufficient in value terms to discharge the interest and principal amounts during the life of the debenture. They call for periodic reports from the issuers and also ensure that the issuers comply with the provisions of the trust deed, the Companies Act and the listing agreements of the stock exchanges. DTs on noticing any breach of the trust deed or law have to act immediately to protect the interest of the debenture holders. In the event of default, DTs can appoint nominee directors on the issuer's board and also have the power and authority to sell the secured property to redeem the debentures.

The SEBI (Debenture Trustees) Regulations, 1993 govern DTs in India. As per the provisions of Companies Act, appointment of a DT is compulsory if any debentures/bonds are issued with a maturity of more than 18 months. Unsecured debentures/bonds are treated as fixed deposits, if received from individual investors. In India, the issuer pays fees to the DT for its services.

Qualified Institutional Buyer (QIB)

QIBs in the Indian market include:

* Scheduled Commercial Banks
*Insurance Companies registered with the Insurance Regulatory and Development Authority of India (IRDAI)
*Mutual Funds
*State Industrial Development Corporations
*Multilateral and bilateral Development Financial Institutions
*Provident Funds with minimum corpus of ₹25 crore
*Pension Funds with minimum corpus of ₹25 crore
*Public Financial Institution as defined in the Companies Act
*Foreign Institutional Investor registered with SEBI
*Venture Capital Funds registered with SEBI
*Foreign Venture Capital Investors registered with SEBI

Retail Individual Investors

"Retail Individual Investor" refers to investors who bid/apply for securities for ₹2 lakh or less.

Designated stock exchange

"Designated stock exchange" means a stock exchange with nationwide trading terminals on which debt securities are listed.

9.10.2 Corporate debt Instruments

Company deposits

These are time deposits issued by companies for a specific time period which is usually 1, 2 and 3 years. Since they are issued by companies they are known as company deposits. There is a fixed rate of interest that is paid on these deposits, which is usually higher than the bank fixed deposit rate depending on the financial position of the company. Investors need to look at the company and its financial situation before making a decision about investing in these deposits.

Bonds and debentures

These are bonds and debentures that are issued by companies and they are usually for a slightly longer time frame. Another factor that is present for bonds and debentures is that many of them are secured in nature. This means that there is the security of an asset behind these issues so there is an additional level of comfort for the investor. The risk of a credit default needs to be considered by investors when they look at such issues

Infrastructure Bonds

The infrastructure bonds are very long term bonds that are issued and they can be for 10 to even 20 years, these are meant to finance infrastructure projects and hence they are long term in nature. Specific companies that operate in this space are the ones who issue these bonds and they are often traded in the secondary market. Investors need to analyse these in a different light in the consideration of the projects for which the money would be used.

Inflation indexed bond

The inflation indexed bonds set themselves apart as they do not have a fixed rate of interest on them. At a specified time interval the interest rate on these bonds will change depending on the inflation rate in the economy. This ensures that the real rate of return for the investor is protected.

9.11 Small Saving Instruments

Bank Deposits

A bank fixed deposit (FD) is also called a term or time deposit, as it is a deposit account with a bank for a fixed period of time. It entitles the investor to pre-determined interest payments and return of the deposited sum on maturity. Fixed bank deposits offer higher returns than savings accounts as the money is available for use by the bank for a longer period of time. Fixed deposits are preferred by investors who like the safety that a bank provides, want to know how much they will earn and do not have an immediate need for the funds.

Bank FDs are considered to be a safe investment option. This is because each depositor is insured up to Rs.5 lakh by the Deposit Insurance and Credit Guarantee Corporation (DICGC). It includes all deposits and interest on them, held across branches of a given bank. The limit of Rs 5 lakh per bank is a significant sum that provides an element of comfort for the investor as they know that their money is not going to be lost if the bank goes down.

A fixed deposit is created by opening an FD account with the bank which in turn issues an FD receipt. Interest on an FD can be paid into the depositor's savings bank account at a predefined frequency, or accumulated and paid at the end of the term. On maturity, the lump sum deposit amount is returned to the investor.

Investors can also choose to renew the deposit on the maturity date. The minimum deposit amount varies across banks. The duration of deposits can range from 7 days to 10 years though FDs longer than 5 years are not very common.

Interest Rates on FDs

Interest rates depend on the duration of deposit, amount deposited and policies of the bank. In general, longer term deposits pay a higher rate than shorter term deposits. There could be a specific time bracket that could have a higher interest rate because the bank wants to attract money for that specific duration. However, banks might also introduce deposits with specific terms like 333 days or 777 days which can have a special rate of interest. Banks also offer special rates to senior citizens, defined as those who are over 60 years of age. The special rate is usually an amount ranging from 0.25% to 0.75% extra interest above the normal applicable one. Interest rates also vary from bank to bank. The interest rate paid by a bank depends on its need for funds for a particular tenor.

Interest rates do not remain unchanged. Deposit rates offered by banks for various tenors change over time, depending on the economic cycle, their need for funds and demand for credit (loans) from banks. However, a rate committed to be payable for a tenor, until maturity, does not change even if market interest rates change. New rates usually apply only for fresh deposits.

Banks may also prescribe a minimum lock-in period during which funds cannot be withdrawn from the FD account. They may levy a penalty on depositors for pre-mature withdrawals. FD holders may enjoy additional benefits such as loan facility against the security of their FD receipts, or cash overdraft facility.

Investment in specified (under Section 80C of the Income Tax Act) 5-year bank FDs are eligible for tax deductions up to a maximum amount of Rs.1.5 lakh, along with other investment options listed under the same section. These deposits are subject to a lock-in period of 5 years.

Floating rate Government of India Bond

The Government of India has launched a bond for investment, which investors can use to earn a regular sum of interest. This bond was launched on July 1, 2020 with an interest rate of 7.15 per cent. Unlike earlier bond series, where the interest rate was fixed for the entire duration of the bond the situation is different with this issue. The interest rate on this floating rate bond will be set twice a year based on the changes in the benchmark rate.

The interest on the bond is payable every six months and after the payment is done the interest rate would be reset for the next six months. The first payment of interest would take place on January 1, 2021 and then continue according to the schedule. The interest rate on the bond has been linked to the rate prevailing on the National Savings Certificate (NSC). The rate here would be 35 basis points or 0.35% over the NSC rate.

A resident Indian can make an investment in these bonds while Non Resident Indians (NRIs) are not allowed to invest. The bonds can be bought from designated branches of a few public and private sector banks and will be held only in demat form. This is also called a bond ledger account which are opened only with a bank for holding government securities.

The minimum amount of purchase has to be Rs 1,000 while there is no maximum limit for investment in these bonds. They can be bought in cash only upto Rs 20,000 otherwise by using demand draft, cheque or online payments.

The tenure of these bonds is 7 years. Earlier redemption of these bonds is possible only for senior citizens. Those who are above 80 years of age can redeem them after completion of 4 years, those between 70 and 80 years of age can redeem them after 5 years while those above 60 years can redeem them after 6 years. These bonds are not tradeable or used as collateral against loans.

The interest earned on these bonds is taxable and it is added to the income under the head of Income from other sources.

Small Saving Instruments[8]

The Indian government has instituted a number of small saving schemes to encourage investors to save regularly. The main attraction of these schemes is the implicit guarantee of the government, which is the borrower. These schemes are offered through the post office and select banks.

The saving schemes currently offered by the government are:

- Public Provident Fund (PPF)
- Senior Citizens' Saving Scheme (SCSS)
- National Savings Certificate (NSC)
- Post Office Schemes and Deposits
- Kisan Vikas Patra (KVP)
- Sukanya Samriddhi Account

Public Provident Fund

Instituted in 1968, the objective of the PPF is to provide a long term retirement planning option to those individuals who may not be covered by the provident funds of their employers or may be self-employed.

PPF is a 15-year deposit account that can be opened with a designated bank or a post office. It can also be opened online with a few banks. A person can hold only one PPF account in their name except an account in the name of a minor child to whom he or she is a guardian. An individual can open a PPF account at any age. HUFs and NRIs are not allowed to open PPF accounts. If a resident subsequently becomes an NRI during the prescribed term, he/she may continue to subscribe to the fund till its maturity on a non-repatriation basis. Joint account cannot be opened, however nomination facility is available.

National Savings Certificate (NSC)

National Savings Certificates are issued by the government and available for purchase at the post office. NSCs are issued with a tenor of 5 years (NSC VIII issue amended as of December 1, 2011). Interest is compounded annually and accumulated and paid on maturity.

The certificates can be bought by individuals on their own account or on behalf of minors. NRI, HUF, Companies, trusts, societies, or other institutions are not allowed to purchase the NSCs. If a resident holder becomes an NRI subsequent to the purchase, the certificate can be held till maturity. However, the maturity value cannot be repatriated. Joint holding is allowed

[8] http://nsiindia.gov.in/InternalPage.aspx?CircularId=9999

and the certificate can be held jointly by up to two joint holders on joint basis or either or survivor basis.

Certificates are available in denominations of Rs.100, 500, 1,000, 5,000, and 10,000. The minimum investment is Rs.100 without any maximum limit. The certificates can be bought by cash or through cheques.

Investments made in the NSC VIII issue enjoy tax benefits under section 80C of Income Tax Act, 1961. Accrued interest is taxable, but is it deemed to be reinvested and therefore the interest becomes eligible for Section 80C benefits. There is no tax deducted at source at the time of redeeming the certificate value.

NSCs can be transferred from one person to another with the consent of a designated official of the post office under situations such as transfers to heirs of a deceased holder, under a court order, to near relatives such as wife, lineal ascendant or descendant and transfer to a bank, housing company or other specified institution as security.

Premature encashment is allowed only in case of death of the holder, forfeiture by a pledgee, or under orders of court of law. If the encashment happens within a period of one year from the date of the certificate, only the face value will be paid. If the encashment happens after one year but before three years, simple interest is paid at the rates applicable to Post office savings accounts. After three years, the certificates will be encashed at a discounted value specified in the rules.

Nomination is allowed in the certificates, which can be done at the time of the purchase or subsequently. There shall be no nomination allowed on a certificate held on behalf of a minor. A nomination can be cancelled or changed by making an application to this effect at the post office where the certificates stands registered.

The certificates are also accepted as collateral for taking a loan. The government has enabled holding NSCs in demat form.

Senior Citizens' Saving Scheme (SCSS)

The Senior Citizens' Saving Scheme is a savings product available to only senior citizens of age 60 years or above on the date of opening the account. Proof of age and a photograph of account holder are required. The age limit is reduced to 55 years in case of an individual retiring on superannuation or otherwise, or under VRS or special VRS, provided the account is opened within one month of date of receipt of retirement benefits. The retired personnel of Defence Services, excluding Civilian Defence Employees, shall be eligible irrespective of age limit. The account can be opened at any post office undertaking savings bank work and a branch of a bank authorized to do so. The scheme can be held in individual capacity or jointly

with the spouse. The age restrictions apply only to the first holder. NRIs, PIOs and HUF are not eligible to invest in this scheme.

National Savings Schemes / Post Office Schemes and Deposits

a) National Savings Monthly Income Account / Post Office Monthly Income Scheme (POMIS)

The Post Office Monthly Income Scheme provides a regular monthly income to the depositors. This scheme has a term of 5 years.

Minimum amount of investment in the scheme is Rs.1,500, and the maximum amount is Rs.4.5 lakhs for a singly held account and Rs.9 lakhs if the account is held jointly. A depositor can have multiple accounts, but the aggregate amount held in the scheme across all post offices cannot exceed the maximum permissible limits. The deposit can be made in cash or cheque.

The applicable interest rate is announced every quarter and is payable on a monthly basis with no bonus on maturity. Nomination facility is available and can be made at the time of opening the account or subsequently at any time before maturity.

Premature withdrawal of the invested amount is allowed after 1 year of opening the account. If the account is closed between 1 and 3 years of opening, 2% of the deposited amount is deducted as penalty. If it is closed after 3 years of opening, 1% of the deposited amount is charged as penalty.

b) National Savings Time Deposit Account/ Post Office Time Deposits (POTD)

National Savings Time Deposit Account / Post Office Time Deposits are similar to fixed deposits of commercial banks. The post office accepts deposits with terms of one year, two years, three years and five years. The account can be held singly in individual capacity or jointly by a maximum of two holders. Single account can be converted into Joint and vice versa.

The minimum deposit amount is Rs.100. There is no maximum limit. The interest rates on these deposits are subject to changes every quarter as announced by the government.

Interest rates are compounded quarterly and are subject to tax. The five year term deposit is eligible for tax benefits under Section 80C of the Income Tax Act, 1961.

c) National Savings Recurring Deposit Account /Post Office Recurring Deposit

National Savings Recurring Deposit Account /Post Office Recurring Deposit (RD) accounts can be opened by resident individuals, and a maximum of two people can hold an account jointly or on either or survivor basis. An individual can hold any number of RD accounts, singly or

jointly. Deposits can be made at a minimum amount of Rs.10 per month and in multiples of Rs.5 thereafter for every calendar month. There is no maximum investment limit. Interest is payable on a quarterly compounded basis. The maturity amount with interest is paid at the end of the term. Interest is taxable. Deposits have to be made regularly on a monthly basis, and penalties apply for non-payment of instalment.

One withdrawal is allowed after the deposit has been in operation for at least one year and 12 monthly deposits have been made. Interest as applicable will apply on the withdrawal and the repayment can be in lump sum or in instalments. An account can be extended for another 5-year term after maturity.

Kisan Vikas Patra (KVP)

The KVP can be purchased by an adult for self or by two adults for a minor investor. NRIs, HUFs and other entities are not eligible to invest in the KVP. It can be purchased from any departmental post office or bank through cash, local cheque. The minimum investment is Rs.1,000 and in multiples of Rs. 1,000/-. There is no maximum limit. The instrument maturity depends on the applicable rate of interest. The effective interest rate is announced on a quarterly basis. The facility of nomination and joint holding is available in the KVP and the certificate can be transferred from one person to another and one post office to another by endorsement and delivery. KVP can be prematurely encashed 2 ½ years from the date of issue. There is no tax incentive for the investment made and the interest earned is taxed on accrual basis.

Sukanya Samriddhi Account Scheme

The Sukanya Samriddhi Account is a scheme launched for the benefit of girl children. The account has to be opened in the name of the girl child by a natural or legal guardian. The account is opened with an authorized list of banks. Only one account can be opened in the name of a child and a guardian can open a maximum of two accounts in the name of two different girl children. The age of the child cannot be more than 10 years at the time of opening the account. The minimum investment in the account is Rs.250 in a financial year and a maximum of Rs.1,50,000. Investments can be made in a lumpsum or in tranches. There is no limit on the number of deposits that can be made in a financial year in multiples of Rs.100. The account can be transferred to any place in India. The account will mature on the completion of 21 years from the date of opening the account. If the girl child gets married before the completion of 21 years then the account is closed.

Partial withdrawal is allowed after the holder attains 18 years of age, to the extent of 50% of the amount in balance at the end of the preceding financial year. Any amount deposited in the account is eligible for deduction under section 80C of the Income Tax Act.

CHAPTER 10: UNDERSTANDING DERIVATIVES

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Basics of Derivatives
- Underlying concepts in derivatives
- Types of derivative products
- Structure of derivative markets
- Purpose of Derivatives
- Benefits, Costs and risks of Derivatives
- Equity, Currency and Commodity derivatives
- Derivative markets, products and strategies

10.1 Basics of Derivatives

Derivative is a contract or a product whose value is derived from the value of some other asset known as underlying. Derivatives are based on a wide range of underlying assets such as metals (Gold, silver etc.), energy resources (oil, coal, gas etc.), agri commodities (wheat, coffee) and financial assets (shares, bonds).

In the Indian context the Securities Contracts (Regulation) Act, 1956 [SC(R)A] defines "derivative" to include-

1. A security derived from a debt instrument, share, loan whether secured or unsecured, risk instrument or contract for differences or any other form of security.
2. A contract which derives its value from the prices, or index of prices, of underlying securities.

Derivatives are securities under the SC(R)A and hence the trading of derivatives is governed by the regulatory framework under the SC(R)A.

The term derivative has also been defined in section 45U(a) of the RBI Act 1934 as follows:

An instrument, to be settled at a future date, whose value is derived from change in interest rate, foreign exchange rate, credit rating or credit index, price of securities (also called “underlying”), or a combination of more than one of them and includes interest rate swaps, forward rate agreements, foreign currency swaps, foreign currency-rupee swaps, foreign currency options, foreign currency-rupee options or such other instruments as may be specified by RBI from time to time.

10.2 Underlying concepts in derivatives

Zero Sum Game

In a futures contract, the counterparties who enter into the contract have opposing views and needs. The seller of gold futures thinks prices will fall, and benefits if the price falls below the price at which she entered into the futures contract. The buyer of gold futures thinks prices will rise, and benefits if the price rises beyond the price at which she has agreed to buy gold in the future. On maturity the market price of the underlying would be same for both the futures contracts, leading to profits to only of them. But when the net positions of the both the buyer and seller are considered, it always amounts to zero. Hence the word Zero Sum Game suits appropriately to describe the net positions of derivative instruments. However there are the two usual assumptions to this conclusion, that there are no taxes and no transaction costs.

Settlement Mechanism

Earlier most derivative contracts were settled in cash. Cash settlement is a settlement method where upon expiration or exercise of the derivatives contract, the counterparties to the contract settle their position through exchange of the price differentials and do not deliver the actual (physical) underlying asset.

However, SEBI has mandated physical settlement (settlement by delivery of underlying stock) for all stock derivatives i.e. all the stock derivatives which are presently being cash settled shall move compulsorily to physical settlement in a phased manner. The stock exchanges have initiated the transition from cash settlement to physical settlement based on the criteria notified by the relevant SEBI circulars.

Margining Process

Margin is defined as the funds or securities which must be deposited by Clearing Members as collateral before executing a trade. The provision of collateral is intended to ensure that all financial commitments related to the open positions of a Clearing Member can be offset within a specified period of time.

There are different kinds of margins. The initial margin is charged to the trading account on the assumption that the position will be carried out till the expiry of the contract. The initial margin has two components; SPAN[9] margins and ELM margins based on exposure. Both margins have to be mandatorily deposited before taking a trade. The initial margin should be large enough to cover the loss in 99 per cent of the cases. The greater the volatility of the stock, greater the risk and, therefore greater is the initial margin.

[9] The margin calculation is carried out using a software called - SPAN® (Standard Portfolio Analysis of Risk). It is a product developed by Chicago Mercantile Exchange (CME) and is extensively used by leading stock exchanges of the world.

In addition to Initial Margin, a Premium Margin is charged to trading members trading in Option contracts.

The premium margin is paid by the buyers of the Options contracts and is equal to the value of the options premium multiplied by the quantity of Options purchased.

Open Interest

Open interest is commonly associated with the futures and options markets. Open interest is the total number of outstanding derivative contracts that have not been settled. The open interest number only changes when a new buyer and seller enter the market, creating a new contract, or when a buyer and seller meet—thereby closing both positions. Open interest is a measure of market activity. However, it is to be noted that it is not trading volume. Open interest is a measure of the flow of money into a futures or options market. Increasing open interest represents new or additional money coming into the market while decreasing open interest indicates money flowing out of the market.

10.3 Types of derivative products

The four commonly used derivative products are Forwards, Futures, Options and Swaps.

10.3.1 Forwards

Forward contract is an agreement made directly between two parties to buy or sell an asset on a specific date in the future, at the terms decided today. Forwards are widely used in commodities, foreign exchange, equity and interest rate markets.

Let us understand with the help of an example. What is the basic difference between the cash market and forwards? Assume on March 9, 2018 you wanted to purchase gold from a goldsmith. The market price for gold on March 9, 2018 was Rs. 30,425 for 10 gram and goldsmith agrees to sell you gold at market price. You paid him Rs. 30,425 for 10 gram of gold and took gold. This is a cash market transaction at a price (in this case Rs. 30,425) referred to as spot price.

Now suppose you want to agree to buy gold on March 9, 2018, but take delivery of the same and pay for the same only after 1 month. Goldsmith quotes you Rs. 30,450 for 10 grams of gold to be delivered after 1 month. You agree to the forward price for 10 grams of gold and go away. There is no exchange of money or gold on March 9th, 2018. After 1 month, you come back to the goldsmith pay him Rs.30,450 and collect your gold. This is a forward, where both the parties are obliged to go through with the contract irrespective of the value of the underlying asset (in this case gold) at the point of delivery. Here, in this example, you have bought forward or you are long forward, whereas the goldsmith has sold forwards or short forwards.

In other words, Forwards are bilateral over-the-counter (OTC) transactions where the terms of the contract, such as price, quantity, quality, time and place are negotiated between two parties to the contract. Any alteration in the terms of the contract is possible if both parties agree to it. Corporations, traders and investing institutions extensively use OTC transactions to meet their specific requirements. The essential idea of entering into a forward is to fix the price and thereby avoid the price risk. Thus, by entering into forwards, one is assured of the price at which one can buy/sell an underlying asset.

Major limitations of forward contracts

Liquidity Risk

As forwards are tailor made contracts i.e. the terms of the contract are according to the specific requirements of the parties, other market participants may not be interested in these contracts. Forwards are not listed or traded on exchanges, which makes it difficult for other market participants to easily access these contracts or contracting parties.

Counterparty risk

Counterparty risk is the risk of an economic loss from the failure of counterparty to fulfil its contractual obligation. For example, A and B enter into a bilateral agreement, where A will purchase 100 kg of rice at Rs.20 per kg from B after 6 months. Here, A is counterparty to B and vice versa. After 6 months, if the price of rice is Rs.30 in the market then B may forego his obligation to deliver 100 kg of rice at Rs.20 to A. Similarly, if the price of rice falls to Rs.15 then A may purchase from the market at a lower price, instead of honouring the contract. Thus, a party to the contract may default on his obligation if there is incentive to default. This risk is also called default risk or credit risk.

In addition to the illiquidity and counterparty risks, there are several issues like lack of transparency, settlement complications as it is to be done directly between the contracting parties. Simple solution to all these issues lies in bringing these contracts to the centralized trading platform. This is what futures contracts do.

10.3.2 Futures

Futures markets were innovated to overcome the limitations of forwards. A futures contract is an agreement made through an organized exchange to buy or sell a fixed amount of a commodity or a financial asset on a future date at an agreed price. Simply, futures are standardised forward contracts that are traded on an exchange. Exchange becomes counterparty to both buyer and seller of a futures contract through a clearing house. Futures create an obligation on both buyer and seller's part. The terms of the contract are specified by the exchange and are subjected to change as and when necessary. The clearing corporation

associated with the exchange guarantees settlement of these trades. A trader, who buys futures contract, takes a long position and the one, who sells futures, takes a short position. The words buy and sell are figurative only because no money or underlying asset changes hands, between buyer and seller, when the deal is signed.

Features of futures contract

In the futures market, exchange decides all the contract terms of the contract other than price. Accordingly, futures contracts have the following features:

- Contract between two parties is through Exchange
- Centralised trading platform i.e. exchange
- Price discovery through free interaction of buyers and sellers
- Margins are payable by both the parties
- Quality decided today (standardized)
- Quantity decided today (standardized)

10.3.3 Options

An Option is a contract that gives its buyers the right, but not an obligation, to buy or sell the underlying asset on or before a stated date/day, at a stated price, for a premium (price). The party taking a long position i.e. buying the option is called buyer/ holder of the option and the party taking a short position i.e. selling the option is called the seller/ writer of the option. The option buyer has the right but no obligation with regards to buying or selling the underlying asset, while the option writer has the obligation to its commitment in the contract. Therefore, option buyer/ holder will exercise his option only when the situation is favourable to her, but, when she decides to exercise, option writer is legally bound to honour the contract. Options are of mainly two types—Call and Put:

Option, which gives buyer a right to buy the underlying asset, is called Call option and the option which gives buyer a right to sell the underlying asset, is called Put option.

Option Terminology

Arvind buys a call option on the Nifty index from Salim, to buy the Nifty at a value of Rs. 10,000, three months from today. Arvind pays a premium of Rs 100 to Salim. What does this mean?

- Arvind is the buyer of the call option.
- Salim is the seller or writer of the call option.
- The contract is entered into today, but will be completed three months later on the settlement date.

- Rs. 10,000 is the price Arvind is willing to pay for Nifty, three months from today. This is called the strike price or exercise price.
- Arvind may or may not exercise the option to buy Nifty at Rs. 10,000 on the settlement date.
- But if Arvind exercises the option, Salim is under the obligation to sell Nifty at Rs. 10,000 to Arvind.
- Arvind pays Salim Rs.100 as upfront payment. This is called the option premium. This is also called as the price of the option.
- On the settlement date, Nifty is at Rs. 10,200. This means Arvind's option is "in-the-money." He can buy the Nifty at Rs.10,000, by exercising his option.
- Salim earned Rs.100 as premium, but lost as he has to sell Nifty at Rs.10,000 to meet his obligation, while the market price was Rs. 10,200.
- On the other hand, if on the settlement date, Nifty is at Rs. 9,800, Arvind's option will be "out-of-the-money."
- There is no point paying Rs.10,000 to buy the Nifty, when the market price is Rs. 9,800. Arvind will not exercise the option. Salim will retain the Rs.100 he collected as premium.

The options can be given names like In-The-Money, At-The-Money, and Out-of-The-Money, depending on whether the strike price of the option is greater, equal, or lesser than the underlying asset's market price, respectively. When the underlying asset's price is greater than the strike price, in the case of a call option, the investor would benefit by exercising the option and buy the asset at the strike price, and immediately sell it in the market at a higher price to enjoy the gain. In the same manner there is no gain in the case of At-The-Money and there would be a loss in the case of Out-Of-the-Money.

Similarly, there are two connotations of value, namely intrinsic value and time value. Time value is the excess price a buyer of an option is ready to pay over and above the intrinsic value of that option. This is with an intention that the value of the option would increase in the future, especially when there is adequate time for maturity. Intrinsic value is the excess of the current price over and above the strike price. Essentially In-The-Money options have positive intrinsic value and hence can generate gains for option holders.

Option Premium = Time Value + Intrinsic Value

Time Value = Option Premium – Intrinsic Value

10.3.4 Swaps

A swap is a contract in which two parties agree to a specified exchange of cash flows on a future date(s). Interest Rate Swaps and Currency Swaps are most common swaps.

Example:

A borrower has to pay a quarterly interest rate defined as the Treasury bill rate on that date, plus a spread. This floating rate interest payment means that the actual obligation of the borrower will depend on what the Treasury bill rate would be on the date of settlement. The borrower however prefers to pay a fixed rate of interest.

She can use the interest rate swap markets to get into the following swap arrangement:

- Pay a fixed rate to the swap dealer every quarter
- Receive T-bill plus spread from the swap dealer every quarter

The swap in this contract is that one party pays a fixed rate to the other, and receives a floating rate in return. The principal amount on which the interest will be computed is agreed upon between counterparties and is never exchanged. Only the interest rate on this amount is exchanged on each settlement date (every quarter) between counterparties. The principal amount is also known as notional amount.

The borrower will use the floating rate that she has received from the swap market and pay the floating rate dues on her borrowing. These two legs are thus cancelled, and her net obligation is the payment of a fixed interest rate to the swap dealer. By using the swap market, the borrower has converted his floating rate borrowing into a fixed rate obligation.

Swaps are very common in currency and interest rate markets. Though swap transactions are OTC, they are governed by rules and regulations accepted by Swap Dealer Associations.

Role of FIMMDA

FIMMDA stands for The Fixed Income Money Market and Derivatives Association of India (FIMMDA). It is an Association of Commercial Banks, Financial Institutions and Primary Dealers. FIMMDA is a voluntary market body for the bond, Money and Derivatives Markets.

The objectives of FIMMDA are:

1. To function as the principal interface with the regulators on various issues that impact the functioning of bond, money and derivatives markets.
2. To undertake developmental activities, such as, introduction of benchmark rates and new derivatives instruments, etc.
3. To provide training and development support to dealers and support personnel at member institutions.
4. To adopt/develop international standard practices and a code of conduct in the above fields of activity.
5. To devise standardized best market practices.
6. To function as an arbitrator for disputes, if any, between member institutions.
7. To develop standardized sets of documentation.

8. To assume any other relevant role facilitating smooth and orderly functioning of the said markets.

10.4 Structure of derivative markets

A derivative market is formed when different market players interested to manage their price risks come together and try to secure themselves from the prospective risks that they fear.

In India the following derivative products are available indices, stocks, interest rates and commodities. Apart from the above, forward markets for agricultural commodities and swap markets for interest rates are available in the OTC markets.

OTC Markets

Some derivative contracts are settled between counterparties on terms mutually agreed upon between them. These are called over the counter (OTC) derivatives. They are non-standard and they depend on the trust between counterparties to meet their commitment as promised. These are prevalent only between institutions, which are comfortable dealing with each other.

Exchange Traded Markets

Exchange-traded derivatives are standard derivative contracts defined by an exchange, and are usually settled through a clearing house. The buyers and sellers maintain margins with the clearing-house, which enables players that do not know one another (anonymous) to enter into contracts on the strength of the settlement process of the clearing house. Forwards are OTC derivatives; futures are exchange-traded derivatives.

10.5 Purpose of Derivatives

A derivative is a risk management product used commonly in financial investments where there is market based price risk due resulting in an unknown future value of the investment. Derivatives are typically used for three purposes—Hedging, Speculation and Arbitrage.

Hedging

When an investor has an investment in any asset or portfolio of assets, and further she also has a desired return or any specific investment objective, then she can use the derivative markets to protect the desired value of that investment from the risk of future price movements.

Speculation

A speculative trade in a derivative is not supported by an underlying existing investment in asset or portfolio. It simply involves implementation of an investment or trading strategy based on a view about the future prices of the relevant asset underlying the specific derivative product. For instance, a buyer of a futures contract carries the view that the price of the underlying asset would move up, and she would gain having bought the futures contract at a

lower price, as of now, because such a view is not reflecting in the current futures price. In the process the investor has to bear the cost of this long position, which is related to cost incurred in the management of margins required in the futures contracts.

Arbitrage

The law of one price states that two goods (assets) that are identical, cannot trade at different prices in two different markets. If not, one would buy from the cheaper market and sell at the costlier market, and make riskless profits. However, such buying and selling itself will reduce the gap in prices. The demand in the cheaper market will increase prices there and the supply into the costlier market will reduce prices, bringing the prices in both markets to the same level. Arbitrageurs are specialists who identify such price differential in two markets and indulge in trades that reduce such differences in price. Prices in two markets for the same tradable asset will be different only to the extent of transaction costs. These costs can include transportation, storage, insurance, interest costs and any other cost that impacts the activities of buying and selling.

10.6 Benefits, Costs and risks of Derivatives

The applications of derivatives in hedging, speculation and arbitrage demonstrates the following key benefits of derivative:

- Enables hedging and better management of risk, by providing various alternative ways to structure symmetrical and asymmetrical pay offs.
- Enhances the liquidity of underlying markets and reduce overall costs of trading for cash and derivatives.
- Increases participation, information dissemination and price discovery.

Market Participants must understand that derivatives, being leveraged instruments, have risks like counterparty risk (default by counterparty), price risk (loss on position because of price move), liquidity risk (inability to exit from a position), legal or regulatory risk (enforceability of contracts), operational risk (fraud, inadequate documentation, improper execution, etc.) and may not be an appropriate avenue for someone of limited resources, trading experience and low risk tolerance. A market participant should therefore carefully consider whether such trading is suitable for him/her based on these parameters. Market participants, who trade in derivatives are advised to carefully read the Model Risk Disclosure Document, given by the broker to his clients at the time of signing agreement. Model Risk Disclosure Document is issued by the members of Exchanges and contains important information on trading in Equities and F&O Segments of exchanges. All prospective participants should read this document before trading on Capital Market/Cash Segment or F&O segment of the Exchanges.

10.7 Equity, Currency and Commodity derivatives

The basic concept of a derivative contract remains the same for all the underlying assets, whether the underlying happens to be a commodity or currency. When the underlying asset is a commodity, e.g. Oil or Wheat, the contract is termed a “commodity derivative”. When the underlying is an exchange rate, the contract is termed a “currency derivative”. Both future and options contracts are available on commodities and as well as on currencies.

Commodity derivatives

Derivatives have become an integral part of today’s commodity trading and are used for various types of risk protection and in innovative investment strategies. Commodity derivatives markets play an increasingly important role in the commodity market value chain by performing key economic functions such as risk management through risk reduction and risk transfer, price discovery and transactional efficiency. Commodity derivatives markets allow market participants such as farmers, traders, processors, etc. to hedge their risk against price volatility through commodity futures and options.

Commodity Futures contracts are highly uniform and are well-defined. These contracts explicitly state the commodities (quantity and quality of the goods) that have to be delivered at a certain time and place (acceptable delivery date) in a certain manner (method for closing the contract) and define their permissible price fluctuations (minimum and maximum daily price changes). Therefore, a commodity futures contract is a standardized contract to buy or sell commodities for a particular price and for delivery on a certain date in the future.

For instance, if a Biscuit manufacturer wants to buy 10 tonnes of wheat today, he can buy the wheat in the spot market for immediate use. If he wants to buy 10 tonnes of wheat for future use, he can buy wheat futures contracts at a commodity futures exchange. The futures contracts provide for the delivery of a physical commodity at the originally contracted price at a specified future date, irrespective of the actual price prevailing on the actual date of delivery.

Futures trading in commodities can be conducted between members of an approved exchange only. Futures trading in commodities is organized by these exchanges after obtaining a certificate of registration from the SEBI. The national exchanges in which commodity derivatives are currently traded in India are: Multi Commodity Exchange of India Limited (MCX), National Commodity & Derivatives Exchange Limited (NCDEX), Indian Commodity Exchange Limited (ICEX), National Stock Exchange of India Limited (NSE) and BSE Limited (Bombay Stock Exchange).

Commodities that are traded on Indian exchanges can be grouped into four major categories: Bullion, Metals, Energy and Agriculture. An indicative list of commodities traded in the Indian derivatives exchanges are:

Bullion: Gold, Silver, Diamond

Metals: Aluminium, Brass, Copper, Lead, Nickel, Steel, Zinc

Energy: Crude Oil, Natural Gas

Agriculture: Barley, Chana, Maize, Wheat, Guar Seed, Guar Gum, Isabgul Seed, Pepper, Cardamom, Coriander, Jeera, Turmeric, Sugar, Copra, Rubber, Jute, Cotton, Cotton Seed Oilcake, Castor Seed Oil, Mentha Oil, Soy Bean, Soy Bean Oil, Refined Soy Oil, Degummed Soy Oil, Rape/Mustard Seed, Crude Palm Oil, RBD Palmolein.

Commodity options in India devolve into Commodity Futures. That means, buyers of commodity options would get a right to have a position in underlying commodity futures rather than getting a right to outrightly buy/sell the actual commodity on expiry. Therefore, the underlying for a commodity options contract is a commodity futures contract of a specified month traded on the corresponding exchange. This is one example where a derivative has another derivative as underlying. Such an instrument is also called Exotic Option in this case.

Currency derivatives

Unlike any other traded asset class, the most significant part of the currency market is the concept of currency pairs. In the currency market, while initiating a trade you buy one currency and sell another currency. Every trade in FX market is a currency pair: one currency is bought with or sold for another currency. In case of currency derivatives, the underlying is an exchange rate. Currency risks could be managed through any of the currency derivatives i.e. forwards, futures, swaps and options. Each of these instruments has its role in managing the currency risk.

A currency future, also known as FX future, is a futures contract to exchange one currency for another at a specified date in the future at a price (exchange rate) that is fixed on the purchase date. Currency Options are contracts that grant the buyer of the option the right, but not the obligation, to buy or sell underlying currency at a specified exchange rate during a specified period of time. For this right, the buyer pays a premium to the seller of the option.

Currency Derivatives are available on four currency pairs viz. US Dollars (USD), Euro (EUR), Great Britain Pound (GBP) and Japanese Yen (JPY). Cross Currency Futures & Options contracts on EUR-USD, GBP-USD and USD-JPY are also available for trading in Currency Derivatives segment.

10.8 Derivative markets, products and strategies

Derivative trading was introduced in India in June 2000 and turnover has increased dramatically since then. India's equity derivative markets are thus among the largest in the world.

Pricing a Futures Contract

The pricing of a futures contract is based on the simple principle of carry cost. Suppose a stock is selling for Rs.100 in the spot equity markets today. We can buy this stock in the spot market and the price to be paid is the spot price (S).

There is another market, namely the equity futures market, where it is possible to trade in the same stock, for delivery on a future date. Let us say the stock future is selling for Rs. 120, delivery date being 20 days away. This is the futures price of the same stock (F).

The difference between the two prices is nothing but the interest rate on the money for those 20 days. Therefore the relationship between the two can be shown as:

120 = 100 + (interest for 20 days)

F = S + carry costs

The logic for such pricing is that given the same amount of information about the stock at a point in time, there is no arbitrage profit to be made between the spot and the futures market. The law of one price stipulates that if the same good is traded in two markets, the price has to be the same, unless there are costs involved in buying in one market and selling in another. The presence of these costs makes it impossible to make money by buying the same good in one market and selling it at another.

If the spot price is Rs. 100 and the futures price is Rs. 120, traders would like to buy spot and sell futures, to take advantage of the difference in price. However, if the cost of borrowing funds to buy spot and repay the borrowing after selling the futures, is equal to Rs. 20, there is no profit in the trade.

The difference between the spot and the futures price thus adjusts to the market rates of interest, for the period between spot and futures delivery. This interest is called as 'carry cost'.

The carry cost is not a risk-free rate or a fixed interest rate, but a market-driven rate that is driven by the risk assumed by the lenders to the trading position.

The difference between the spot price and the futures price is called basis. If futures trade at a level higher than spot prices, the basis is positive. The gains to the trader will be equal to the difference between the two prices. If the trader’s cost of carry is different from the basis, there is arbitrage profit to be made on the basis.

For example, assume that spot Nifty is 8,900 and near month future expiring 20 days from today is at 9,000. The implicit carry cost in this transaction is:

(9,000 – 8,900)/8,900 * 365/20

= 20.5%

To a trader who can obtain funds at a rate lower than 20.5%, there is a profit to be made by buying Nifty spot (i.e., buying the underlying constituents of Nifty in the same ratio as they make-up the Nifty index) and selling the futures. If the basis is negative (futures are lower than spot), money is made by buying the futures and selling spot.

After the trade, the spot and future prices are bound to change. However, given that opposite positions have been locked into, that net position will remain unaltered on settlement date.

On settlement date, both the spot and the futures are at the same level. This is known as the spot-future convergence. The carry cost of buying spot and selling futures on settlement date is zero, since settlement is on the same day as the contract expiration day. Therefore, on expiration day, spot and future prices of the same underlying is identical.

Spot-Future Arbitrage

Sometimes the spot price and the futures price for the same stock vary much more than what is justified by a normal rate of interest (cost of carry). There is then the scope to create equal but opposite positions in the cash and futures market (arbitrage) using lower cost funds.

For example, on March 3rd, 2017, stock XYZ was selling in the cash market at Rs. 3,984 and on the same date, futures (delivery March30th) were selling at Rs. 4,032.

Buy XYZ in the cash market	Rs. 3,984
Sell XYZ futures	Rs. 4,032
Difference in prices	Rs. 48
Profit from the transaction:	(48/3,984) *365/24
	= 18.32% p.a.

On the settlement date, the contract will expire and be closed out automatically at the settlement price. Since opposite positions have been taken in the two markets, the profit is locked in provided both the positions are closed at the same price, which is possible given the spot-future convergence at settlement. Arbitrage funds work on this principle.

Option Pay-offs

An option contract features an asymmetric pay-off. The upside and the downside are not uniform.

The payoff profile of various option positions is explained below.

Long on option

Buyer of an option is said to be "long on option". As described above, a person would have a right and no obligation with regard to buying/ selling the underlying asset in the contract. When you are long on equity option contract:

You have the right to exercise that option.

Your potential loss is limited to the premium amount you paid for buying the option.

Profit would depend on the level of underlying asset price at the time of exercise/expiry of the contract.

Short on option

Seller of an option is said to be "short on option". As described above, he/she would have obligation but no right with regard to selling/buying the underlying asset in the contract. When you are short (i.e., the writer of) an equity option contract:

- Your maximum profit is the premium received.
- You can be assigned an exercised option any time during the life of option contract (for American Options only). All option writers should be aware that assignment is a distinct possibility.
- Your potential loss is theoretically unlimited as defined below.

Hedging Using Futures

The investor looks up the markets to find the price of the index futures (Nifty 50 futures, S&P BSE Sensex futures or SX40 futures) contracts expiring one year from today and sells enough lots to lead to a delivery position of Rs. 11.5 lakhs (after factoring in 15% return on his portfolio of 10 lakh over the next year, he hedges his portfolio for Rs.11.5 lakh). He finds a buyer who is willing to pay that price. The investor has entered into a contract to sell the index one year later, at a value of Rs. 11.5 lakhs. This is a hedge that uses a futures contract.

The index equity portfolio that the investor holds is his long position. It is already invested and it has a value that changes as the index changes in value over time. The future is the derivative position on the index.

How does the derivative modify the profit or loss to the investor?

Consider the portfolio position of Rs. 10 lakhs. A year from now, there are three possibilities: The value goes up, goes down or remains the same. Assume the following:

The index goes up, leading to a portfolio value of Rs. 15 lakhs.
The index remains the same, leading to a portfolio value of Rs. 10 lakhs.
The index goes down, leading to a portfolio value of Rs. 5 lakhs.

- **Payoff Structure**

What happens a year later, when the investor also holds derivative positions as we had proposed earlier?

Sale of index Futures at Rs. 11.5 Lakhs (Futures Position)

The investor had already decided the price at which he will sell index, a year earlier. Therefore this contract will be executed at the current market price, and the difference in cash will be paid to the investor. The profit or loss will be as follows:

* If the index goes up, leading to a portfolio value of Rs. 15 lakhs
    - The futures contract will result in a loss as the investor will sell at Rs. 11.5 lakhs, while the market is at Rs. 15 lakhs leading to a loss of Rs. 3.5 lakhs.
* If the index remains the same, leading to a portfolio value of Rs. 10 lakhs.
    - The futures contract will result in a profit, as the investor will sell at Rs. 11.5 lakhs, leading to a profit of Rs. 1.5 lakhs.
* The index goes down, leading to a portfolio value of Rs. 5 lakhs.
    - The futures contract will result in a profit as the investor will sell at Rs. 11.5 lakhs, while the market is at Rs.5 lakhs, leading to a profit of Rs. 6.5 lakhs.

Let's see what the net position of the investor is if he sold the index at Rs. 11.5 lakhs in the futures market while his underlying cash position was Rs. 10 lakhs.

Market Price	**Portfolio Position**	**Short Futures Position**	**Net Position**
Rs. 10 lakhs	● Sell at Rs.10 lakhs ● No profit or loss	● Sell at Rs. 11.5 lakhs ● Buy at Rs. 10 lakhs ● Profit Rs. 1.5 lakhs	● Rs. 11.5 lakhs ● *No profit or loss from portfolio+1.5 lakhs from futures*
Rs. 15 lakhs	● Sell at Rs.15 lakhs ● Profit Rs.5 lakhs	● Sell at Rs. 11.5 lakhs ● Buy at Rs. 15 lakhs ● Loss Rs. 3.5 lakhs	● Rs. 11.5 lakhs ● *+ Rs. 5 lakhs from portfolio* ● *- Rs. 3.5 lakhs for futures*
Rs. 5 Lakhs	● Sell at Rs. 5 lakhs ● Loss Rs. 5 lakhs	● Sell at Rs. 11.5 lakhs ● Buy at Rs. 5 lakhs ● Profit Rs. 6.5 lakhs	● Rs. 11.5 lakhs ● *- Rs 5 lakhs from portfolio* ● *+ Rs. 6.5 lakhs from futures*

When the investor sold futures at Rs. 11.5 lakhs, he ensured that he got a net amount of Rs. 11.5 lakhs from the investment, no matter how the market behaved. This is called hedging. By using a futures contract what the investor managed was to protect the value of his investments from adverse market movements.

- **Hedging Using Options**

A similar outcome, but with asymmetrical payoffs (not a uniform 11.5 lakhs net position irrespective of the market) can be achieved using options. The investor likes to benefit from a possible increase in the index. He is only worried about a possible loss if the index were to fall. In other words, he likes to participate in the upside, but seeks protection from any downside risk. He can buy a put option on the index for an exercise price of Rs. 11.5 lakhs, exercisable in a year. He pays a premium for this position.

The investor may or may not sell the index a year from now. It depends on the value of the index in the market. If the value is more than Rs. 11.5 lakhs, he will not exercise the option to sell, because the market price is more than what he would get if he sold. If the value is less than Rs. 11.5 lakhs, he will exercise the option and sell the index at Rs. 11.5 lakhs. In this case, he gets Rs. 11.5 lakhs even if the market falls.

Market Price	**Portfolio Position**	**Long Put Option Position**	**Net Position**
Rs. 10 lakhs	● Sell at Rs. 10 lakhs ● No profit or loss	● Option is exercised as it is in the money ● Profit of Rs.1.5 lakh	● Rs.11.5 lakhs ● *No profit or loss from portfolio* ● *Profit of Rs. 1.5 lakhs from put option exercised* ● *Less cost of premium on option position*
Rs. 15 lakhs	● Sell at Rs. 15 lakhs ● Profit Rs. 5 lakhs	● Option expires unexercised as it is out of the money	● Rs. 15 lakh ● *Profit of Rs. 5 lakhs from portfolio* ● *Less cost of option premium*

Rs. 5 Lakhs	● Sell at Rs. 5 lakhs ● Loss Rs. 5 lakhs	● Exercise the option to sell at Rs. 11.5 lakhs ● Profit Rs. 6.5 lakhs	● Rs. 11.5 lakhs ● *Loss of Rs. 5 lakhs on portfolio position* ● *Profit of Rs. 6.5 lakhs less premium from option position*

- **Futures vs. Options in Hedging**

The following differences are noticed in using futures or options to hedge the position:

a. The option premium reduces the net position value, even if the market price did not move. Option comes at a specific cost by way of premium.
b. The loss is limited to the premium amount if the underlying moves against the option position (markets moving up when the investor has bought a put option).
c. The futures hedge keeps the net position value constant, irrespective of market movement. What is lost in portfolio value is gained in futures and vice versa.
d. In the options hedge, the gain if the market price moved up depends on how much the portfolio position is participating in the upside, after accounting for the option premium.
e. The gain if the market price moved down depends on the option position paying off on the downside after accounting for the option premium.

The payoff in a futures position is the same (symmetrical) whether the market price moves up or down. The payoff in the options position is different (asymmetrical) for up and down markets and depends on how much was the movement in prices, and what was the premium paid.

Module 3 Sample Questions:

1. Equity shareholders get the _____ claim on the assets of the company.

a. First
b. Second
c. Last
d. Third

2. _____ is a route of taking exposure to real estate with a limited investment.

a. REIT
b. Flat
c. Apartment
d. Office space

3. One of the features of art is that there are no _____.

a. Art funds
b. Sellers
c. Art experts
d. Standard products

4. Sector specific risk can be reduced through the process of _____.

a. Remaining in the most popular sector
b. Changing sectors as trends change
c. Diversification across sectors
d. Including both large and mid caps from the sector

5.You want to sell 10,000 shares of a company but you find that the volume on a particular day is just 800 shares. This gives rise to _____

a. Market risk
b. Sector specific risk
c. Transactional risk
d. Liquidity risk

6.The P/E ratio takes into consideration the existing or expected _____

a. Environmental factors
b. Earnings per share
c. Enterprise value
d. Equity share capital

7. A spike in inflation resulting in a rise in interest rate in the market will lead to _____

a. Fall in bond prices
b. Rise in bond prices
c. Stable bond prices
d. Unresponsive bond prices

8. A fixed deposit maturing in a year's time with the money to be invested will face _____

a. Call risk
b. Credit risk
c. Volatility risk
d. **Reinvestment risk**

9. A derivative is a contract whose value is derived from the value of _____

a. Itself
b. Traded prices
c. Some other asset
d. Demand

10. Which of the following is not a purpose for which derivatives are used:

a. Long term investing
b. Arbitrage
c. Hedging
d. Speculation

MODULE 4: INVESTMENT THROUGH MANAGED PORTFOLIO

Chapter 11: Mutual Funds

Chapter 12: Portfolio Manager

Chapter 13: Overview of Alternative Investment Funds (AIFs)

CHAPTER 11: MUTUAL FUNDS

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Know about Mutual funds and its features
- Concepts and Terms Related to Mutual Funds
- Features of and differences between Open-ended schemes, Close-ended schemes, Interval schemes and Exchange Traded Funds (ETFs)
- Regulatory Framework of Mutual Funds
- Mutual Fund Products
- Mutual Fund Investment Options
- Triggers in Mutual Fund Investment
- Process associated with Investment in Mutual Funds
- Systematic transactions
- Investment Modes

11.1 Meaning and features of Mutual Fund

Mutual funds are investment products available to investors through which they can invest in an asset class of their choice such as equity, debt, gold or real estate. Investors who may not want to invest directly in financial markets may instead get exposure to the same securities through a mutual fund. Similarly, investors can diversify their portfolio holdings even with small amounts, by investing in gold and real estate through mutual funds.

There are multiple entities involved in the activities of a mutual fund business. All these entities are regulated by SEBI for their eligibility in terms of experience and financial soundness, range of responsibilities and accountability. A mutual fund is set up by a sponsor, who is its promoter. Trustees are appointed to take care of the interests of the investors in the various schemes launched by the mutual fund. An asset management company (AMC) is appointed to manage the activities related to launching a scheme, marketing it, collecting funds, investing the funds according to the scheme's investment objectives and enabling investor transactions. In this, they are assisted by other entities such as banks, registrars to an issue and transfer agents, investor service centres (ISC), brokers or members of stock exchanges, custodians, among others.

The AMC creates a product with the approval of the trustees and SEBI. The mutual fund invites subscription from investors by issuing an offer document that gives all details of the proposed fund, including its investment objective, investment pattern in different asset classes to reflect the objective, the strategy of the fund manager to manage the fund, the costs and fees associated with managing the fund and all other information prescribed by SEBI as essential

for an investor to make an investment decision. This is the New Fund Offer (NFO) of the scheme.

The investor will assess the suitability of the fund for their investment needs and make an investment decision. The application form along with the abridged offer document called the Key Information Memorandum (KIM) is available with the AMC, investor service centres and other distribution points, the details of which are available in the KIM. The activities related to maintaining investor records and investment details and communicating with the investors is done by the R&T agent of the scheme.

The funds collected from multiple investors are invested in a portfolio of securities or assets that reflect the stated investment objective of the fund. This portfolio is owned only by the investors who have contributed the funds, in proportion to their contribution.

11.2 Concepts and Terms Related to Mutual Funds

11.2.1 Investment Objective

An investor's decision to invest in a mutual fund scheme should be determined by the suitability of the scheme to their needs. A mutual fund scheme is defined by its investment objective. The investment objective states what the scheme intends to achieve. The asset class that the fund will invest in, the type of securities that will be selected and the way the fund will be managed will depend upon the investment objective. The features of the portfolio in terms of the level and type of returns and the risks involved in the fund will also depend upon its investment objective.

11.2.2 Units

Just as an investor's investments in equity of a company is represented in number of shares, or investments in debt is represented in number of bonds or debentures, each investor's holding in a mutual fund is represented in terms of units that is derived from the amount invested. Each unit represents one share of the fund. For example, A &B invests in GTX Equity fund when the price of each unit is Rs.10. A invests Rs.5,000 and B Rs.10,000. The number of units allotted is calculated as amount invested/price per units.

A : Rs.5,000/Rs.10 = 500 units

B : Rs.10,000/Rs.10= 1000 units

The units are first offered to the investors at the time the scheme is launched through a new fund offer (NFO). Subsequently, depending upon the structure of the scheme, the fund may or may not issue fresh units to investors. Units can be allotted in decimals too which ensures that the investor gets value for their entire investment.

11.2.3 Net Assets

The assets of a mutual fund scheme are the current value of the portfolio of securities held by it. There may be some current assets such as cash and receivables. Together they form the total assets of the scheme. From this, the fees and expenses related to managing the fund such as fund manager's fees, charges paid to constituents, regulatory expenses on advertisements and such are deducted to arrive at the net assets of the scheme. This belongs to the investors in the fund who have been allotted units and no other entity has a claim to it.

The Net assets of a scheme will go up whenever investors buy additional units in the scheme and bring in funds, or when the value of the investments held in the portfolio goes up, or when the securities held in the portfolio earns income such as dividends from shares or interest on bonds held. Similarly, the net assets of the scheme will go down if investors take out their investments from the scheme by redeeming their units or if the securities held in the portfolio fall in value or when expenses related to the scheme are accounted for. The net assets of the scheme are therefore not a fixed value but keep changing with a change in any of the above factors.

11.2.4 Net Asset Value (NAV)

The net asset per unit of a scheme is calculated as Net assets/Number of outstanding units of the scheme. This is the Net asset value (NAV). The NAV of the scheme will change with every change in the Net Assets of the scheme. All investor transactions are conducted at the current NAV of the scheme.

For example, NUM Equity Fund collects Rs.100,000 from investors and allots 10,000 units. The funds are invested in a portfolio of securities. Consider the table below.

	Net Assets (Rs) A	Units Outstanding B	NAV(Rs) A/B	Comments
	100000	10000	10	
Value of portfolio goes up	120000	10000	12	An increase in net assets has led to a rise in NAV.
Investor redeems 1000 units when NAV is Rs.12	108000	9000	12	No change in NAV.A decrease in net assets because of investor redeeming is offset by a decrease in the outstanding units.
Value of portfolio falls	100000	9000	11.11	A decrease in net assets has led to a fall in NAV
Investor buys 1000 units when NAV is Rs.11.11	111110	1000	11.11	No change in NAV since the addition to net assets brought in by the investor is offset by an increase in units

The value of a mutual fund investor's investment is calculated using the NAV. If an investor has invested 1,000 units in the scheme at Rs.10, the value of the investment is Rs.10,000. When the NAV goes up to Rs.12, the value of the investment also goes up to Rs.12,000 and when the NAV goes down to Rs.11.11 the value of the investment comes down to Rs.11,110.

A redemption or additional investment will not directly affect the NAV since the transactions are conducted at the NAV. In the above example, consider the impact if the investor buying 1,000 units when the NAV is Rs.11.11, is allotted units at the face value of Rs.10. The investor will bring in Rs.10,000 (100* Rs.10). The net assets will go up by this Rs.10,000 to Rs.110,000. The number of units outstanding will go up by 1,000 to 10,000 units. The NAV post this transaction will be Rs.11. The NAV of the scheme has come down because the units were allotted at a price different from the NAV and will have an impact on all the investors in the scheme. The NAV of a scheme (other than liquid schemes where NAV is calculated on a daily basis) is calculated every business day so that investors can value their portfolio holdings and conduct transactions on this basis.

11.2.5 Cut off timings

The time when a request for a purchase or redemption or switch of units is received by a mutual fund will determine when it is processed. This is a standard that is followed across all mutual funds so that there is equity and fairness in allocation and that no investors gets a preferential treatment over others. The NAV that will be applicable would thus be determined by the time when the request is received by the mutual fund.

11.2.6 Mark to Market

The current value of the portfolio forms the base of the net assets of the scheme and therefore the NAV. It means that if the portfolio was to be liquidated, then this would be the value that would be realised and distributed to the investors. Therefore, the portfolio has to reflect the current market price of the securities held. This process of valuing the portfolio on a daily basis at current value is called marking to market. The price is taken from the market where the security is traded. If the security is not traded or the price available is stale, then SEBI has laid down the method for valuing such securities.

11.3 Features of and differences between Open-ended schemes, Close-ended schemes, Interval schemes and Exchange Traded Funds (ETFs)

11.3.1 Open- ended and Closed-end Schemes

Mutual fund schemes can be structured as open-ended or closed-end schemes. An open-ended scheme allows investors to invest in additional units and redeem investment continuously at current NAV. The scheme is for perpetuity unless the investors decide to wind up the scheme. The unit capital of the scheme is not fixed but changes with every investment or redemption made by investors.

A closed-end scheme is for a fixed period or tenor. It offers units to investors only during the new fund offer (NFO). The scheme is closed for transactions with investors after this. The units allotted are redeemed by the fund at the prevalent NAV when the term is over and the fund ceases to exist after this. In the interim, if investors want to exit their investment they can do so by selling the units to other investors on a stock exchange where they are mandatorily listed. The unit capital of a closed end fund does not change over the life of the scheme since transactions between investors on the stock exchange does not affect the fund.

11.3.2. Interval funds

Interval funds are a variant of closed end funds which become open-ended during specified periods. During these periods investors can purchase and redeem units like in an open-ended fund. The specified transaction periods are for a minimum period of two days and there must be a minimum gap of 15 days between two transaction periods. Like closed-ended funds, these funds have to be listed on a stock exchange.

11.3.3 Exchange Traded Funds

Exchange Traded Funds (ETFs) are mutual funds that have the features of a mutual fund but can be traded. Like a stock they are listed on the stock exchange so they can be traded all day long. Beneath this feature is the fact that the ETF is a mutual fund that has its value derived from the value of the holdings in its portfolio. ETFs usually track some index when it comes to equity oriented funds while they can also track the price of a commodity like gold. Instead of a single NAV for a day that the investor gets in a normal open ended fund there are multiple prices they can get in an ETF. In an ETF it is actually investors trading with each other while in case of an open ended fund it is the investor on one side of the transaction and the mutual fund on the other side.

11.4 Regulatory Framework of Mutual Funds

The Securities and Exchange Board of India (SEBI) is the primary regulator of mutual funds in India. SEBI's Regulations called the SEBI (Mutual Funds) Regulations, 1996, along with amendments made from time to time, govern the setting up a mutual fund and its structure, launching a scheme, creating and managing the portfolio, investor protection, investor services and roles and responsibilities of the constituents.

Apart from SEBI, other regulators such as the RBI are also involved for specific areas which involve foreign exchange transactions such as investments in international markets and investments by foreign nationals and the role of the banking system in the mutual funds industry in India.

The Association of Mutual Funds in India (AMFI) is the industry body that oversees the functioning of the industry and recommends best practices to be followed by the industry members. It also represents the industry's requirements to the regulator, government and other stakeholders.

11.4.1 Investor Service Standards

An investor has multiple financial and non-financial transactions with a mutual fund. SEBI has prescribed the turnaround time for the services given to investors. The regulations also define the type of information that mutual funds must mandatorily provide investors and their periodicity. Timelines for allotment of units in NFOs, scheme opening for continuous transactions, confirmation of unit allotment etc. have been defined by SEBI.

11.5 Mutual Fund Products

SEBI has defined the process of categorizing open-end mutual fund products broadly as equity schemes, debt schemes, hybrid schemes, solution oriented schemes and other schemes.

Open-ended schemes are classified based on the asset class/sub-asset class, the strategy adopted to select and manage the schemes or the solutions offered by the scheme.

Only one scheme per category is permitted for each mutual fund. The exceptions are Index funds and Exchange Traded Funds (ETF) tracking different indices, Fund of Funds with different underlying schemes and sectoral/thematic funds investing in different sectors or themes.

11.5.1 Equity Funds

Equity funds invest in a portfolio of equity shares and equity related instruments. Since the portfolio comprises of the equity instruments, the risk and return from the scheme will be similar to directly investing in equity markets. Equity funds can be further categorized on the basis of the strategy adopted by the fund managers to manage the fund.

a) Passive & Active Funds

Passive funds invest the money in the companies represented in an index such as Nifty or Sensex in the same proportion as the company's representation in the index. There is no selection of securities or investment decisions taken by the fund manager as to when to invest or how much to invest in each security. Active funds select stocks for the portfolio based on a strategy that is intended to generate higher return than the index. Active funds can be further categorized based on the way the securities for the portfolio are selected.

b) Diversified Equity funds

Diversified equity funds invest across segments, sectors and sizes of companies. Since the portfolio takes exposure to different stocks across sectors and market segments, there is a lower risk in such funds of poor performance of few stocks or sectors. Some equity diversified funds can also be closed ended schemes which are in operation for a specific time period. The assets are redeemed after the time period of the scheme is over and returned to the investors.

c) Based on market capitalisation

Equity funds may focus on a particular size of companies to benefit from the features of such companies.

Equity stocks may be segmented based on market capitalization as large- cap, mid-cap and small-cap stocks. The open-end equity schemes (based on market capitalisation) are classified by SEBI as follows:

- Large cap funds invest in stocks of large, liquid blue-chip companies with stable performance and returns. Large-cap companies are those ranked 1 to 100th in terms of full market capitalization in the list of stocks prepared by AMFI. To be classified as

a large cap fund, at least 80% of the total assets should be invested in such large cap companies.

- Mid-cap funds invest in mid-cap companies that have the potential for faster growth and higher returns. These companies are more susceptible to economic downturns and therefore, evaluating and selecting the right companies becomes important. Funds that invest in such companies have a higher risk of the companies selected not being able to withstand the slowdown in revenues and profits. Similarly, the price of the stocks also fall more when markets fall. Mid-cap companies are those ranked 101st to 250th in terms of full market capitalization in the list of stocks prepared by AMFI. To be classified as a mid-cap fund, at least 65% of the total assets should be invested in such companies.
- Large and Mid-cap funds invest in equity-related securities of a combination of large and mid-cap companies. To be classified as a large and mid-cap fund, a minimum of 35% of the total assets should be invested in large cap companies and a minimum of 35% in mid-cap companies.
- Small-cap funds invest in companies with small market capitalisation with intent of benefitting from the higher gains in the price of stocks. The risks are also higher. Companies ranked from 251 onwards in terms of total market capitalization in the list of stocks prepared by AMFI are defined as small-cap companies. To be classified as a small cap fund, at least 65% of the total assets should be invested in such companies.
- Multi cap funds invest across large, mid and small cap companies. Earlier to be classified as a multi cap fund at least 65% of the total assets should be invested in equity related instruments of such companies. At least 75% of the assets to be invested in equity related instruments with a minimum of 25 % in large caps, 25% in mid-caps and 25% in small caps.
- In Flexicap funds there is no minimum investment limits across market caps and the funds are free to invest according to their requirements. Overall at least 65% of the corpus has to be invested in equities.

d) Based on Sectors and Industries

Sector funds invest in companies that belong to a particular sector such as technology or banking. The risk is higher because of lesser diversification since such funds are concentrated in a particular sector. Sector performances tend to be cyclical and the return from investing in a sector is never the same across time. For example, Auto sector, does well, when the economy is doing well and more cars, trucks and bikes are bought. It does not do well, when demand goes down. Banking sector does well, when interest rates are low in the market; they don't do well when rates are high. Investments in sector funds have to be timed well. Investment in sector funds should be made when the fund manager expects the related sectors, to do well. They could out-perform the market, if the call on sector performance plays

out. In case it doesn't, such funds could underperform the broad market. An open end sector fund should invest at least 80% of the total assets in the equity and equity-related instruments of the identified sector. XYZ Banking Fund, ABC Magnum Sector Funds are examples of sector funds.

e) Based on Themes

Theme-based funds invest in multiple sectors and stocks that form part of a theme. For example, if the theme is infrastructure then companies in the infrastructure sector, construction, cement, banking and logistics will all form part of the theme and be eligible for inclusion in the portfolio. They are more diversified than sector funds but still have a high concentration risks. An open-end thematic fund should invest at least 80% of the total assets in the equity and equity-related instruments of the identified sector.

Under Thematic Category of mutual funds, any scheme under the ESG category can be launched with one of the following strategies -a.Exclusion b.Integration c.Best-in-class & Positive Screening d.Impact investing e.Sustainable objectivesf.Transition or transition related investments.

f) Based on Investment Style

The strategy adopted by the fund manager to create and manage the fund's portfolio is a basis for categorizing funds. The investment style and strategy adopted can significantly impact the nature of risk and return in the portfolio. Passive fund invests only in the securities included in an index and does not feature selection risks. However, the returns from the fund will also be only in line with the market index. On the other hand, active funds use selection and timing strategies to create portfolios that are expected to generate returns better than the market returns. The risk is higher too since the fund's performance will be affected negatively if the selected stocks do not perform as expected. The open-end equity funds (based on strategies and styles for selection of securities) are classified by SEBI as follows:

- Value Funds seek to identify companies that are trading at prices below their inherent value with the expectation of benefiting from an increase in price as the market recognizes the true value. Such funds have lower risk. They require a longer investment horizon for the strategy to play out. At least 65% of the total assets of the value fund should be invested in equity and equity-related instruments.
- Contra Funds adopt a contrarian investment strategy. They seek to identify under-valued stocks and stocks that are under-performing due to transitory factors. The fund invests in such stocks at valuations that are seen as cheap relative to their long-term fundamental values. Mutual fund houses can either offer a contra fund or a value fund.
- Dividend yield funds invest in stocks that have a high dividend yield. These stocks pay a large portion of their profits as dividend and these appeals to investors looking for

income from their equity investments. The companies typically have high level of stable earnings but do not have much potential for growth or expansion. They therefore pay high dividends while the stock prices remain stable. The stocks are bought for their dividend pay-out rather than for the potential for capital appreciation. At least 65% of the total assets of the dividend yield fund should be invested in equity and equity-related instruments.

- Focussed funds hold a concentrated portfolio of securities. SEBI's regulation limits the number of stocks in the portfolio to 30. The risk in such funds may be higher because the extent of diversification in the portfolio is lower.

g) Equity Linked Savings Schemes (ELSS)

ELSS is a special type of open-end equity fund scheme which provides the investor with the tax deduction benefits under section 80C of the Income Tax Act up to a limit of Rs.1,50,000 per year. An ELSS must hold at least 80% of the portfolio in equity securities. The investment made by the investor is locked-in for a period of three years during which it cannot be redeemed, transferred or pledged.

11.5.2 Debt Funds

Debt funds invest in a portfolio of debt instruments such as government bonds, corporate bonds and money market securities. Debt instruments have a pre-defined coupon or income stream. Bonds issued by the government have no risk of default and thus pay the lowest coupon income relative to other bonds of same tenor. These bonds are also the most liquid in the debt markets. Corporate bonds carry a credit risk or risk of default and pay a higher coupon to compensate for this risk. Fund managers have to manage credit risk, i.e. the risk of default by the issuers of the debt instrument in paying the periodic interest or repayment of principal. The credit rating of the instrument is used to assess the credit risk and higher the credit rating, lower is the perceived risk of default. Government and corporate borrowers raise funds by issuing short and long-term securities depending upon their need for funds. Debt instruments may also see a change in prices or values in response to changes in interest rates in the market. The degree of change depends upon features of the instrument such as its tenor and instruments with longer tenor exhibit a higher sensitivity to interest rate changes. Fund managers make choices on higher credit risk for higher coupon income and higher interest rate risk for higher capital gains depending upon the nature of the fund and their evaluation of the issuer and macro-economic factors.

Debt funds can be categorized based on the type of securities they hold in the portfolio, in terms of tenor and credit risk.

Short Term Debt Funds aim to provide superior liquidity and safety of the principal amount in the investments. It does this by keeping interest rate and credit risk low by investing in very

liquid, short maturity fixed income securities of highest credit quality. The objective is to generate a steady return, mostly coming from accrual of interest income, with minimal NAV volatility. The open-end debt schemes (investing in securities with maturity ranging from one day to one year) are classified by SEBI as follows:

- **Overnight Funds** invest in securities with a maturity of one day.
- **Liquid Funds** invest in debt securities with less than 91 days to maturity.
- **Ultra Short Duration Funds** invest in debt and money market instruments such that the Macaulay duration of the portfolio is between 3 months and 6 months.
- **Low Duration Fund** invest in debt and money markets instruments such that the Macaulay duration of the fund is between 6 months to 12 months.
- **Money Market Fund** invest in money market instruments having maturity up to one year.

The next category of debt funds combines short term debt securities with a small allocation to longer term debt securities. Short term plans earn interest from short term securities and interest and capital gains from long term securities. Fund managers take a call on the exposure to long term securities based on their view for interest rate movements. If interest rates are expected to go down, these funds increase their exposure to long term securities to benefit from the resultant increase in prices. The volatility in returns will depend upon the extent of long-term debt securities in the portfolio.

Short term funds may provide a higher level of return than liquid funds and ultra-short term funds, but will be exposed to higher mark to market risks. Open-end debt schemes investing in the above stated manner are categorised by SEBI in the following manner:

- **Short duration funds** invest in debt and money market instruments such that the Macaulay duration of the fund is between 1 year - 3 years.
- **Medium duration fund** invests in debt and money market instruments such that the Macaulay duration of the fund is between 3 years- 4 years.
- **Medium to Long duration fund** invests in debt and money market instruments such that the Macaulay duration of the fund is between 4 years- 7 years.

If the fund manager has a view on interest rates in the event of anticipated adverse situations then the portfolio's Macaulay duration may be reduced to one year for Medium and Medium to Long duration funds.

Long Term Debt Funds

Long term debt funds are structured to generate total returns made up of both interest income and capital appreciation from the securities held. Since the price of securities may go

up or down resulting in gains or losses, the total returns tend to be more volatile than short term debt funds that focus primarily on earning coupon income.

The value of bond held in a long term portfolio, changes with change in interest rates. Since market interest rates and value of a bond are inversely related, any fall in the interest rates causes a mark-to-market gain in a bond portfolio and vice versa.

Therefore in a falling interest rate scenario, when investors in most fixed income products face a reduced rate of interest income, long term debt funds post higher returns. This is because the interest income is augmented by capital gains and result in a higher total return.

The extent of change in market prices of debt securities is linked to the average tenor of the portfolio - higher the tenor, greater the impact of changes in interest rates. Long term debt funds choose the tenor of the instruments for the portfolio, and manage the average maturity of the portfolio, based on scheme objectives and their own interest rate views.

Corporate debt securities enable higher interest income due to the credit risk associated with them. In the corporate bond market, an income fund tries to manage interest income from buying bonds at a spread to Government securities and manages capital gains by taking a view on the interest rate movements and credit spread. Thus, income funds feature both interest rate risk and credit risk. Open-end debt schemes investing in the above stated manner are categorised by SEBI in the following manner:

- Long Duration fund invests in debt and money market securities such that the Macaulay duration of the portfolio is greater than 7 years.
- **Corporate bond fund** invests at least 80% of total assets in corporate debt instruments with rating of AA+ and above.
- **Credit Risk Funds** invest a minimum of 65% of total assets in corporate debt instruments rated AA and below.
- **Banking and PSU fund** invests a minimum of 80% of total assets in debt instruments of banks, Public Financial Institutions and Public Sector Undertakings and municipal bonds.
- **Open-end gilt funds** invest at least 80% of the total assets in government securities across maturities. There is no risk of default and liquidity is considerably higher in case of government securities. However, prices of government securities are very sensitive to interest rate changes. Long term gilt funds have a longer maturity and therefore, higher interest rate risk as compared to short term gilt funds. Gilt funds are popular with investors mandated to invest in G-secs such as provident funds or PF trusts.
- **Gilt fund** with 10 year constant duration invest a minimum of 80% of total assets in government securities such that the Macaulay duration of the portfolio is equal to 10 years.

- **Dynamic bond funds** seek flexible and dynamic management of interest rate risk and credit risk. That is, these funds have no restrictions with respect to security types or maturity profiles that they invest in. Dynamic or flexible debt funds do not focus on long or short term segment of the yield curve, but move across the yield curve depending on where they see the opportunity for exploiting changes in yields duration of these portfolios are not fixed, but are dynamically managed. If the manager believes that interest rates could move up, the duration of the portfolio is reduced and vice versa. According to SEBI Categorisation, an open-end dynamic bond fund invests across durations.

The open-end floating rate funds invest a minimum of 65% of total assets in floating rate debt instruments. In these instruments the coupon is not fixed for the term of the instrument but is periodically revised with reference to the market rate. If interest rates in the markets go up, the coupon for these instruments are also revised upwards and vice versa. The reset period is defined when the bond is issued, say every 6 months, as also the market benchmark which will be referred to determine current rates. Since the coupon of the bond will be in line with the market rates, there is low interest rate risk in the bonds. These funds give the benefit of higher coupon income when interest rates are on the rise, without the risk of falling bond prices.

Fixed maturity plans (FMPs) are closed-end funds that invest in debt securities with maturities that match the term of the scheme. The debt securities are redeemed on maturity and paid to investors. FMPs are issued for various maturity periods ranging from 3 months to 5 years.

Mutual fund companies typically keep FMPs in the pipeline, issuing one after another, particularly depending upon demand from corporate investors in the market. The return of an FMP depends on the yield it earns on the underlying securities. The investments may be spread across various issuers, but the tenor is matched with the maturity of the plan. An FMP structure eliminates the interest rate risk or price risk for investors if the fund is held passively until maturity. Therefore, even if the price of bonds held in the portfolio moves up or down, as long as the fund receives the interest pay-outs and the original investment on maturity, the FMP does not suffer significant risks. This makes FMPs the preferred investment in a rising interest rate environment, as investors can lock into high yields.

11.5.3 Hybrid Funds

Hybrid funds invest in a combination of debt and equity securities. The allocation to each of these asset classes will depend upon the investment objective of the scheme. The risk and return in the scheme will depend upon the allocation to equity and debt and how they are managed. A higher allocation to equity instruments will increase the risk and the expected

returns from the portfolio. Similarly, if the debt instruments held are short term in nature for generating income, then the extent of risk is lower than if the portfolio holds long-term debt instruments that show greater volatility in prices. SEBI has classified open-end hybrid funds as follows:

- **Conservative hybrid funds** invest minimum of 75% to 90% in a debt portfolio and 10% to 25% of total assets in equity and equity-related instruments. The debt component is conservatively managed with the focus on generating regular income, which is generally paid out in the form of periodic dividend. The credit risk and interest rate risk are taken care of by investing into liquid, high credit rated and short term debt securities. The allocation to equity is kept low and primarily in large cap stocks, to enable a small increase in return, without the high risk of fluctuation in NAV. These attributes largely contribute accrual income in order to provide regular dividends. Debt-oriented hybrids are designed to be a low risk product for an investor. These products are suitable for traditional debt investors, who are looking for an opportunity to participate in equity markets on a conservative basis with limited equity exposure. These funds are taxed as debt funds.
- **Balanced Hybrid Fund** invests 40% to 60% of the total assets in debt instruments and 40% to 60% in equity and equity related investments.
- **Aggressive Hybrid Funds** are predominantly equity-oriented funds investing between 65% and 80% in the equity market, and invest between 20% up to 35% in debt, so that some income is also generated and there is stability to the returns from the fund.

  Mutual funds are permitted to offer either an Aggressive Hybrid fund or Balanced Hybrid fund.
- **Dynamic Asset Allocation or Balanced Advantage fund** dynamically manage investment in equity and debt instruments
- **Multi Asset Allocation Funds** invest in at least three asset classes with a minimum of 10% of the total assets invested in each of the asset classes. The fund manager takes a view on which type of investment is expected to do well and will tilt the allocation towards either asset class. Within this, foreign securities will not be treated as separate asset class.
- **Arbitrage funds** aim at taking advantage of the price differential between the cash and the derivatives markets. Arbitrage is defined as simultaneous purchase and sale of an asset to take advantage of difference in prices in different markets. The difference between the future and the spot price of the same underlying is an interest element, representing the interest on the amount invested in spot, which can be realized on a future date, when the future is sold. Funds buy in the spot market and sell in the derivatives market, to earn the interest rate differential. For example, funds may buy equity shares in the cash market at Rs. 80 and simultaneously sell in the futures market at Rs.100, to make a gain of Rs. 20. If the interest rate differential is

higher than the cost of borrowing there is a profit to be made. The price differential between spot and futures is locked-in if positions are held until expiry of the derivative cycle. On settlement date both positions are closed at the same price, to realize the difference. A completely hedged position makes these funds a low-risk investment proposition. They feature lower volatility in NAV, similar to that of a liquid fund. The fund will hold a minimum of 65% of total asset in equity and equity-related instruments.

- Equity Savings fund invest in equity, debt and arbitrage opportunities to generate returns. A minimum of 65% of total assets will be invested in equity and equity related instruments and a minimum of 10% in debt investments.

Close-end Hybrid Funds

Capital Protection Funds are closed-end hybrids funds. In these types of funds, the exposure to equity is typically taken through the equity derivatives market. The portfolio is structured such that a portion of the principal amount is invested in debt instruments so that it grows to the principal amount over the term of the fund. For example, Rs.90 may be invested for 3 years to grow into Rs.100 at maturity. This provides the protection to the capital invested. The remaining portion of the original amount is invested in equity derivatives to earn higher returns.

11.5.4 Solution Oriented Schemes: SEBI has categorised the open-end solution oriented schemes as follows:

- **Retirement Fund** are schemes oriented towards saving for retirement. Schemes will have a lock-in for at least 5 years or till retirement age whichever is earlier.
- **Children's Fund** are schemes oriented towards saving for children's needs. Schemes will have a lock-in of 5 years or till the age of majority whichever is earlier.

11.5.5 Other Funds

Other open-end funds categorised by SEBI in 'Other Fund' Category is as Fund of Fund and Exchange Traded Fund:

- A **Fund of Funds (FoF)** is a mutual fund that invests in other mutual funds. It does not hold securities in its portfolio, but other funds that have been chosen to match its investment objective. These funds can be either debt or equity, depending on the objective of the FoF. 95% of the total assets should be invested in the underlying fund. A FoF either invests in other mutual funds belonging to the same fund house or belonging to other fund

houses. FoFs belonging to various mutual fund houses are called multi-manager FoFs, because the AMCs that manage the funds are different.

A FoF looks for funds that fit into its investment objective. It specialises in analyzing funds, their performance and strategy and adds or removes funds based on such analysis. A FoF imposes additional cost on the investor, as the expenses of the underlying funds are built into their NAV.

Equity FoFs do not enjoy the tax concessions available to equity funds on dividends and long term capital gains.

- **Exchange Traded Funds (ETFs)** hold a portfolio of securities that replicates an index and are listed and traded on the stock exchange. At least 95% of the total assets should be in securities represented in the index being tracked. The return and risk on ETF is directly related to the underlying index or asset. The expense ratio of an ETF is similar to that of an index fund.

ETFs are first offered in a New Fund Offer (NFO) like all mutual funds. Units are credited to demat account of investors and ETF's are listed on the stock exchange. On-going purchase and sale is done on the stock exchange through trading portals or stock brokers. Settlement is like a stock trade, and debit or credit is done through the demat account.

ETF prices are real-time and known at the time of the transaction, unlike NAV which is computed at the end of a business day. Their value changes on a real-time basis along with changes in the underlying index.

- **Gold/Silver ETFs** have gold as the underlying asset so as to provide investment returns that, closely track the performance of domestic prices of gold/silver. Each ETF unit typically represents a proportion of weight of the metal . For every unit of ETF issued, the fund holds gold in the form of physical gold of 99.5 % purity or gold receipts/ 99.9 % purity silver bars and exchange traded commodity derivatives having silver as underlying. Gold ETFs arealso allowed to invest in the gold deposit schemes of banks to a limit of 20% of the net assets of the scheme. The custodian of the fund is responsible for the safe keeping of the assets. The actual returns from gold/silver ETF may be lower than market returns due to the effect of fund management expense charged and cash holdings.

	Physical Gold/Silver	Gold/Silver ETF
Impurity Risk	Present	Absent
Liquidity	Low	High

Transaction Cost	High	Low
STCG	If held for not more than 36 months	If held for not more than 36 months
LTCG	If held for more than 36 months	If held for more than 36 months

The definition of equity-oriented funds in the Income Tax Act refers only to investment in equity shares of domestic companies.

- **Real Estate Mutual Funds** invest in real estate either in the form of physical property or in the form of securities of companies engaged in the real estate business. SEBI's regulations require that at least 35% of the portfolio should be held in physical assets. Securities that these funds can invest in include mortgage-backed securities and debt issuances of companies engaged in real estate projects. Not less than 75% of the net assets of the scheme shall be in physical assets and such securities. These funds are closed-end funds and have to be listed on a stock exchange.

- **Infrastructure Debt Schemes** are closed-ended schemes with a tenor of at least five years that invest in debt securities and securitized debt of infrastructure companies. 90% of the fund's portfolio should be invested in the specified securities. The remaining can be invested in the equity shares of infrastructure companies and in money market instruments. The NAV of the scheme will be disclosed at least once each quarter. The minimum investment allowed in these schemes is for Rs. one crore and the minimum face value of each unit shall be Rs. ten lakh. As a closed-ended scheme the units of the scheme will be listed on a stock exchange. An Infrastructure Debt Scheme can be set up by an existing mutual fund or a new fund set up for this purpose. The sponsor and key personnel must have adequate experience in the infrastructure sector to be able to launch the scheme.

11.6 Mutual Fund Investment Options

The nature of primary return that an investor earns from a mutual fund investment, whether dividend or capital gain, and the impact of tax on their returns, will depend upon the choices they make on structuring their return. Mutual funds offer investment options for each scheme that define how the investor will take the returns from the investment. Most mutual funds offer an Income Distribution cum Capital Withdrawal (earlier known as dividend) option and growth option. The Income Distribution cum Capital Withdrawal option implies that the funds will pay-out the returns generated in the form of periodic dividends. There is an Income

Distribution cum Capital Withdrawal re-investment option too where the dividend declared is not paid out but re-invested in the scheme. The NAV of the scheme will fall to the extent of the dividend that is paid out of its net assets. Investors should know that the amount paid as dividend can also include a part of their capital so they should check the breakup of the amount received. In the growth option, the returns generated are retained in the scheme and translates into an appreciation in the NAV, and hence the value of the investment. The investor can realize this appreciation at any time by redeeming the units.

11.7 Triggers in Mutual Fund Investment

Another factor to consider are various trigger options that ensure that on achieving a particular situation, the redemption of units are automatically triggered. The trigger can be something like a specified percentage return over the cost of the investment or it can be a specific value that has been set by the investor. There can be a NAV based trigger, when this reaches a certain level the sell decision is automatically made. Another variation is a specific date trigger or an index level trigger, when the index hits a specific level. The setting of the condition ensures that when this is reached the fund will act automatically and redeem or transfer the units. It allows the investor to achieve their aim without having to track the investment continuously since the trigger conditions are set in advance.

11.8 Process associated with Investment in Mutual Funds

11.8.1 Fresh Purchase of Mutual Fund Units

An investor can make an initial investment in a mutual fund either in the new fund offer (NFO) or subsequently when the open-ended fund opens for transactions. A fresh purchase of units is made by submitting an application form in which mandatory information has to be provided such as name, date of birth, status, occupation of the first holder, PAN details, address and contact details, signature and bank account details of the first holder. The application form provides for joint holder details to be provided for two joint holders (a folio can have up to three holders) and the mode of holding and operating the folio will have to be provided for the records.

The investment details such as the name of the scheme, option and payment mode have to be filled in. The investor can also make nominations in the application form. The form has to be signed by all the holders, irrespective of the mode of holding chosen.

The information provided in the application form is used by the R&T agent of the mutual fund to create the investor folio.

Purchase of Units in an NFO

An investor can buy units in an NFO by submitting the application form along with the payment, at the AMCs office or designated collection centres during the NFO period.

Purchase of Units in the Continuous Offer Period

Once the scheme opens for transactions investors can buy units of the scheme or redeem investment or conduct other financial and non-financial transactions with the fund. The application form for purchase of units, along with the payment has to be submitted at the AMC's office or the investor service centres.

The units will be allotted to investors at the applicable NAV for the transaction. The applicable NAV will depend upon a) type of scheme, b) day of transaction, c) time of making the application, d) availability of clear funds to the mutual fund for all liquid fund purchases and for non-liquid purchases.

11.8.2 Additional Purchases in a Mutual Fund

Investors can make additional investments in an open-ended scheme after the fresh purchase made in the NFO or continuous offer period. The folio number created at the time of the fresh purchase is the unique identity of the investor with the mutual fund under which all personal information such as name, signature, address, contact details and regulatory compliance on PAN and KYC norms are recorded. Quoting the folio number at the time of making the additional purchase eliminates the need for providing all the information again. Additional investment will be added to the existing folio number. A transaction slip can be used to make the additional investment. It is used by investor for all subsequent transactions with the mutual fund after the initial investment. The transaction slip is sent to the investor along with confirmation of the original investment through the statement of accounts. It can also be downloaded from the website of the mutual fund. It has a simple format that provides for the folio number to be mentioned and the details of the transaction to be conducted. Investors can also use the application form to make additional investments by just filling up the folio number in the space provided.

11.8.3 Redemptions from a Mutual Fund

Investments in open-ended schemes of mutual funds can be realized at any time by redeeming the units. A redemption request can be for all the units held or for a part of it. The redemption request can specify the number of units to be redeemed or the amount in rupees to be redeemed. The request may be made using the transaction slip and submitted at any point of acceptance or online. It has to be signed by the holders according to the mode of holding registered in the folio. The applicable NAV for valid transactions received on a day is the NAV calculated for the day. The NAV is adjusted for exit load, if any.

The redemption amount is sent either through a cheque with pre-printed details of the first holder or credited to the bank account of the first holder registered with the mutual fund. The investor can choose the mode of receiving redemption and other pay-outs, such as dividend, from the mutual fund at the time of making the application. The IFSC code of the account has to be given to receive the proceeds electronically through ECS, NEFT or direct credit. Direct credit facility is provided only with such banks that the mutual fund has a tie up with. Instant Access Facility (IAF) credits the redemption amount on the day of the redemption request from liquid funds for resident individual investors only. The limit for the use of this facility is Rs.50,000 or 90% of the latest value of investment in the scheme, whichever is lower, per day per scheme per investor.

In case of redemptions by an NRI, the bank account into which the redemption proceeds will be credited will depend upon whether the original investment was made from repatriable funds or domestic funds. If investments were made from an NRO or rupee account, redemption proceeds can only be credited to a similar account from which repatriation is regulated. If the investment was made from repatriable funds then the redemption proceeds will be credited to an NRO or NRE account specified by the investor.

Mutual funds specify the minimum redemption amount for each transaction. They may also specify the minimum balance to be maintained in the folio. If redemption will result in the folio balance falling below the minimum balance required, mutual funds retain the right to redeem all the units held and close the folio.

Mutual funds may restrict redemptions from schemes when there is a systemic crisis or events that constricts market liquidity. This includes situations when the market at large becomes illiquid and it is not restricted to a specific issuer, market failures and closures and unexpected operational issues.

In a circular issued in May 2020 SEBI has said that all schemes that are being wound up would need to be listed on the stock exchanges in order to provide an exit route to investors. There can be quite some time before the entire assets of a wound up scheme are realised and given to the investors. This facility is meant to provide liquidity to the investors in the interim period.

11.8.4 Switch

A switch is a single transfer from one scheme or option of a scheme to another mutual fund scheme, or option of the same scheme. The investor redeems units from scheme and simultaneously invests it in another scheme of the same mutual fund in an inter-scheme switch. In an intra-scheme switch, the investor redeems from one option of a scheme and invests in another option of the same scheme. In a switch, an investor can transfer all or a portion of the funds held in the investment. The applicable NAV for the switch-out (redemption) from the source scheme or option and switch-in (purchase) into the target scheme or option will depend upon the type of schemes. Since there is a redemption that

happens in a switch, exit loads and taxes will apply. The investor will need to specify the source and target schemes and options and the amount to be switched.

11.8.5 Dividend Reinvestment

One option that is provided for mutual fund investors is that of dividend reinvestment. This consists of a process where the dividend that is declared by a mutual fund scheme is actually used to purchase more units of the scheme instead of this being received as a pay-out. It is a way of ensuring that there is compounding of returns since no amount is taken out of the investment but it keeps getting invested back. The entire process consists of two transactions for the investor, both of which happen automatically without them having to do anything. The first involves the declaration of the dividend. Once this happens then the second part is completed, where the amount that is earned as dividend gets converted into new units at the NAV post the dividend declaration.

11.9 Systematic Transactions

Mutual funds offer investors the facility to automate their investment and redemption transactions to meet their needs from the investment. Investors may choose to invest periodically rather than in a lump sum to benefit from volatility in prices, they may choose to redeem periodically to generate regular pay-out from the investment or they may want to rebalance the portfolio periodically to align or re-align the asset allocation to their situation. Systematic investment plans (SIP), systematic withdrawal plans (SWP), systematic transfer plans (STP) and switches are some of the facilities provided.

Systematic transactions require investors to commit to a set of transactions in advance. The value of each investment, the periodicity of the transaction and the day of execution transaction will be decided at the time of commitment. The transaction will be executed at the applicable NAV at the time of execution of each transaction. Systematic transactions which have been initiated can be cancelled at any time by the investor after giving due notice.

11.9.1 Systematic Investment Plans (SIP)

In a systematic investment plan, investors commit to invest a fixed sum of money at regular intervals over a period of time in a mutual fund scheme. It enables investors to build a corpus over time even with small sums invested. Through SIP, investment is made at different prices over the term chosen and this allows investors to benefit from the volatility in the market. Since the same amount is being invested in each instalment, investors buy more units when the price is low and less units when the price is high. Overtime, the average cost of acquisition per unit comes down. This is called rupee cost averaging and is the primary advantage that SIPs provides investors.

SIP Date	**Investment Amount (Rs)** **(A)**	**NAV** **(B)**	**Units Allotted** **(A/B)**
10-Feb-23	2500	10.50	238.10
10-Mar-23	2500	11.70	213.68
10-Apr-23	2500	12.30	203.25
10-May-23	2500	12.10	206.61
10-Jun-23	2500	11.95	209.21
10-Jul-23	2500	10.25	243.90
Total	15000		1314.74
Average cost per unit		**11.41**	

The above table shows the monthly investments made by an investor in mutual funds at different NAVs. The investor is able to reduce the average cost of acquisition per unit by just investing regularly, without having to adopt any market timing strategy. This is possible because the same sum of money invested buys more units when the NAV is low and less units when the NAV is high. This reduces the average cost of purchase of units for the investor. The investor is able to use market volatility to his advantage. This is the benefit of rupee cost averaging and SIPs.

An investor enrolling for an SIP has to make the following decisions:

a) **The scheme, plan and option:** Mutual funds mention the schemes in which SIPs is allowed.
b) **The amount to be invested in each instalment:** The minimum investment for each instalment will be specified by the mutual fund. This is usually lower than the minimum amount of investment for a lump sum investment.
c) **The periodicity of the investment:** The intervals at which the investment can be made, say monthly or quarterly, is defined by the mutual fund. Investors can choose the periodicity that is most suitable.
d) **The date of investment each period:** The investor has to choose the dates from those specified by the mutual fund.

e) **The tenor of the plan:** The date of commencement of the SIP and the term over which the SIP will run has to be selected by the investor. The mutual fund usually specifies the minimum commitment period.
f) **The mode of payment:** The payment mode for an SIP can post dated cheques, NACH, standing instructions, etc.

Electronic payment options require an instruction to be given to the bank that is signed by all the account holders. This form is part of the SIP enrolment form and registered by the mutual fund with the bank.

To start an SIP in an existing folio, the SIP enrolment form along with the post-dated cheques or instruction form for electronic payment has to be registered with mutual fund. If a fresh investment is being made in the scheme through the SIP, the first instalment will be used to open the folio. The investor has to submit the application form duly filled along with the SIP enrolment form.

The SIP enrolment form will require the SIP commencement date, periodicity and tenor of the SIP, date selected, instalment amount and details of payment to be provided. The enrolment form along with the payment mandate has to be submitted at the official points of acceptance.

An SIP can be discontinued or cancelled by the investor giving notice of the same in writing to the mutual fund and to the bank, in case of electronic payment instructions. The mutual fund specifies the notice in days required before the next instalment to process the cancellation. Dishonour of cheques and insufficient funds in the bank account of the investor are other ways in which an SIP is discontinued. If the payment for one or more instalment does not go through, the mutual fund may cancel the SIP.

The mutual fund will notify the investor to renew an SIP in force when it is close to completion of its term. Investors can choose to renew it on different terms with respect to investment amount, frequency, term and payment mode.

11.9.2 Systematic Withdrawal Plan (SWP)

Investors can structure a regular pay-out from the balance held in a mutual fund investment by registering for a systematic withdrawal plan. An SWP enables recurring redemptions from a scheme over a period of time at the applicable NAV on the date of each redemption. It is a facility that provides a defined pay-out from a fund for investors who need it. Investors seeking to redeem units from a scheme can also use this facility to eliminate the price risk associated with redeeming all the required units at one point. In an SWP since the withdrawal happens at different points, the investor will be able to benefit from the NAV volatility in the

period. When the NAV is high, fewer units are redeemed to pay-out the same amount of money and vice versa.

Investors can register for an SWP using the transaction slip. They need to specify the following to the mutual fund:

a) Mutual fund scheme, plan & option.
b) Amount to be redeemed: The mutual fund will specify the minimum amount that can be withdrawn in one instalment.
c) Frequency of withdrawal from the options provided by the mutual fund such as monthly, quarterly and so on.
d) Date of redemption for each instalment has to be selected from the options provided by the mutual fund.
e) The period or tenor of the SWP over which the redemption will be done. The mutual fund may specify a minimum period for the SWP.
f) Date of commencement of the SWP. Mutual funds specify a minimum period before the first redemption for the SWP request to be registered with them.

The SWP is redemption from a scheme. Exit loads will apply to each redemption transaction and there will be tax implications for the investor on redemption in the form of capital gains. The redemption amount will be credited to the investor's bank account registered with the mutual fund. The SWP will cease automatically if the balance in the folio falls below a specified amount. Mutual funds may offer variations to the SWP such as the facility to withdraw only the appreciation in a folio in the period between one instalment and the next. Investors can cancel an SWP by notifying the mutual fund of the same.

11.9.3 Systematic Transfer Plan (STP)

A systematic transfer plan combines redemption from one scheme and an investment to another scheme of the same mutual fund for a defined period of time. The scheme from which units are redeemed is called the source scheme and the scheme into which investments are made is called the target scheme. For example, an investor who has been accumulating funds in an equity fund may decide to transfer it over a period of time to a less risky fund such as a short term debt fund as the time to use the corpus comes near. Instead if the units were redeemed at one point, there is a risk of the NAV being low at that point in time and the resultant fall in the value of the corpus. The folio under which the investment in the target scheme will be made will be the same folio from which the redemption is done from the source scheme.

The investor registers an STP with the mutual fund by specifying the following:

a) Source and target scheme including plan and option. The schemes that are eligible for STP will be specified by the mutual fund.

b) The amount to be redeemed and invested in each instalment. The mutual fund will specify the minimum amount that can be transferred.
c) The frequency of the STP has to be selected from the options provided by the mutual fund.
d) The period over which the STP has to be conducted has to be specified. Mutual funds may fix a minimum period for the STP.
e) The commence date for the STP has to be specified and due notice has to be given to the mutual fund before the commencement of the first transfer.

The redemption of units from the source scheme and the investment into the target scheme will happen at the applicable NAV in force. The redemption will attract exit loads and taxes as applicable.

11.9.4 Dividend Transfer Plan (DTP)

The Income Distribution cum Capital Withdrawal (Dividend) Transfer Plan (DTP) involves an investment in a particular scheme in the Income Distribution cum Capital Withdrawal option. When the fund declares a dividend, then this amount is transferred to a target fund. The initial investment in the original scheme remains intact with the dividend that is mainly earnings from the scheme being transferred to some other scheme. This is actually similar to the dividend reinvestment process, but the difference here is that the target fund where the amount is being transferred is some other scheme and not the one where the dividend originates.

The DTP can be used to transfer dividends from an equity scheme to a debt scheme. In this case, the investor would be ensuring that the gains from the equity scheme are being invested in the debt scheme, thus constantly booking profit from the equity investment. On the other hand dividends from a debt scheme can also be used to invest in an equity scheme. This could be a way of regularly investing in an equity scheme to get the benefit of averaging of cost.

11.9.5 Value Averaging Investment Plan

The normal process of systematic investment calls for a sum of money to be invested at the same time after a specific time interval. This could mean a regular investment of say Rs 1,000 every month on the 25th of the month. Value averaging goes a step further than a normal systematic investment plan and it does this by putting in more money when the market is down and a lesser amount when this is high.

To understand this in an easy manner consider an example where there is a sum of Rs 10,000 being invested each month. In a SIP this amount will remain constant over the time period of the SIP. In case of value averaging there is a need to consider a growth rate for the investment. Let us assume this to be 1 per cent per month for simplification purposes. This means that at

the end of the first month the Rs 10,000 that was invested under the value averaging investment plan would be worth Rs 10,100.

If there is a comparison, then the first month has a similar amount being invested in a SIP and the value averaging investment plan but the figures start diverging thereafter. In the second month the SIP amount in the example above will remain Rs 10,000. The value averaging calculation will look at the value that was supposed to be present, which is Rs 10,100 and the actual value of the investment which let us assume is Rs 9,900. There is a difference of Rs 200 in this calculation and to make up for this the plan will invest Rs 10,200 in this month.

Instead of Rs 9,900 consider a situation where the value of the investment was Rs 10,400. In this case this is more than the value that it was supposed to be. So the second month investment in this case will turn out to be Rs 9,700 which is Rs 300 less because of the extra value that has been witnessed in the fund. This automatically ensures that the investment is more when the prices are down and less when the prices are up.

There are two main challenges in this approach where the first one is the complexity of the calculations. As the number of instalments increase, the calculations can get pretty complicated. The other thing is that mutual funds do not allow this kind of changes every month in a normal SIP, so the investor will have to take care of the difference in their own way. This can prove to be a very tough task in terms of trying to manage the investment.

11.10 Investment Modes

Investors can directly invest in a mutual fund scheme by choosing the 'Direct Plan' option provided in the application form and submitting the application to the official point of acceptance. All mutual fund schemes have to offer a direct plan which features a lower expense ratio for investors who do not use the distribution network set up by the mutual fund.

Investors can also choose to use the services of a distributor who will assist in making the investment and provide advice and service on maintaining the investment. If investors invest through the distributor then they opt for the 'regular plan' of the scheme.

11.10.1 Direct and Regular Plan

A normal scheme of a mutual fund with its operation is a regular plan. This is the standard plan that has been in operation and it represents the plan which pays out distribution commission to various distributors and makes various expenses in the course of its operations.

As against this a direct plan is a separate plan where the investor can invest directly with the fund house or its Registrar and Transfer agent. There is no distributor who helps the

investor to make the investment in this plan. The cost of this plan is less in terms of the expense ratio, that is charged to the scheme each year.

The portfolio of both the regular plan and the direct plan are the same. So at one level the invested amount is earning the same return. The lower cost in the direct plan will however lead to a larger net return for the investor because a larger part of the gains remain for the investor after the various expenses are deducted.

The key feature that differentiates the two plans is that the regular plan has a broker or intermediary through whom the investor can buy the plan. There are investors who need the assistance of someone in making the investment. This is required especially for the completion of the process related to the investment. The regular plan is the way in which these investors can use help in finishing the requirements.

Investors who are knowledgeable and familiar with the workings of mutual funds would want to consider the direct plan. They will not get the benefit of the help of the distributor but if the investor is able to manage the transactions online then they can use the direct route. It will translate into lower cost as the expense ratio is lower for these plans.

11.10.2 Role of Investment Adviser

There has to be a clear understanding of the difference between the direct and the regular plan for the investor. The Investment adviser has to make the investor aware of this. The Investment adviser has to bring out the point that looking at the cost aspect is just one angle, because this comes with its own set of conditions. In a regular plan there is an intermediary or a distributor who is there to help the investor in case there is a need for anything or if there is a problem with the investment and the process is stuck. This can happen either at the time of making a transaction or it can happen when there are changes in guidelines, which require the investor to take some specific additional action.

The Investment adviser also has to clarify that the direct plan on the other hand is a ‘Do it yourself approach’ where there is no one around to help. The investor has to go and complete the process by themselves and even in the future after the investment is made if there are some problems then they need to tackle it themselves. They have to monitor their own investments and make the necessary decisions about any transactions in their funds.

The role of the investment adviser becomes critical in this entire process. The adviser has to see the exact situation of the investor and then determine if they are able to handle the work related to the mutual fund investment. There are some investors who might have the required knowledge and understanding but there is also the issue of having the time and the space to actually complete the different requirements related to the investment.

There has to be a long term look at the entire position and then a decision has to be made whether the investor should be going towards the direct plan or the regular plan. In case the investment adviser is providing the investor with the necessary advice on where to invest and they are using a distributor to invest in a regular plan then this would take care of the entire process. On the other hand if the investor is doing things by themselves they need to be told about the pros and the cons of this step.

The investment advisers should also be able to tell the investor how they can transact through direct plans. They need to know the details that will be required and they can demonstrate how this will actually take place. It will give the investor a clear idea of what is required and whether they can handle this. Undertaking the investment online and then monitoring this would require some effort and there could be issues with log in and other technical matters. The investment adviser has to be able to explain the impact of these issues to the investor. The investor can then decide on whether they want to try and save some of the expense on the direct plan or stick to the regular plan.

CHAPTER 12: PORTFOLIO MANAGER

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Overview of portfolio managers in India
- Types of portfolio management services
- Structure of PMS in India
- Registration requirements of a Portfolio Manager
- Responsibilities of a Portfolio Manager
- Costs, expenses and fees of investing in PMS
- Direct access facility offered by PMS
- SEBI Requirements on performance disclosure

12.1 Overview of portfolio managers in India

Risk and return are the two important aspects of financial investment. Portfolio management involves selecting and managing a basket of assets that minimizes risk, while maximizing return on investments. A portfolio manager plays a pivotal role in designing customized investment solutions for the clients.

A portfolio manager is a body corporate which, pursuant to a contract or arrangement with a client, advises or directs or undertakes on behalf of the client (discretionary portfolio manager or otherwise) , the management or administration of a portfolio of securities or the client's funds. Portfolio managers are registered and regulated under SEBI (Portfolio Managers) Regulations, 2020. According to SEBI guidelines PMS can be offered only by SEBI registered entities.

January 1993, marked the beginning of Portfolio Management Service when SEBI issued Securities and Exchange Board of India (Portfolio Managers) Regulations, 1993. These were one of the first few regulations issued by the regulators. These regulations came even before the mutual fund regulations. This shows the importance of the sector to the regulator.

In India the major providers of portfolio management services are big brokerage firms, asset management companies and independent experts.

12.2 Types of portfolio management services

On the basis of provider of the services PMS can be classified as:

1. PMS by asset management companies
2. PMS by brokerage houses
3. Boutique (independent) PMS houses

They can further be classified on the basis of product class as:

1. Equity based PMS
2. Fixed Income based PMS
3. Commodity PMS
4. Mutual Fund PMS
5. Multi Asset based PMS

Portfolio managers may classify their clients on the basis of their net-worth. Another way which also finds mention in the regulation also is on the basis of the services provided by the portfolio managers. The following are the types of portfolio management services:

12.2.1 Discretionary services

As per SEBI's portfolio managers regulation "discretionary portfolio manager" means a portfolio manager who under a contract relating to portfolio management, exercises or may exercise, any degree of discretion as to the investment of funds or management of the portfolio of securities of the client, as the case may be. In other words, discretionary portfolio manager individually and independently manages the funds of each investor as per the contract. This could be based on an existing investment approach or strategy which the portfolio manager is offering or can be customized based on client's requirement.

12.2.2 Non-discretionary services

Non-discretionary portfolio manager manages the funds in accordance with the directions of the client. The portfolio manager does not exercise his/her discretion for the buy or sell decisions. He/she has to consult the client for every transaction. Decisions like what to buy/sell? And when to buy/sell? Rest with the Investor. The execution of trade is done by the portfolio manager. So, in this case the Portfolio manager provides investment management services with the consent of the client.

12.2.3 Advisory services

In advisory role, the portfolio manager suggests the investment ideas or provides non-binding investment advice. The investor take the decisions. The investors also executes the transactions. These kind of services are typically used for institutional clients, who manage portfolios on their own, but typically hire country experts in each country.

12.3 Structure of PMS in India

A portfolio manager is a body corporate who, pursuant to a contract or arrangement with a client, advises or directs or undertakes on behalf of the client (whether as a discretionary portfolio manager or otherwise), the management or administration of a portfolio of securities or the funds of the client. Body corporate broadly means a corporate entity which has a legal existence.

The companies Act has provided an extensive definition of the term body corporate. The term "body corporate" is defined in Section 2(11) of the Companies Act, 2013.

“body corporate” or “corporation” includes a company incorporated outside India, but does not include—
(i) a co-operative society registered under any law relating to co-operative societies; and

(ii) any other body corporate (not being a company as defined in this Act), which the Central Government may, by notification, specify in this behalf;

In simple terms the term body corporate includes a private company, public company, one persona company, small company, Limited Liability Partnerships, foreign company etc. “body corporate” or “corporation” also includes a company incorporated outside India.

A body corporate means any entity that has its separate legal existence apart from the persons forming it. It enjoys a completely different legal status apart from its members.

12.4 Registration requirements of a Portfolio Manager

To act as a portfolio manager, obtaining certificate of registration from SEBI under the Portfolio Managers regulations is a mandatory requirement.

The application for obtaining the certificate needs to be made to the Securities and Exchange Board of India along with non-refundable fee.

The application needs to be made in Form A of Schedule I. Form A is a very detailed form. It requires mainly the following information.

1) Particulars of the applicant (Name, PAN, Address)
2) Organization Structure
3) Infrastructural Facilities
4) Business Plan (for three years)
5) Financial Information (Capital structure, networth, deployment of resources, major sources of income etc.)
6) Other Information (Settled and pending disputes, membership with stock exchanges etc.)
7) Business Information (type of activity carried on, facilities for making decision on portfolio investment, risk profiling procedure, details of grievance redressal and dispute resolution mechanism followed, research and database facilities etc.)
8) Experience (in financial services rendered, details of activity etc.)
9) Additional information (Copy of Draft Agreement with Client to be provided Copy of Draft Disclosure Document, details of custodian, SEBI Registration, other registration details etc.)

10) Declaration (Declarations related to compliance, Fit and Proper, periodic reports, disclosure documents, maintenance of records etc.)

Before issuing a certificate of registration, the regulator will ensure that the:

1. the applicant is a body corporate;

2. the applicant has the necessary infrastructure like adequate office space, equipment and the manpower to effectively discharge the activities of a portfolio manager;

3. the applicant has appointed a compliance officer;

4. the principal officer of the applicant has a professional qualification in finance, law, accountancy or business management, experience of at least five years in related activities in the securities market including in a portfolio manager, stock broker, investment advisor, research analyst or as a fund manager; and the relevant NISM certification as specified by the regulator from time to time.

5. In addition to the Principal Officer and Compliance Officer, the applicant has in its employment at least one person who has a graduation from a university or an institution recognized by the Central Government or any State Government or a foreign university; and an experience of at least two years in related activities in the securities market including in a portfolio manager, stock broker, investment advisor or as a fund manager:

6. Any disciplinary action has been taken by the regulator against a person directly or indirectly connected with the applicant

7. The applicant fulfils the net worth requirement (five crore rupees)

8. The applicant, its director or partner, principal officer, compliance officer or the employee is involved in any litigation connected with the securities market that has an adverse bearing on the business of the applicant;

9. The applicant, its director or partner, principal officer, compliance officer or the employee has at any time been convicted for any offence involving moral turpitude or has been found guilty of any economic offence;

10. The applicant is a fit and proper person;

The grant of certificate to the applicant is in the interest of investors.

The certificate of registration granted under shall be valid unless it is suspended or cancelled by the regulator.

12.5 Responsibilities of a Portfolio Manager

The Portfolio Managers regulation by SEBI has enumerated the following responsibilities on the portfolio managers:

* The discretionary portfolio manager shall individually and independently manage the funds of each client in accordance with the needs of the client, in a manner which does not partake character of a Mutual Fund, whereas the non-discretionary portfolio manager shall manage the funds in accordance with the directions of the client.

* The portfolio manager shall not accept from the client, funds or securities worth less than fifty lakh rupees:

* The portfolio manager shall act in a fiduciary capacity with regard to the client's funds.

* The portfolio manager shall segregate each client’s holding in securities in separate accounts.

* The portfolio manager shall keep the funds of all clients in a separate account to be maintained by it in a Scheduled Commercial Bank.

* Portfolio manager shall invest a maximum of 30% of their client’s portfolio in securities of their own associates/related parties. A one-time written consent shall be taken from the client for the same.

* Portfolio managers shall not make investments in below investment grade securities.

* The portfolio manager shall transact in securities within the limitation placed by the client himself with regard to dealing in securities under the provisions of the Reserve Bank of India Act, 1934 (2 of 1934).

* The portfolio manager shall not derive any direct or indirect benefit out of client's funds or securities.

* The portfolio manager shall not borrow funds or securities on behalf of the client.

* The portfolio manager shall not lend securities held on behalf of the clients to a third person except as provided under these regulations.

* The portfolio manager shall ensure proper and timely handling of complaints from his clients and take appropriate action immediately.

* The portfolio manager shall ensure that any person or entity involved in the distribution of its services is carrying out the distribution activities in compliance with these regulations and circulars issued thereunder from time to time.

12.6 Cost, expenses and fees of investing in PMS

Fixed cost

The fixed cost is the amount that has to be paid by the investor to the PMS fund manager no matter what is the outcome of the entire investment. This is usually a fixed percentage of the amount that is actually being managed or invested into the PMS. It could be something like 1 per cent of the amount invested. In addition, there are other costs that are related to the investment which will be charged to the investor based on the actual amount. For example, the brokerage and other costs involved when the assets are bought and sold become a fixed cost for the investor.

Performance linked costs

The performance linked costs or the profit sharing fee are an additional amount of fees that the investor has to pay to the PMS . This is present in order to incentivise the fund manager to give a better performance. There are targets that are set and decided upon when the PMS agreement is signed. If these are met then a certain percentage of the profits could be taken by the PMS fund manager as additional fees. These become the cost for the investor and they need to be aware of how much they are actually paying at the end of the day because the performance linked costs can turn out to be quite high.

High watermark principle

The PMS usually collects a percentage of the assets as a fee so the calculation for this purpose becomes important. High watermark is usually the corpus investment value or the NAV at which fees have been paid historically. The PMS should not be collecting fees for some recent poor performance and this is where the high watermark principle comes in. According to this principle once the fees are calculated on a specific level of assets then the next payment would only come about when the previous higher level is passed. For example, if there are profit sharing fees are to be calculated on the gains of the corpus invested at Rs 50 lakh and if in one year this rises to Rs 60 lakh then Rs 10 lakh would be the basis for the calculation. Next year if the portfolio value drops to Rs 55 lakh then till it crosses the previous high of Rs 60 lakh the profit sharing fee would not be calculated.

Hurdle rate

This is the rate which would need to be crossed if the PMS would charge extra fees to the investor. This is mentioned in the PMS agreement. For example, it could be that the hurdle

rate is 8 per cent. In this case till the return is 8 per cent there is no profit sharing fee calculation and then only when this rate is crossed would the calculation start.

Catch up/no catch up concept

This is used by the PMS for the purpose of calculation of the fees. There is a hurdle rate that is usually present which is the rate till which no extra fees would be charged. Once this rate is crossed the question arises as to whether the full gains or only the gains above the hurdle rate would be used for the calculation. The no catch up concept is that only the incremental amount above the hurdle rate would be considered while the catch up concept would then look at the fees right from the first earning which would need to catch up to the total earnings.

12.7 Direct access facility offered by PMS

Difference with regular plan

The direct plan way of investing is popular with mutual fund investors. In a direct plan the investor does not use the services of an intermediary like a broker or a distributor but goes directly to the service provider. This cuts out the need for commission for the intermediary and there is a separate value for such plans because the cost for these will be lower. All this goes on to increase the net returns for the investor.

There is now a provision for direct access facility in PMS too whereby there are no distributors who are involved in the selling of the plan. This will have a situation where the investor goes and directly puts money into the PMS without any intermediary. The direct access facility has the same benefit in the PMS as in a mutual fund which is that the cost for this will be lower. The lower amount of expenses will lead to a lower amount being charged as expenses to the investor.

The PMS has to offer this direct access facility so that any investor who wants to skip the intermediaries can directly approach the PMS provider and then put their money. The rest of the process of the management of the funds does not differ and hence this is a route that the investors can adopt. The regular plan of the PMS will operate in the traditional way with its normal expenses including that paid to the distributors.

Role of Investment Advisers

The role of Investment Advisers in empowering the investor is pretty significant. They are the ones who are guiding the investors in various steps that are in their interest and which also helps them to save cost while getting the best services at the same time.

When it comes to the PMS the investment adviser has to consider the position of the client. The need for the client to get into a PMS as compared to various other instruments has to be

checked. Once it is clear that the investor needs to have a PMS then the suitability of the direct access plan has to be considered.

There is often no need to go through an intermediary especially when the client is aware about the nature of the investment and what it involves. When it comes to advising on the exposure to a PMS the investment adviser can ask their clients to take the direct access facility as it will enable them to save on costs. The other factor related to the PMS do not change and hence this is not going to have any impact as far as performance is concerned. In addition, depending on the client's situation the Investment Adviser has to guide them as to whether they should go in for a discretionary plan or a non-discretionary one or even the advisory service. This could result in a higher net return for the investor which will be a beneficial thing for them.

12.8 SEBI requirements on performance disclosure

The Portfolio Manager, before taking up an assignment of management of portfolio on behalf of a client is required to enter into an agreement in writing with the client specifying the details stated in the SEBI (Portfolio Managers Regulations), 2020. The Portfolio Manager is also required to provide the client with a Disclosure Document containing specified particulars. The Disclosure Document is required to include, inter alia, the quantum and manner of payment of fees payable to the client for each activity for which service is rendered, portfolio risks specific to each investment approach, disclosures with respect to related parties as required under Accounting Standards issued by Institute of Chartered Accounts of India etc. This document is required to be made available on the website of the portfolio manager as well as filed with the SEBI. The portfolio manager shall report its performance uniformly in the disclosures to the SEBI, marketing materials and reports to the clients and on its website. The portfolio manager shall disclose the range of fees charged under various heads in the disclosure document.

CHAPTER 13: OVERVIEW OF ALTERNATIVE INVESTMENT FUNDS (AIFs)

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Introduction to Alternative Investments
- Evolution and Growth of AIFs in India
- SEBI Requirements on AIFs
- Categories of AIFs
- Types of AIFs
- Suitability and Enablers for AIF Products in India
- Current AIF Market Status
- Role of Alternative Investment in Portfolio Management

13.1 Introduction to Alternative Investments

Globally the alternative investment industry has evolved over time, hence there is no uniform classification or limitation as to what constitutes such assets. Alternative investments are therefore defined generally by several sources as investments other than traditional investments. Traditional investments[10] (as distinguished from savings in bank deposits, government schemes, ornamental gold and residential property for living purposes) are confined to the domain of financial securities such as stocks and bonds from primary and secondary capital market, purchase of general categories of mutual fund units and Exchange Traded Funds (ETFs). Traditional investments cater to general investors who seek investment options which provide better returns than mere savings schemes.

Alternative investments have evolved over time to cater to the requirements of sophisticated investors such as institutional investors managing pools of funds and High net-worth individual investors (HNIs) who have higher risk-taking capability and need more sophisticated avenues than traditional investment options. Unlike traditional investments, alternative investments are about investing in opportunities that can potentially generate higher returns but entail higher risk-taking as well. Alternative investments are meant to complement traditional investments for such investors by improving their risk-adjusted returns over the long term.

Traditional investments are primarily on-market opportunities whose common feature is liquidity, i.e. nearness to cash because they can be exited through the market or by anytime redemption offered by an open ended mutual fund. The essential characteristic of alternative

[10]According to Investopedia, "An alternative investment is a financial asset that does not fall into one of the conventional investment categories. Conventional categories include stocks, bonds, and cash."

investments is 'illiquidity', i.e. they are not readily convertible into cash as they are either off-market investments or because they are complex structures that do not have a ready market. The dual class could include structures that have underlying illiquid assets but the instruments per se may be liquid as they are either listed on the stock market or are redeemable through the mutual fund route with some restrictions.

Internationally, the investors in an AIF are primarily large institutional funds such as pension funds, investment funds, insurance companies, endowment funds, investment banks, family offices and HNIs, fund of funds and AIF managers themselves. All these investors have large pools of funds managed by fund managers who would be seeking varied investment options beyond traditional investments. AIFs cater to the needs of such investors through alternative asset classes.

13.2 Evolution and Growth of AIFs in India

The evolution of alternative investments in India can be traced to the modest beginnings in venture capital financing in the 1980s mostly through the initiatives of state level industrial development corporations, financial institutions and a few PSU banks. The reasons for the late emergence of the venture capital industry in India are mostly historical and linked to the state of the capital market and ownership patterns of Indian companies.

The traditional concept of VC being technology risk capital was broad-banded by SEBI in 1996 by notifying a new set of regulations for the VC industry called the SEBI (Venture Capital Fund) Regulations, 1996 which did away with the requirement of looking for 'untried technologies'. The entire spectrum of private capital investment in unlisted companies was thus brought into the ambit of institutional investment. Though the framework for full-fledged venture capital and private equity investments were put in place in 1996, the tax law was not investor friendly. Subsequently, tax breaks were given to VCFs at fund level and the SEBI regulations were also revised following the recommendations of the K.B. Chandrasekhar Committee in 2000. In the dotcom era of 1997-2001, several technology VCFs were set up in India modelled after their Silicon Valley counterparts with VC financing.

From a business perspective, from 2001 onwards, Indian industry was on a consolidation drive in various sectors. Companies sought to grow not only to stand up to competitive market forces in the domestic market but to attain global scale of operations as well. This corporate growth initiative coupled with an investor friendly regime and good economic conditions led to a spurt in private equity activity in India.

In the initial stages, though private equity was largely confined to the information technology sector, by the end of 2007, the sectoral bias was largely removed and private capital had got extended to several other sectors including large scale manufacturing (such as

pharmaceuticals, auto-ancillaries, FMCG), real estate and construction, core sectors (like cement, steel, metals) and infrastructure. The interest of private equity also got extended to service sectors such as banking and financial services, logistics, e-commerce, entertainment, healthcare, wellness and education. Private equity investors showed interest even in project financing, an area dominated by large banks and specialised financial institutions. In the real estate and infrastructure sector, private equity has played a role in financing both the developers as well as specific projects.

The global financial crisis of 2008 had its ripple effects in the Indian markets and accordingly, growth in private equity activity was affected in the following few years. Several funds that had invested in the bullish markets prior to 2008 found it difficult to sustain their investment values. Weak capital market added to their exit woes due to which their follow-on fund raising efforts were also quite unsuccessful. In the years following the global financial crisis, private equity sector in India suffered due to a plethora of sectoral and macroeconomic issues including the scare of regressive taxation laws.

13.3 SEBI requirements on AIF

Definition of AIF

The SEBI (Alternative Investment Funds) Regulations 2012 (AIF Regulations) that currently regulate such activity define the term 'Alternative Investment Fund' (AIF) as one which is primarily a privately pooled investment vehicle. However, since there are several types of investment funds in the market, the definition prescribes that only a '*privately pooled'* structure with funds pooled from India or abroad for a defined investment policy is to be considered as an AIF. *The words 'privately pooled' denote that the fund is pooled from select investors and not from the general public at large*. These private investors are sourced from categories such as institutions and HNIs who can understand the nuances of higher risk taking and complex investment arrangements.

Investment in AIF

Investment in all categories of Alternative Investment Funds shall be subject to the following conditions:-

(a) the Alternative Investment Fund may raise funds from any investor whether Indian, foreign or non-resident Indians by way of issue of units;

(b) each scheme of the Alternative Investment Fund shall have corpus of at least Rs.20 crores.

(c) the Alternative Investment Fund shall not accept from an investor, an investment of value less than Rs. 1 crore. Provided that in case of investors who are employees or directors of the Alternative Investment Fund or employees or directors of the Manager, the minimum value of investment shall be Rs. 25 lakh.

(d) the Manager or Sponsor shall have a continuing interest in the Alternative Investment Fund of not less than two and half percent of the corpus or Rs.5 crore, whichever is lower, in the form of investment in the Alternative Investment Fund and such interest shall not be through the waiver of management fees: Provided that for Category III Alternative Investment Fund, the continuing interest shall be not less than five percent of the corpus or ten crore rupees, whichever is lower.

(e) the Manager or Sponsor shall disclose their investment in the Alternative Investment Fund to the investors of the Alternative Investment Fund;

(f) no scheme of the Alternative Investment Fund shall have more than one thousand investors (this is subject to the provisions of Companies Act, 2013, if it is a company)

(g) the fund shall not solicit or collect funds except by way of private placement.

Listing of AIF

Units of close ended Alternative Investment Fund may be listed on stock exchange subject to a minimum tradable lot of one crore rupees. Listing of Alternative Investment Fund units shall be permitted only after final close of the fund or scheme.

Investment conditions:

Investments by all categories of Alternative Investment Funds shall be subject to certain conditions, some of these are stated below.

(a) Alternative Investment Fund may invest in securities of companies incorporated outside India subject to such conditions or guidelines that may be stipulated or issued by the Reserve Bank of India and SEBI from time to time;

(b) Co-investment in an investee company by a Manager or Sponsor or co-investor shall not be on terms more favourable than those offered to the Alternative Investment Fund.

(c) Category I and II Alternative Investment Funds shall invest not more than 25 percent of the investable funds in an investee company directly or through investment in the units of other AIFs.

(d) Category III Alternative Investment Fund shall invest not more than 10 percent of the investable funds in an Investee Company.

(e) Alternative Investment Fund shall not invest in associates except with the approval of 75 percent of investors by value of their investment in the Alternative Investment Fund.

(f) Un-invested portion of the investable funds may be invested in liquid mutual funds or bank deposits or other liquid assets of higher quality such as Treasury bills, CBLOs, Commercial Papers, Certificates of Deposits, etc. till deployment of funds as per the investment objective;

13.4 Categories of AIFs and their comparison

All the types of funds that have been described above are divided into three categories under the SEBI AIF Regulations for the purposes of registration and other operational requirements. These categories are mentioned below.

Category I AIF – is an AIF that invests in start-up or early stage ventures or social ventures or SMEs or infrastructure or other sectors or areas which the government or regulators consider as socially or economically desirable and shall include venture capital funds, SME Funds, social venture funds, infrastructure funds, special situation funds and such other AIFs as may be specified under the Regulations from time to time. Other funds that are considered economically beneficial and are provided special incentives by the government or any regulator are also considered as part of this Category.

Category II AIF – is an AIF that does not fall in Category I and III and which does not undertake leverage or borrowing other than to meet day-to-day operational requirements or as permitted in the Regulations. For this purpose, AIFs such as private equity funds or debt funds for which no specific incentives or concessions are given by the government or any other Regulator are included under this Category.

Category III AIF – is an AIF that which employs diverse or complex trading strategies and may employ leverage including through investment in listed or unlisted derivatives. AIFs such as hedge funds or funds which trade with a view to make short term returns or such other funds which are open ended and for which no specific incentives or concessions are given by the government or any other Regulator are included under this Category.

SEBI has inserted a fourth category of AIF known as Specified AIF.

13.4 Types of AIFs

Alternative Investment Funds (AIFs) can be of different types based on their investment strategy and types of assets under management. Under the SEBI AIF Regulations 2012, we can list the following types of funds as AIFs –

13.4.1 Venture Capital Fund (VCF)

VCF means “an AIF which invests primarily in unlisted securities of start-ups, emerging or early-stage venture capital undertakings mainly involved in new products, new services,

technology or intellectual property right based activities or a new business model and shall include an angel fund". Venture capital can be termed as the first stage of institutional financing in a company (after the angel stage). It is mostly applicable to asset light businesses that are intensive in technology, intellectual property or digital media applications.

13.4.2 Angel Fund

Angel Fund means "a sub-category of Venture Capital Fund under Category I Alternative Investment Fund that raises funds from angel investors and invests in accordance with the SEBI AIF Regulations".

Angel Investor means any person who proposes to invest in an angel fund and satisfies one of the following conditions, namely, - (a) an individual investor who has net tangible assets of at least INR 2 crore excluding value of his principal residence, and who has early stage investment experience, or has experience as a serial entrepreneur or is a senior management professional with at least ten years of experience,
(b) a body corporate with a net worth of at least INR 10 crore or
(c) a registered AIF under these regulations or a VCF registered under the erstwhile SEBI (Venture Capital Funds) Regulations 1996.

13.4.3 Private Equity Fund (PE)

PE Fund means "an AIF which invests primarily in equity or equity linked instruments or partnership interests of investee companies according to the stated objective of the fund"[11]. It may be understood that private equity fund is primarily an equity-based investor but unlike venture capital funds which are focussed on early stage investments, private equity funds are mostly involved in later stage financing in business entities that have established a business model and need to be scaled up for further growth.

13.4.4 Debt Fund

Debt Fund means "an AIF which invests primarily in debt or debt securities of listed or unlisted investee companies according to the stated objectives of the Fund". Many types of debt that are private are considered to be alternative investments because of their illiquidity and often because they are not commonly held by traditional investors. Even listed companies issue debt securities such as non-convertible debentures (NCDs) and bonds through private placement that are not available in the traditional investment route. Some of the venture financing funds also term themselves as 'venture debt funds' since they finance advanced

[11]Equity linked instruments include instruments convertible into equity shares or share warrants, preference shares, debentures compulsorily or optionally convertible into equity.

stage of venture capital through mezzanine financing (debt financing with some equity upside like warrants attached to them.). Some private debt funds also finance sub-ordinate debt which can go in funding companies that are already having high senior debt (loans that are secured on the assets and have first claim on cash flow) on their balance sheet, such debt financing is called 'leveraged loan'.

Distressed debt financing through private debt funds is also catching on in India in the form of refinancing settlements with banks and insolvency resolution schemes under the IBC proceedings. Distressed financing is mostly about providing capital for companies to turn with heavy debt burden to turn around or to help in their acquisition by new owners through auctions that are conducted under the Insolvency and Bankruptcy Code 2016. Such processes are known as 'insolvency resolution'. Private debt funds are often classified as a form of private equity funds rather than being treated as another alternative asset class.

13.4.5 Infrastructure Fund

Infrastructure Fund means "an AIF which invests primarily in unlisted securities or partnership interest or listed debt or securitised debt instruments of investee companies or Special Purpose Vehicles (SPVs) engaged in or formed for the purpose of operating, developing or holding infrastructure projects". Infrastructure debt or equity financing through AIFs is of recent phenomenon in India. It is mostly the sovereign wealth funds, multi-lateral funds and sector-focussed AIFs that operate in this space due to its high illiquidity, long gestation risk in project implementation, long amortisation of the debt and lower equity returns from such SPVs.

13.4.6 SME Fund

SME Fund means "an AIF which invests primarily in unlisted securities of investee companies which are SMEs or securities of those SMEs which are listed or proposed to be listed on a SME exchange or SME segment of an exchange". In this context, 'SME' means a Small and Medium Enterprise and shall have the same meaning as assigned to it under the Micro, Small and Medium Enterprises Development Act 2006 as amended from time to time.

13.4.7 Hedge Fund

Hedge Fund means "an AIF which employs diverse or complex trading strategies and invests and trades in securities having diverse risks or complex products including listed and unlisted derivatives".

13.4.8 Social Impact Fund

Social Impact Fund means "an AIF which invests primarily in securities or units or partnership interest of social ventures or securities of social enterprises which satisfies the social performance norms laid down by the fund. Social ventures are formed with the purpose of promoting social welfare, solving problems or providing social benefits. These may include public charitable trusts registered with Charity Commissioner, Societies registered for charitable purposes or for promotion of science, literature or fine arts, Section 8 companies (Companies Act, 2013) or microfinance institutions.

13.4.9 Special Situations Fund

Special Situation Fund is an "AIF which invests in special situation assets in accordance with its investment objectives and may act as a resolution applicant under the Insolvency and Bankruptcy Code, 2016.

13.5 Role of Alternative Investments in Portfolio Management

Portfolio management needs to be ever-evolving to meet improved return expectations of investors. However, this is easier said than done. In the 21st century new challenges have been emerging to generate business returns from established business models due to technological innovations, environmental concerns, regulatory challenges, economic volatility in several economies, geo-political issues and changing needs of markets and customers. Due to economic slowdown in developed economies, central banks of the world have been using expansionary monetary policy and even zero or negative benchmark rates to revive their economies. This has caused fall in investment returns in developed markets and a shift to emerging markets in the past two decades.

While there are new opportunities to be explored in the developed markets, emerging markets are the hot bed of growth and innovation especially in the emerging sectors of business. In order that investors generate superior returns, it is necessary to look beyond traditional investments. Institutional fund managers are aware of the need for new avenues to diversification of their portfolios. There are huge opportunities in handholding new ventures in sunrise industries and technologies as also in structured products emerging from the markets. Asset allocators in institutional investment classes should not miss out on improved diversification and stellar early or first-mover returns (i.e., high returns resulting from investing early into new asset classes).

The rationale for alternative investments is not just about returns. Investors are looking at alternative investments for other reasons as well.

13.6 Suitability and Enablers for AIF Products in India

India has seen tremendous economic growth in the decades of post-liberalisation economic era, more particularly in the specific growth phases that followed. The economic prosperity of the entrepreneurial class and corporate executives created several high-net worth investors and family offices. Several NRIs also favour investing in Indian market and alternative investment products are an ideal asset class for such investors. After SEBI allowed non-resident non-institutional investors to tap the Indian market as FPIs, it provided additional class of investors to invest in AIFs with India investment focus. India's economic prosperity has been underpinned by the increasing tribe of billion dollar ultra-high net worth investors.

The regulatory impetus to the AIF industry's growth has been provided with the introduction of the AIF Regulations by SEBI in 2012. They provided the necessary framework which made alternative investments marketable, safe and predictable for the participants. The Government of India also provided necessary support with the announcement that a 'fund of funds' of INR 10,000 crore for start-ups was established under the Department for Promotion of Industry and Internal Trade which shall be managed by SIDBI. The fund would invest in SEBI registered AIFs which, in turn, would invest in start-ups. Thus, this fund would act as an enabler to attract private capital in the form of equity, quasi-equity, soft loans and other risk capital for start-ups. The Government of India also set up the National Infrastructure Investment Fund in 2015 to invest in infrastructure and strategic assets.

On the supply side too, the emergence of the start-up phase brought in several value creators in services and technology enabled business models. With increased focus on clean technologies and renewable, there are immense opportunities for companies to be set up in these spaces. The realty sector thrives in India primarily due to urban migration which drives the demand for more investments in both retail and commercial urban realty. The infrastructure space provides vast opportunities for debt and equity though it has some sectoral issues. With improved ease of doing business and policy facilitation by the government, the scope for alternative assets has only increased over time. The strong growth of the primary capital market with several block buster IPOs increased the scope for favourable private equity exits resulting in further impetus to the private equity industry in particular.

The introduction of the Insolvency and Bankruptcy Code 2016 created a new space for special situation funds to step in looking for suitable opportunities in distressed asset sector pertaining to old economy companies. In addition, with improved governance regulations and management practices, the SME sector which is a significant contributor to the growth story has immense potential to cater to the alternative asset class of investors. In view of these

developments, the AIF sector is most suitably positioned for investors and investee companies in India in the coming years.

From an external perspective, the lack of growth in developed economies coupled with quantitative easing by the central banks over the past decade has created a situation of excess capital generation in these countries. This excess capital found its way into emerging high growth markets wherein India stands next only to China as a preferred investment destination. India's large economic potential and favourable investment climate make it a necessary part of the bucket list of global alternative investment funds.

13.7 Current AIF Market Status

Recognising the need to develop a broader enabling framework for the entire gamut of alternative investments, SEBI issued the AIF Regulations initially in 2012. Since then, the AIF industry witnessed explosive growth in India. As on March 31 2023, 1088 AIFs were registered with SEBI as compared to 885 registered AIFs as on March 31 2022.

Module 4 Sample Questions

1.The interest rate risk in a debt fund will depend on _____.

a) **The tenor of securities**
b) The credit quality of the portfolio
c) The coupon of the securities
d) None of the above

2.In a fund of fund the portfolio consists of _____.

a) Debt securities
b) Equity instruments
c) Derivative instruments
d) **Units of other schemes**

3.Investors withdrawing a fixed sum of money each month are using the _____.

a) Systematic Investment Plan
b) Systematic Transfer Plan
c) **Systematic Withdrawal Plan**
d) Dividend Transfer Plan

4.Under the advisory model of PMS the execution has to be done by the _____

a) PMS fund manager
b) **Client**
c) Advisor
d) None of the above

5.The PMS provider has to appoint a _____ compulsorily

a) Expert
b) Committee
c) **Compliance Officer**
d) Technological officer

6.The hurdle rate is the rate which has to be crossed in order to charge _____

a) Profit sharing fees
b) Depository charges
c) Brokerage
d) Administration charges

7. An AIF consists of _____ funds

a) Mass market
b) Privately pooled
c) Lumpsum
d) Limited

MODULE 5: PORTFOLIO CONSTRUCTION, PERFORMANCE MONITORING AND EVALUATION

Chapter 14: Introduction to Modern Portfolio Theory

Chapter 15: Portfolio Construction Process

Chapter 16: Portfolio Performance measurement and evaluation

CHAPTER 14: INTRODUCTION TO MODERN PORTFOLIO THEORY

Learning Objectives:

After studying this chapter, you should understand about:

- The framework for constructing and selecting portfolios
- Assumptions of the theory
- Definition of risk averse, risk seeking and risk neutral investor
- Calculation of risk and return of individual asset/security
- Graphical presentation of portfolio risk/return of two securities
- The concept of Efficient Frontier
- Portfolio Optimization process
- Estimation issues

14.1 Framework for constructing portfolios - modern portfolio theory

Conventional wisdom has always dictated not putting all of your eggs in one basket. In other words, this adage is addressing the benefits of diversification. Diversification is nothing but spreading out the investments across different areas or asset classes to reduce risk as every asset will not behave similarly at all times. Prior to 1950, investing community was familiar with the benefits of holding a diversified portfolio. However, they had no way of quantifying the benefits of diversification.

In 1952 The Journal of Finance published an article titled "Portfolio Selection", authored by Harry Markowitz. Decades later in 1990, Harry Markowitz was honoured with the Nobel Prize in Economics for his portfolio theory. The ideas introduced in this article have come to form the foundations of what is now popularly referred as Modern Portfolio Theory (MPT). In simple words, MPT provides a framework for constructing and selecting portfolios based on the expected performance of the investments and the risk appetite of the investor. MPT quantified the concept of diversification by introducing the statistical notion of covariance, or correlation between investment assets. Harry Markowitz mathematically demonstrated that the variance of the rate of return is a meaningful measure of portfolio risk. He derived the formula for computing the variance of a portfolio, showing how to effectively diversify a portfolio.

14.2 Assumptions of the theory

Some of the assumptions of the Modern Portfolio Theory (MPT) are as under

- An investor wants to maximize the return for a given level of risk. That means given a choice between two assets with equal rate of return, investors will select the asset with lower risk. Investors consider each investment alternative as being presented by

a probability distribution of expected returns over some holding period measurement of risk.

- Investors maximize one-period expected utility. Investors choose an action or event with the maximum expected utility. Investors assign utility scores to the various portfolio choices available to them.
- Utility curves demonstrate diminishing marginal utility of wealth**.** Though investors have different rates of decrease in the marginal utility of wealth, the principle is that per rupee increment to utility decreases with wealth.
- Investors estimate the risk of the portfolio on the basis of the variability of expected returns of constituent assets.
- Investors base decisions solely on expected return and risk, so their utility curves are a function of expected return and the expected variance (or standard deviation) of returns only.

14.3 Definition of risk averse, risk seeking and risk neutral investor

The presence of risk means more than one outcome is possible. Investors demand risk premium for bearing the risk. The question whether a given risk premium is adequate is a central theme in investment management. Measurement of risk and determination of risk premium is an important area of work in finance.

A prospect that has a zero risk premium is called a fair game. Risk averse investors reject fair game. Risk averse investors will invest in risk-free investment opportunities or in investment opportunities with positive expected risk premium. The greater the risk, greater the demand for risk premium. Investors assign utility score to competing portfolios given their expected return and risk involved. Higher utility scores are assigned to those portfolios with better risk-return profile. Higher utility scores are assigned to portfolios with higher expected return and lower utility scores are assigned to portfolios with higher risk.

Investors are assumed to be comparing the utility value of the risky portfolio with risk free investment offering the same utility to determine Certainty Equivalent Rate (CER). Certainty equivalent rate is the rate that a risk free investment has to offer to be equally attractive with risky investment. A highly risk averse investor may assign a risky portfolio with a CER below the risk free rate of return and reject investments into risky portfolio. A less risk averse investors may assign a higher CER and accept the same risky portfolio.

A risk neutral investor on the other hand evaluates the investment opportunities solely on the basis of expected return with no regard to risk. The amount of risk is irrelevant to the risk neutral person. Risk neutral person provide no penalty for risk. For risk neutral investor, portfolio CER is expected rate of return on the risky portfolio.

A risk seeking investor is the one who will engage in a fair game. They make an upward adjustment for utility unlike a risk averse investor who make a downward adjustment for utility.

14.4. Calculation of expected rate of return for individual security

Expected rate of return of an individual investment opportunity is the sum of the potential returns multiplied with the corresponding probability of the returns.

Suppose the following returns are forecasted for stocks A and B in three possible scenarios:

	State	Probability	A	B
I	Boom	0.3	15%	25%
II	Normal	0.5	10%	20%
III	Recession	0.2	2%	1%

The expected return of these two stocks will be calculated as follow:

R_A = .3(15%) + .5(10%) + .2(2%) = 9.9%

R_B = .3(25%) + .5(20%) + .2(1%) = 17.7%

- Calculation of Variance of return for individual security

Risk for an asset is defined as variability in return. One of the best-known measures of risk is standard deviation of expected returns (square root of variance of expected returns). It is a statistical measure of the dispersion of returns around the expected value. Larger variance (larger standard deviation) indicates greater dispersion, hence larger risk.

Variance is a measure of the variation of possible rates of return R_i, from the expected rate of return [$E(R_i)$].Standard deviation is the square root of the variance.

$$\text{Variance } (\sigma^2) = \sum_{i=1}^{n} [R_i - E(R_i)]^2 P_i$$

where Pi is the probability of the possible rate of return, Ri

The calculation of Variance of an individual investment is shown below:

Possible rate of return Ri	Expected Rate of Return E(Ri)	Ri-E(Ri)	$(Ri-E(Ri))^2$	P	$(Ri-E(Ri))^2$ *P
8%	11%	-3%	0.09%	0.25	0.000225
10%	11%	-1%	0.01%	0.25	0.000025
12%	11%	1%	0.01%	0.25	0.000025
14%	11%	3%	0.09%	0.25	0.000225
					0.0005

Variance (σ^2) = 0.00050

Standard Deviation (σ) = 0.0224

- Calculation of expected rate of return for a portfolio

Expected rates of return for a portfolio of assets is weighted average of the expected rates of return for the individual investments in the portfolio.

$$E(R_{\text{por i}}) = \sum_{i=1}^{n} W_i R_i$$

where:

W_i = the percent of the portfolio in asset i

$E(R_i)$ = the expected rate of return for asset i

The calculation of the portfolio return is shown below:

Weights (% of Portfolio)	Expected Investment Return	Weighted investment Return
0.2	0.09	0.018
0.1	0.12	0.012
0.3	0.15	0.045
0.4	0.18	0.072
	Expected Return of a Portfolio	0.147

➢ Calculation of Variance of return for a portfolio

Harry Markowitz derived the variance of a portfolio of return by using the statistical notions of covariance or correlation.

Box 14.1: Covariance or Correlation

Covariance is a measure of the degree to which two variables "move together" relative to their individual mean values. For two assets, i and j, the covariance of rates of return is defined as:

$$\text{Cov}_{ij} = \sum_{i=1}^{n} [R_i - E(R_i)][R_j - E(R_j)]/n$$

The correlation coefficient is obtained by standardizing (dividing) the covariance by the product of the individual standard deviations.

$$r_{ij} = \frac{\text{Cov}_{ij}}{\sigma_i \sigma_j}$$

where:

r_{ij} = the correlation coefficient of returns

σ_i = the standard deviation of R_{it}

σ_j = the standard deviation of R_{jt}

Correlation coefficient varies from -1 to +1. A value of +1 would indicate perfect positive correlation. This means that returns for the two assets move together in a completely linear manner. A value of –1 would indicate perfect negative correlation. This means that when one asset's rate of return is above its mean, the other asset's rate of return will be below its mean by a comparable amount.

Markowitz derived the general formula for the risk of the portfolio returns as follows:

$$\sigma_{port} = \sqrt{\sum_{i=1}^{n} w_i^2 \sigma_i^2 + \sum_{i=1}^{n} \sum_{i=1}^{n} w_i w_j \text{Cov}_{ij}}$$

where:

σ_{port} = the standard deviation of the portfolio

W_i = the weights of the individual assets in the portfolio, where weights are determined by the proportion of value in the portfolio

σ_i^2 = the variance of rates of return for asset i

Cov_{ij} = the covariance between the rates of return for assets i and j,

where $\text{Cov}_{ij} = r_{ij} \sigma_i \sigma_j$

As can be seen portfolio risk takes into consideration the weights of every investment in the portfolio, their individual risk (standard deviation) and the correlation between each pair of constituent assets.

In other words, variables which affect the portfolio risk are:

1. weights of investments
2. risk of investments
3. co-movement between investments

- Calculating risk for two securities Portfolio

For a two investments portfolio, the portfolio variance formula will be:

$$\mathrm{E}(\sigma^2_{\mathrm{port}}) = \mathrm{w}_1^2\sigma_1^2 + \mathrm{w}_2^2\sigma_2^2 + 2\mathrm{w}_1\mathrm{w}_2\mathrm{r}_{1,2}\sigma_1\sigma_2$$

As can be observed, portfolio variance is a function of weighted averages of the individual variances (where weights are squared) plus the weighted co-variances between all the assets in the portfolio. In a two investments portfolio there are three terms in the portfolio variance formula. The first term is weighted variance of investment 1, the second term is the weighted variance of investment 2, and the third term is the weighted covariance between investment 1 and 2.

Calculation of portfolio risk with two securities is shown below:

Correlation coefficient between the returns of Security A and B	0.5				
Expected Return on Security A	0.15				
Standard Deviation of return of security A	0.05				
Expected Return on Security B	0.15				
Standard Deviation of return of security B	0.05				
Weight of security A & B	0.5	0.5			

Portfolio Variance:

$$\mathrm{E}(\sigma^2_{\mathrm{port}}) = \mathrm{w}_1^2\sigma_1^2 + \mathrm{w}_2^2\sigma_2^2 + 2\mathrm{w}_1\mathrm{w}_2\mathrm{r}_{1,2}\sigma_1\sigma_2$$

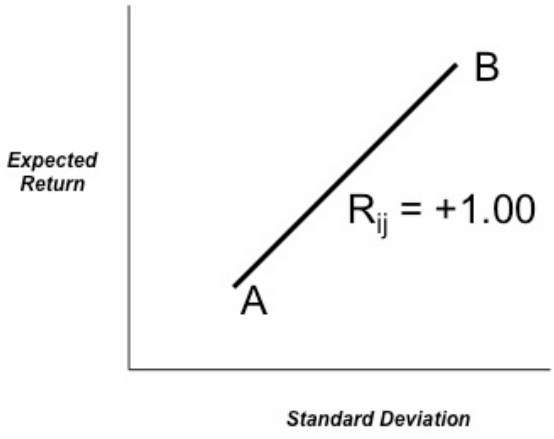
$$\boldsymbol{E(\sigma^2_{port}) = (.50^2 X 0.05^2) + (.50^2 X 0.05^2)}$$
$$\boldsymbol{+ (2X.50X.50X.5X.05X.05)}$$
$$\boldsymbol{E(\sigma^2_{port}) = 0.001875}$$
$$\boldsymbol{E(\sigma_{port}) = 0.0433}$$

- Calculating risk of three securities Portfolio

In a three investment portfolio, there would be six terms - The first term is weighted variance of investment I, the second term is the weighted variance of investment II, the third term is the weighted variance of investment III, the fourth term is the weighted covariance between investment I and II, the fifth term is the weighted covariance between investment II and III, and the sixth term is weighted covariance between investment I and III. Similarly in a 50 investments portfolio, there would be 50 individual investments' weighted variances and 1125 weighted co variances between 50 investments. The number of covariance terms is arrived by using the formula: $\frac{n^2-n}{2}$ where n is the number of securities in the portfolio.

14.5 Graphical presentation of portfolio risk/return of two securities

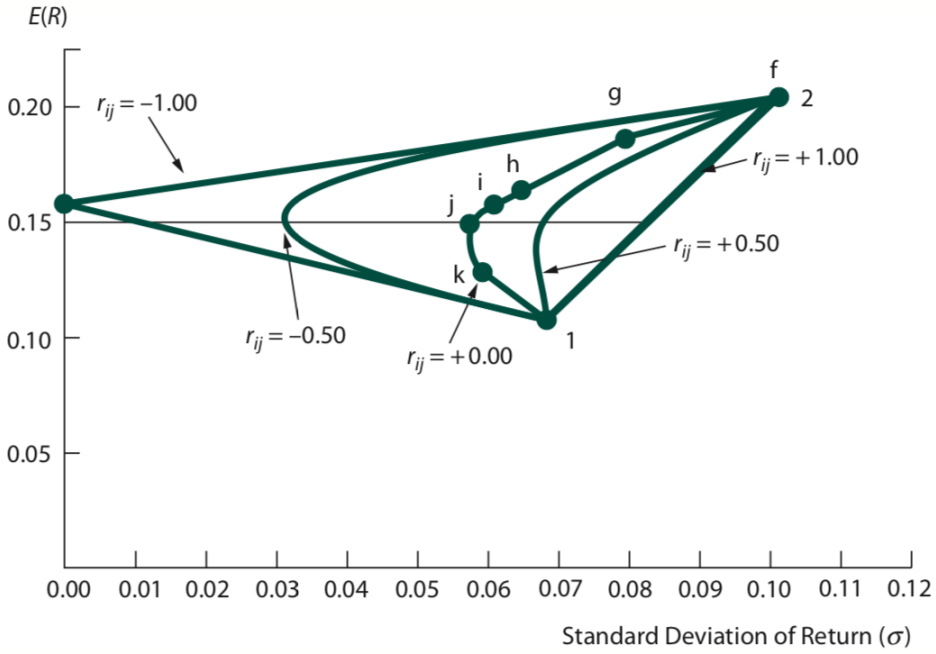
If two securities are perfectly correlated, the risk–return opportunity set is represented by a straight line connecting those two securities. The line contains portfolios formed by changing the weight of each security invested in the portfolio. The portfolio return of any combination of these two securities is the weighted average return of the securities. The standard deviation of any combination of these two securities is the weighted average standard deviation of the securities. In other words there is no benefit of diversification when two assets are having perfect positive correlation between them. Both the expected return and standard deviation of expected return are linear combination, a graph of possible portfolio return and standard deviation is a straight line connecting the two securities.



When correlation between two securities is less than perfect 1:

If the two securities are not perfectly correlated, the portfolio's risk is less than the weighted average risk of the securities, and the portfolio formed from the two securities bulges on the left as shown by curves with the correlation coefficient (ρ) less than 1.0. With low (less than +1 correlation) or negative correlation it is possible to derive portfolios that have lower risk than either of the assets. This is the essence of diversification. As long as the correlation is less than perfect 1, benefits of diversification occurs. Lower the correlation, higher the benefits of diversification.

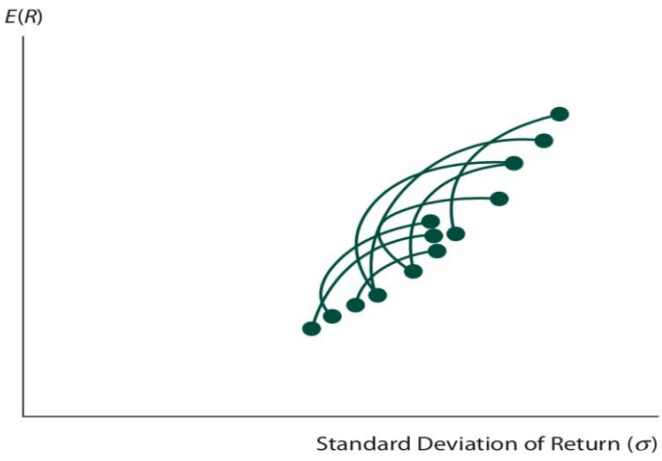
The following graph demonstrates the portfolio Risk–Return Plots for Different Weights When ri,j = +1.00; +0.50; 0.00; −0.50; −1.00



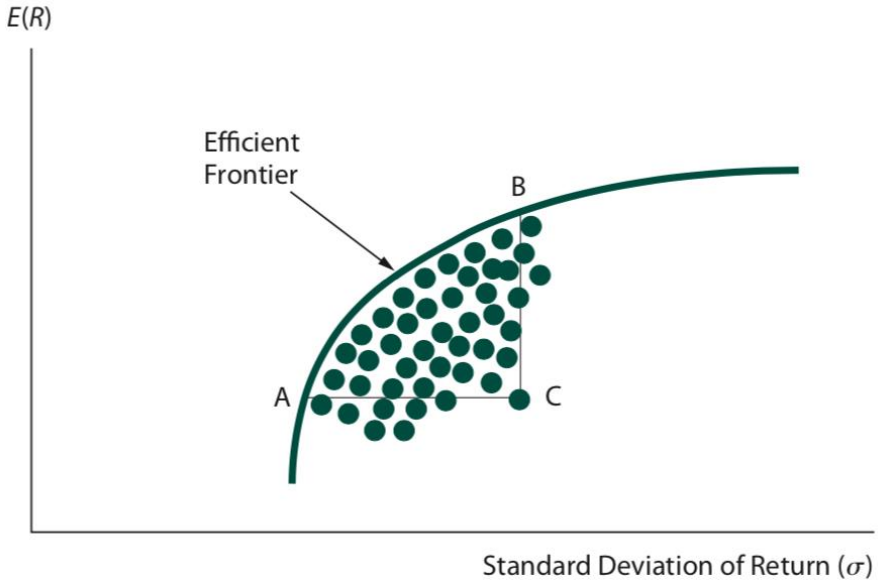
As can be noted in graph, when the correlation between the two assets is -1, the complete benefits of diversification is realized. The negative correlation term is completely offsetting the combined variances terms. Hence a particular combination of such perfectly negatively correlated securities can yield a zero risk portfolio. As noted, the benefits of diversification is critically dependent on the correlation between assets.

14.6 The concept of Efficient Frontier

The risk/return of a portfolio with above two securities can be plotted for all the possible weight combinations. When the correlation between them is less than perfect 1, the various combinations of them get plotted on a curve.



Similarly, many more securities can be combined in various (theoretically infinite) combinations and can be plotted accordingly. Of the various combinations the one that offer highest return for a given level of risk or the lowest risk for a given level of return will appear to be like an umbrella shaped curve. This umbrella shaped curve is referred as Efficient Frontier.



The efficient frontier represents set of portfolios that provides maximum rate of return for a given level of risk or the minimum risk for every level of return. As can be seen in the above graph every portfolio that lies on the efficient frontier has highest possible rate of return for a given level of risk. For example, portfolio A stands on efficient frontier as against portfolio C, because portfolio C has the same rate of return of portfolio A but much higher risk.

14.7 Portfolio Optimization process

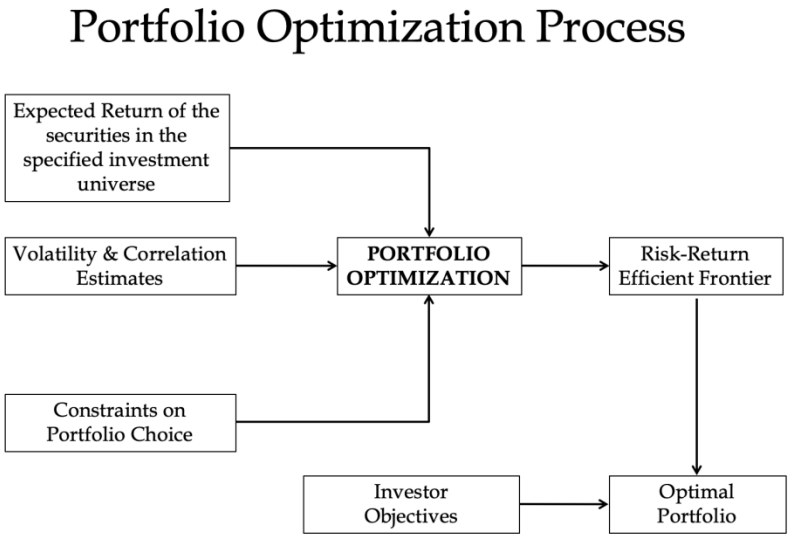
An optimum portfolio is a combination of investments having desirable individual risk–return characteristics for a given set of constraints. For using the MPT framework for constructing and selecting the portfolio, the portfolio manager is required to estimate the following:

1. the expected return of every asset class, securities and investment opportunities which are part of investment universe

2. the standard deviation of each asset's expected returns

3. the correlation coefficient among the entire set of asset class, securities and investment opportunities

In addition to these inputs, if the investor has any constraints, the same also needs to be specified.



From the feasible combinations of the various portfolios, the one which meets the investment objectives of the investor can be selected.

14.8 Estimation issues

For constructing and selecting a portfolio, the portfolio manager has to estimate the returns, risk and correlations among the securities in the investment universe. It is important to bear in mind that the output of the portfolio allocation depend on the accuracy of the statistical inputs. As can be noted, the number of correlation estimates can be significant. For example, for a portfolio of 50 securities, the number correlation estimates is 1225[12]. The potential source of error that arises from these estimations is referred to as estimation risk.

Calculation of portfolio risk comprising more than two securities can be performed in ways similar to how two securities portfolio risk is calculated. Portfolio with larger securities will require calculation of variance-covariance matrix. There are several methods for calculating the variance-covariance matrix. It can be easily calculated on the spreadsheet or visual basic application.

[12] $(n^2-n)/2$

CHAPTER 15: PORTFOLIO CONSTRUCTION PROCESS

LEARNING OBJECTIVES:

After studying this chapter, you should understand about:

- Importance of Asset allocation decision
- Understanding correlation across asset classes and securities
- Steps in Portfolio Construction Process
- Investment objectives
- Investment Constraints
- Exposures limits to different sectors, Entities and Asset Classes
- Unique needs and preferences
- Assessments of needs and requirements of investor
- Analysing the financial position of the investor
- Psychographic analysis of investor
- Life cycle analysis of investor
- Forecasting risk and return of various asset classes
- Benchmarking the client's portfolio
- Asset allocation decision
- Portfolio Construction Principles
- Strategic versus Tactical Asset Allocation
- Rebalancing of Portfolio

15.1. Importance of Asset Allocation Decision

Asset allocation is the process of deciding how to distribute an investor's wealth into different asset classes for investment purposes. An asset class is defined as a collection of securities that have similar characteristics, attributes, and risk/return relationships. Examples of various asset, are bonds, equities, cash and cash like securities etc., A broad asset class, such as "bonds," can be divided into sub-asset classes, like Treasury bonds, corporate bonds, and junk bonds. Equity can further be divided into large cap, mid cap & small cap.

Asset allocation decision is a very important investment decision. This is the starting point for the investor as they set out to achieve their goals. Professional Investment experience has been suggesting that in the long run asset-allocation decision majorly influences the performance of investment portfolios. The asset allocation decision is not an isolated decision, it is a component of the overall portfolio management process.

15.2 Understanding correlation across asset classes and securities

Correlation measures the strength and direction of relationship between two variables. Correlation coefficients vary in the range −1 to +1. A value of +1 (-1) indicates a perfect

positive (negative) relationship between the two variables. A positive relationship between two variables means that they both move together in the same direction, either in an upward trend or downward trend. Negative relationship means the opposite. The value of the correlation coefficient indicates the strength of the relationship between the two variables. Understanding correlation across asset classes is very crucial in making asset allocation decision. Investments that are part of same asset class are sensitive to the same major economic and/or investment factors. Hence the correlation between assets that are part of the same asset class is expected to be high where correlation two different asset classes is expected to be low. These assumptions hold good. In normal circumstance that is when the economy, industry are stable. In situations of distress, like COVID-19 pandemic, the alround fear, uncertainity, speculation about gloomy prospects impact all the asset classes in a similar way to a large extent, however this relationship reverses once the normalcy is regained..

Correlation is the most relevant factor in reaping the benefits of risk diversification i.e. in reducing portfolio risk. Correlations among asset class returns can and do change over time and also in different economic situations. Asset return correlation in future may also differ from those observed in the past because of changing economic and market regimes.

Investors should take these factors into consideration while making asset allocation decisions and should not solely depend on past correlation metrics[13].

15.3 Steps in Portfolio Construction Process

Portfolio management process involves a set of integrated activities undertaken in a logical, orderly and consistent manner to create and maintain an optimum portfolio. The elements in the portfolio management process are planning, execution and evaluation as discussed below:

1. The first step in the process of portfolio management is development of policy statement for the portfolio. It is a road map that identifies investors risk appetite and defines investment objectives, goals and investment constraints.
2. The second step involves study of current financial conditions and forecast of future trends.
3. The third step is construction of the portfolio after taking into consideration policy statement and financial markets forecast. Investor needs and financial market forecasts being dynamic, portfolio requires continuous monitoring and rebalancing.
4. The fourth step in portfolio management process is performance measurement & evaluation.

Thus, the portfolio management process moves from planning through execution and then to feedback.

[13]Financial services data integrators like Bloomberg, Capital IQ etc., provide information on Correlation co efficient between various assets and securities. Alternatively, users can calculate correlation coefficient using simple Excel Functions.

15.3.1 Investment Policy Statement (IPS)

Development of an Investment Policy Statement (IPS) is the key step in the process of portfolio management. IPS is the road map that guides the investment process. Either investors or their Investment advisers draft the IPS specifying their investment objectives, goals, constraints, preferences and risks they are willing to take. All investment decision are based on IPS considering investors' goals and objectives, risk appetite etc., Since Investors requirements change over a period time, IPS also needs to be updated and revised periodically. IPS forms the basis for strategic asset allocation which is essentially an interaction between investors risk-return requirements and expected investments' return.

15.3.2. Need and importance for IPS

IPS is an important planning tool which help investors understand their requirements and also help portfolio managers in creating and maintaining optimum portfolios for the investors. Preparation of IPS inculcates a disciplined system and process in managing investments. It reduces the possibility of making inappropriate decisions.

There are four important purposes the policy statement serves:

1. It enables investors to have realistic return expectation from their investments
2. It enables portfolio manager to make effective investment decisions.
3. It provides a framework for portfolio managers evaluation with respect to the investments.
4. It protects the investor against portfolio manager's inappropriate investment decisions or unethical behaviour.

In summary, a well defined policy portfolio go a long way in serving the investor's interest. It enables construction of an optimal investment portfolio.

15.3.3. Constituents of IPS

Since IPS is the most important document, it needs to be prepared with caution. The investor has to be upfront with the Investment adviser or portfolio manager with regard to their financial situation, requirements and risk bearing temperament. The advisor or the manager preparing the IPS is also required to show utmost patience to obtain deep understanding of the investor's profile.

The IPS would normally list out the goals of the investor along with their priorities. This is followed by listing out the investment objectives along with the time horizon. Clarity on this front is essential because the portfolio manager can then frame strategies accordingly. There should be a clear mention of the risk/return profile of the investor along with the liquidity constraints plus naming preferred asset classes even those asset classes that need to be avoided can be mentioned. There has to a systematic review process present in the IPS which

will allow the investor to remain on track to achieve their goals. Current information is a critical part of the whole structure.

15.4 Investment Objectives

Investors' objectives are identified in relation to risk-return-liquidity. Investors may state their investment objectives in terms of desired return in absolute or relative sense. They need to bear in mind that risk and return have typically positive relationship. Higher the risk, higher the return. On the other hand, liquidity has inverse relationship with return. Relatively illiquid investments require premium for being less liquid, i.e. illiquidity risk premium.

Generally, investors invest for preservation of capital, regular Income and capital appreciation. The investment objectives lead to an asset allocation decision. If the investment objective is capital appreciation, then investments need to be high return investments (like equity). Of course, these investments will have higher risk than government securities or bank fixed deposits. On the other hand, if capital preservation is the primary investment objective, asset allocation will be tilted towards safe bonds and debt securities. If regular income is the investment objective, funds will be invested in asset classes generating periodical income like dividend paying stocks, interest paying bond or/and rent paying realty.

15.5 Investment Constraints

Constraints are limitations on investors to take exposure to certain investment opportunities. Constraints relates to investors liquidity needs, time horizon, and other unique needs and preferences.

15.5.1. Liquidity constraint

Different investors have different liquidity requirements. Younger people usually have lesser liquidity requirements than older people. Some may have some health or medical concerns which require them to maintain certain liquid funds. Others may have requirements of college fees or wedding in the family or some other needs. Generally, investors prefer to have liquid funds to meet their day to day expenses. Additionally, they may like to keep some amount of liquidity to meet contingency requirements like sudden medical expenses etc.

The needs for liquidity fall into three categories:

1. Emergency Cash. The emergency cash reserve is usually measured at two to three months' spending, but it could be more if the individual's source of income is at risk or volatile.

2. Near term goal. These needs vary with the individual. For known goals due within a year, the amount needed to achieve these goals should be in assets with relatively good liquidity and less risk.

3. Investment Flexibility. The ability to take advantage of market opportunities as asset classes become overvalued and undervalued would require greater degree of liquidity.

To meet the such requirements, some portion of the portfolio should be in cash or cash like securities. The Investment adviser or the manager need to make detailed assessment of the liquidity needs of the investors. As keeping too much money for liquidity may hit the overall portfolio return. On the other hand not maintaining sufficient liquidity will lead to inconvenience and selling of other investments untimely. The liquidity constraints of the investor need to be clearly specified in the IPS.

15.5.2. Regulatory constraints

Generally individual investors do not have many regulatory constraints. But if there are any, they need to be followed. Regulations can also constraint the investment choices available to the investors. For example, as per the Reserve Bank of India's[14] notification, Liberalised Remittance Scheme (LRS), an Indian resident individual can only invest up to $250,000 overseas per year. Indian resident individual Investors cannot make investments greater than the amount specified by the regulator. Another example is the sell or purchase of securities on the basis information that is not publicly known. Usually, people who have access to such information are insiders of the company and they are prohibited from trading on the basis of insider information.

15.5.3. Tax Constraint

Investment process is complicated by tax concerns. Tax plays a very important role in portfolio management and drives investment decisions. Different investments and different kinds of income are taxed differently. Return in form of income like interest, dividend and rents versus return in form of capital appreciation are taxed differently. The same form of return may attract different tax liability depending on the tax bracket, the recipient belongs to. Hence a thorough understanding of the tax laws applicable to the investor needs to be part of the IPS.

15.6 Exposures limits to different Sectors, Entities and Asset Classes

As per the SEBI PMS Regulations 2020 the agreement between the portfolio manager and the investor must include the investment approach. An investment approach is a broad outlay of the type of securities and permissible instruments to be invested in by the portfolio manager for the investor, taking into account factors specific to investor and securities. It should also include the type of instruments and proportion of exposure.

After taking into account the investor's objective, risk appetite, liquidity needs, tax and other regulatory constraints, time horizon for investment, exposure limits to specific sectors,

[20]Under the Liberalised Remittance Scheme, all resident individuals, including minors, are allowed to freely remit up to USD 2,50,000 per financial year (April – March) for any permissible current or capital account transaction or a combination of both. Further, resident individuals can avail of foreign exchange facility for the purposes mentioned in Para 1 of Schedule III of FEM (CAT) Amendment Rules 2015, dated May 26, 2015, within the limit of USD 2,50,000 only. The Scheme was introduced on February 4, 2004, with a limit of USD 25,000. The LRS limit has been revised in stages consistent with prevailing macro and micro economic conditions

entities and asset classes can be set to avoid “concentration risk”. The portfolio manager needs to adhere to these exposure limits while managing investments.

15.7 Unique needs and preferences

Sometimes investors have idiosyncratic concerns. They may have personal, social ethical, cultural and preferences beliefs. For example, an investor may not want her money to be invested in the stocks of companies selling environmentally harmful products. Another example could be of an investor owning stocks of the company she is working with, reluctant to sell the same even when it is financial prudent, due to emotional attachment. The point is each investor is unique and if she has any specific preference, the same should be clearly specified in the IPS.

In addition to the above mentioned section, the IPS may also include reporting requirements, portfolio rebalancing schedules, frequency of performance communication, investment strategy and styles etc.

15.7.1 Learn about sustainable investing

Sustainable investing is a growing field across the world which considers environmental, social and governance (ESG) criteria while selecting investments. The goal is to generate financial returns while at the same time ensure positive impact on society. There are several reasons for undertaking sustainable investing which could be personal values or needs of the investor or even mission of an institution. The idea is to improve on the environmental, social and governance practices and such investments are determined after comparison on these specific criteria. The investments are also checked to see if they are future ready to tackle the emerging challenges facing the world and there is also a growing belief that focusing on these factors leads to financial outperformance too. Some factors considered under governance are Board independence, Board diversity and Executive compensation. Under social factors are Workplace safety, Community development and Human rights while environmental factors would include areas like Pollution, Water use and Clean technology adopted.

15.7.2 Understand ethical investing

Ethical investing is the process of selecting investments based on moral or ethical principles. Ethical principles here become the primary filter for selecting the investments. A key factor in the entire process that this depends a lot on the investors views. Often ethical investing is used interchangeably with sustainable or socially conscious investing but there is a key difference between the two. The latter is based on an overall set of guidelines that screen out the investments but ethical investing is more personalised. So ethical investing would typically avoid sin areas like gambling, alcohol, smoking or even firearms.

15.8 Assessments of needs and requirements of investor

Investors invest to meet their various goals and objectives. Assessment of the needs and requirements of the investors is critical in making investment decisions. People have many financial goals, some are to be achieved in near term, some are medium or long term goals. The goals also have different priority – some are high priority goals where as others may not be very important to achieve. Investors can put their needs and goals down along with the priority and the time frame for each of those goals, with the funds needed for the same. A proforma for creating a goal sheet is given below:

No.	Goal	Priority	Time period	Amount needed

Near-Term High Priority Goals have a high emotional priority which the investor wishes to achieve within just a few years at most. As a result, investment vehicles for these goals tend to be either cash equivalents or fixed-income instruments with maturity dates that match the goal date. For people of limited to modest means, the cost of not achieving those goals is just too great to take a risk with more-volatile approaches.

For many investors building a retirement corpus is a long-term high priority goals. When investors start planning for this goal well in advance, they have enough time to accumulate the corpus. Because of the long-term nature of such goals, a diversified approach utilizing several different classes of assets is usually preferred.

People also have many low priority goals. There are goals that are not particularly painful if they are not achieved. These could range from buying a farm house to a luxury car. For these goals more-aggressive investment approaches are usually taken.

15.9 Analysing the financial position of the investor

A convenient way to analyse the financial position is by constructing personal financial statements. This helps in organizing financial data in a systematic way. Personal financial statements include a statement of net worth-balance sheet and income-expense statements. For calculating net worth, all the assets the investor owns, i.e. the house, the car, the investments in stocks, bonds & mutual fund, balance in the saving accounts, value of the jewels owned and the value of all other financial assets and real assets are to be recorded at the estimated market value. Then all the liabilities need to be subtracted from the assets. Liabilities may include the outstanding car loan amount, credit card loans, home loan and any other amount he owes like the personal loan, education loan etc. The difference between the

value of assets and the liability is net worth. It is suggested that net worth is to be calculated periodically, at least once in a year. The next step is calculating the whether the person's present income exceeds spending and by how much amount. This is the amount which would be available periodically for investment purposes. The income expenditure statement can be prepared on monthly basis.

15.10 Psychographic analysis of investor

In the investment process, investor's behavioural traits and personality characteristics also play an important role in setting their risk profile. Psychographic analysis of investor bridges the gap between standard finance which treats investors as rational human beings and behavioural finance which view them as normal human beings who have biases and make cognitive errors. In other words, psychographic analysis of investor recognizes investors as normal human beings who are susceptible to biased or irrational behaviour.

All investors have unique personalities. And though it is difficult to categorize the personalities because they all are human beings and they are so different; some basic classification system has evolved after years of research. There are many frameworks available to perform psychographic analysis. For illustration purpose, given below is the framework given by Bailard, Biehl & Kaiser (BB&K).

Bailard, Biehl & Kaiser (BB&K) classifies investor personalities by focusing on two aspects: the level of confidence and the method of action. The first deals with how the investor approaches life in terms of career, wealth or money. The second element deals with whether investor is careful, methodical and analytical in the approach towards life. The two elements can be thought of as two "axis" of individual psychology: one axis is the confidence/anxiousness the other is carefulness/ impetuousness

The different personality characteristics are shown through Exhibit 15.1.

Exhibit 15.1: Investor Personality Characteristics

The Five Personalities:

The upper-right corner of Figure represents the adventurer-people who are willing to put it all in one major bet and "go for it" because they have confidence. As far as they are concerned, it is a carefully considered decision. They are confident as well as impetuous. In that quadrant, one typically will find entrepreneurial people, people who are willing to stick their necks out in their careers or in their money management strategies. They normally have their own ideas about investing. They are willing to take risks, and they normally do not go for the investment advisers. They prefer concentrating their bets.

The lower-right quadrant of Figure is the Celebrity quadrant. These people like to be where the action is. They are afraid of being left out. These investors will keep bringing up the latest hot topic, asking, "Should I be in this, or should I be in that?" They really do not have their own ideas about investments. These people normally go for investment advisers. However, they are the most difficult investors to deal with because of their own confused beliefs.

The individual list is in the upper-left quadrant. These people have certain degree of confidence about them, but they are also careful, methodical, and analytical. Individualists like to do their own research and tend to avoid extreme volatility. They are often contrarian investors because they do sit back and think about where they want to go and which investments make good value sense

The lower-left quadrant represents the Guardian personality. Typically as people get older and begin considering retirement, they approach this personality profile. Guardians are people who are cautiously trying to preserve their wealth. They are definitely not interested in volatility or excitement.

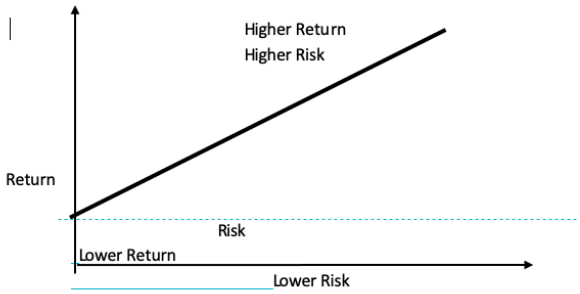
Finally, there are always people who are so well balanced that they cannot be placed in any specific quadrant, so they fall near the centre; this investor is called a straight-arrow investors. On average, this group of investors is a relatively balanced composite of each of the other four investor types, and by implication a group willing to be exposed to medium risk.

It is also worth noting that each investor at times exhibits some characteristics of personalities other than his normal one. This can be particularly influenced by his most recent investment experience. A guardian can become more aggressive for a time, like an adventurer, if he is on a winning streak. Conversely, most investors become more guardian like just after an event with heightened volatility.

Experience has shown that each of the five types of investors requires a different approach in portfolio management.

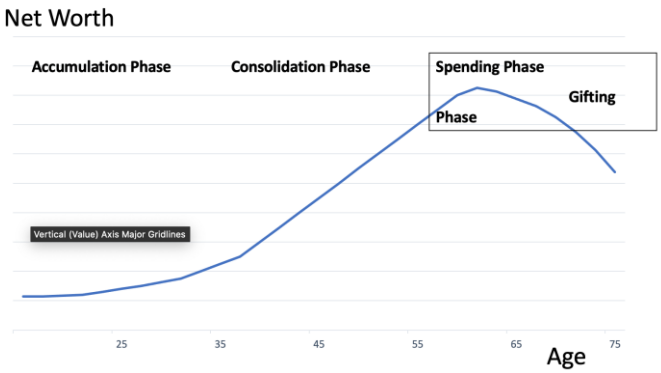
15.11 Life cycle analysis of investor

It is important to understand the various stages in the life cycle; because of the impact they have on an investor’s risk appetite.



Every investor has thoughts about where she might be along that line, especially when the points are described in terms of risk and returns. Generally younger individuals who are just beginning to earn money tend to be on the right side of the line, while older individuals move increasingly to the left side on the line. This life cycle of investing can be broken into phases: the accumulation, consolidation, spending, and gifting phases. This is depicted in Exhibit 15.2.

Exhibit 15.2: Lifecycle of investing



Accumulation Phase: In the accumulation or early career phase. During this phase net worth is typically small relative to liabilities. Investments are fewer and typically non-diversified. Goals may include children's educations, a house, and if possible, investments for future financial independence. But because the individual has a very long time horizon and a potentially growing stream income, she can undertake more high-return, high-risk capital gain-oriented investments.

Consolidation Phase: The consolidation or mid-to-late-career stage of the typical life cycle is characterized by the period when income exceeds expenses. As a result, this stage is characterized by the consolidation of investment portfolio. At this time, while the time

horizon to retirement is still relatively long (15 or 20 years), investors may start looking for capital preservation. High capital gain investments are balanced with some lower-risk assets.

Spending Phase: The "spending phase" is defined as the period when living expenses are covered not from earned income but from accumulated assets such as investments and retirement corpus. Because of the heavy reliance on investments in this phase and the unlikelihood of going back to work, the focus is on stability in investment portfolio. Preference will be on investment that generate dividend, interest, and rental income. As the investor's time horizon may still be well over 15 or 20 years, so some investments in the portfolio should continue to have growth and inflation-hedge potential.

Gifting Phase: This is the final phase when a person realizes that she has more assets than she will need for spending. In such cases the attitude about the purpose of investments does change. Investments at this stage may be made to leave legacy, support a charitable cause etc.,

It is important to note that the boundaries between the stages are fuzzy on time scale.

15.12 Forecasting risk and return of various asset classes

Portfolio Management is the process of integrating two sets of information. The first set of required inputs have already been listed above viz., investment objectives, goals and requirements, personality type, phase in the life cycle, liquidity needs, tax and other constraints etc., The second set of required inputs is the capital market forecasts that establishes the expected risk-return opportunities available to the investors.

The various investment opportunities available to the investors need to be listed and their returns need to be forecasted along with the possibilities of deviations in those returns. Historical risk-return on various asset classes provide a good starting point to understand the relationship between risk and return and proceed to make the forecast about their future return possibilities.

15.13 Benchmarking the client's portfolio

The investment policy statement needs to provide a framework for evaluating the performance of the portfolio. It will typically include a benchmark portfolio which matches in composition of the investor's portfolio. The idea is to compare "apple with apple". If the investment is made in large cap equities, BSE 30 or NIFTY 50 can be an appropriate benchmark. If the investment is made in long term bonds, a bond index with similar maturity and credit profile will be an appropriate benchmark.

15.13.1 Selection of benchmarks

The selection of benchmarks is a crucial point in evaluating the performance for the investor. A wrong selection can paint a completely different picture which could lead to wrong investment decisions. For example a large cap portfolio has to be compared to a large cap

index and similarly a mid-cap portfolio with a mid-cap index. A debt portfolio too needs the right kind of benchmark that represents the nature of the investments made.

Sometimes there is a need to ensure that there are multiple or hybrid benchmarks used for the purpose of comparison. This can be done by either comparing the relevant part of the portfolio to a separate benchmark or if there is a stable asset allocation mix or stable mix within an asset class then even hybrid benchmarks are available which would be more representative of the entire situation.

A benchmark once selected should also be reviewed on a regular basis. If the nature of the investment changes or the benchmark composition changes then there might be a need to change the benchmark too.

15.14 Asset allocation decision

The interaction between the two sets of information – about the investor and about the risk-return on investment opportunity culminates into asset allocation decision. The asset allocation decision follows logically from the investor's needs and goals, risk preferences and liquidity needs. After developing a forecast on risk and return on various asset classes, the portfolio manager has to decide the mix of assets that maximizes the after-tax returns for the investor.

15.15 Portfolio Construction Principles

The portfolio construction process follows from the requirements of the investors along with their goals and the time period in which these have to be achieved. The Investment Adviser can help the client to construct their portfolio keeping several principles in mind.

15.15.1 Selecting Equity portfolios

Equity portfolios should represent the right mix of risk and stability that is required by the investor. Large cap exposure gives an element of stability to the portfolio while mid and small caps though more volatile can lead to a higher capital appreciation. The right mix should be followed by the investor based on their risk taking ability. Higher dividend yield stocks can also generate a cash flow from equities. The extent of equity exposure will depend on the goals of the investor and the time period available to achieve those goals.

15.15.2 Selecting Debt portfolios

While selecting a debt portfolio there has to be a look at the need to generate a steady cash flow from the investments. This will require the choice of a specific kind of instruments. At the same time short term debt instruments are to be used for the purpose of meeting short term goals. Even parking money for a few days can lead to some higher returns rather than these lying in the bank account. The ability of the investor to take credit risk will also determine the type of instruments that are included in the medium to long term debt portfolio.

15.15.3 Selecting Hybrid portfolios

Hybrid portfolios ensure that there is an element of stability to the investments and at the same time there is a potential upside in case the performance of various assets turns out to be better. Hybrid portfolios are meant to achieve a specific objective and are used as a long term goal starts getting near. Sometimes instead of selecting the debt and equity mix separately there might be use of hybrid investments to achieve the same objective. The shift to such portfolios can ensure a smooth transition for the investor in terms of their asset allocation mix.

15.15.4 Other portfolios

Other portfolios will have added elements in them which could include assets like gold or other precious metals and even alternative investments. These portfolios are looking to raise the overall return but at the same time provide a different kind exposure leading to diversification. This can be helpful for the investor in reducing their risk and maintaining stability.

15.16 Strategic versus Tactical Asset Allocation

The asset allocation decision which is made after taking into consideration investor's characteristics is strategic asset allocation (SAA). It is the target policy portfolio. It provides target allocation among the major asset classes; in that sense it is essentially translation of an investment policy statement into asset weights. SAA is the long-term asset allocation decision. SAA is designed to meet the investors goals and objective over a longer period of time.

There is, however, a dynamic component to asset allocation – tactical asset allocation (TAA). Tactical asset allocation TAA is short-term asset allocation decision. These decision are taken more frequently than SAA. The idea behind TAA is to take the advantage of the opportunities in the financial markets. When market conditions favour one asset class over other, the portfolio manager may temporarily shift money from one asset class to another to exploit discrepancy in market with a view to earn returns. In TAA, portfolio managers time markets, i.e., determine which asset classes are likely to go up more than expected and which less than expected. Then they will alter the target asset allocation accordingly. Thus, if a portfolio manager believes that the stock market is overvalued and is up for a correction, while debt market is undervalued, may reduce the proportion of the portfolio that is allocated to equities and increase the proportion allocated to debt. After booking the gains, the portfolio needs to be rebalanced to pursue the target allocation. Thus, TAA attempts to beat the markets. Thus SAA decisions involve "time in the market" whereas TAA is for "timing the markets".

15.16.1 Importance of Asset Allocation decision – empirical support

Asset allocation is considered as the most important investment decisions. This is because asset allocation is the major determinant of risk and return for a given portfolio. There is a huge empirical support for the same. Brinson, Hood, and Beebower (1986) in a landmark paper concluded that a portfolio's target asset allocation explained the majority of a broadly diversified portfolio's return variability over time. These findings were confirmed by Ibbotson, Roger G., and Paul D. Kaplan (2000) suggesting that a portfolio's investment policy is an important contributor to return variability. Across all portfolios, asset allocation decision explains an average of 40 percent of the variation in fund returns. For a single fund, asset allocation explain 90 percent of the fund's variation in returns over time.

15.17 Rebalancing of Portfolio

Portfolio need to be continuously monitored and periodically rebalanced. The need for rebalancing arises due to price changes in portfolio holdings. Over time, asset classes produce different returns that can change the portfolio's asset allocation. To keep the portfolio's original risk-and-return characteristics, the portfolio may require rebalancing. Portfolio may also require re-balancing due to changes in investor's goals and objectives, risk tolerance etc., The IPS should include a policy regarding rebalancing the portfolio answering questions relating to rebalancing like "how often" and "how much" i.e. the periodicity for portfolio rebalancing and the tolerance for deviation from target policy portfolio.

15.17.1 Benefits and difficulties of rebalancing

Portfolio rebalancing involves a simple trade-off: the cost of rebalancing versus the cost of not rebalancing. While deciding the frequency of rebalancing, the trade-off between the cost of doing it and not doing it is to be arrived at. If investor's target asset allocation is considered optimal, any deviation from it due to price fluctuations is undesirable. However, rebalancing costs need to be borne in mind.

There are two types of cost – transaction cost and tax cost. Transaction costs is the time and money costs like research cost, brokerage etc., for buying and selling securities. Relatively illiquid investments like private equity and real estate pose challenges in rebalancing as they pose higher transaction costs. Rebalancing is comparatively easier with relatively more liquid asset like listed equities or government bonds. While rebalancing the portfolio, managers sell assets, usually the appreciated asset and buy usually depreciated assets. Portfolio managers often set price targets for buying and selling securities. Such actions attract tax liability, which also should be kept in mind while deciding the frequency for rebalancing and the tolerance for deviations.

CHAPTER 16: PORTFOLIO PERFORMANCE MEASUREMENT AND EVALUATION

LEARNING OBJECTIVES:

After studying this chapter, you should understand about:

- Parameters to define performance – risk and return
- Understand different ways of calculating the return
- Understand different ways of calculating the risk
- Understand different ways of calculating the risk-adjusted return
- The importance of Benchmarking and peer group analysis
- Performance attribution analysis

16.1 Parameters to define performance – risk and return

The main issue in performance measurement and evaluation is the human tendency to focus on the return, the investment has earned over a period of time with little regard to the risk involved in achieving that return. Proper performance measurement should involve recognition of both return and risk of investments.

16.2 Rate of return measures

The most vital statistic in measuring the performance of a portfolio is the rate of return. Rate of return has many possible definitions. However, there is one possible definition for each purpose. So, one should make effort to obtain clarity about the purpose for which the performance is to be measured and then look at an appropriate return measure.

16.2.1 Holding period return

The most straightforward rate of return is the holding-period-return (HPR), popularly known as total return or point-to-point return. It equals the income generated by an investment plus the change in value of the investment during the period the investment is held, over the beginning value of the investment, expressed as a percentage per annum.

For example, If the market value of an investor's portfolio on 1 April, 2018, is Rs.1,00,000, and on 31 March, 2019 the market value of the same portfolio stands at Rs.1,20,000, the investor would have achieved a holding-period return equal to 20%. In general, we can use Equation (1) to compute holding-period returns.

$$HPR = (E-B)/B \ldots\ldots\ldots\ldots\ldots \text{ Equation 1}$$

HPR = ((120000-100000))/100000 = 20%

Further, assume that during the same period the investor has received Rs. 5000 by way of dividend and interest income, then

$$HPR = (I + (E - B)) / B \ldots\ldots\ldots\ldots\ldots \text{ Equation 2}$$

HPR = (5000 + (120000-100000))/100000 = 25%

where

HPR = holding-period return; I = Income; E = Ending Value; B = Beginning Value. This measure assumes that all income distributions are made at the end of the year. In spite of this limitation, Holding Period Return measure is widely used and generally accepted indicator of performance. This is considered as the starting point of performance measurement exercise.

16.2.2 Time Weighted Rate of Return (TWRR) versus Money Weighted Rate of Return (MWRR)

Let us now consider rate of return over multiple holding periods. Suppose a portfolio has generated the following annual holding period return from 2015 through 2019:

Year	HPR for the year
2015	-5.00%
2016	-15.20%
2017	8.10%
2018	30.75%
2019	17.65%

Suppose further that the investor has invested Rs. 75,000 in this portfolio by making contributions at the beginning of each year as follows:

Year	Investment Amount in Rs.
2015	5000
2016	10000
2017	15000
2018	20000
2019	25000

At the end of 2019, the investments would have grown to the value of Rs. 105,920.31 as shown below:

A	B	C	D	E	F
	Investment made at the beginning of the year in Rs.	Return generated during the period	Return made during the period in Rs.	Portfolio Value at the beginning of the period in Rs.	Portfolio Value at the end of the period in Rs.
2015	5000	-5.00%	-250	5000	4750
2016	10000	-15.20%	-2242	14750	12508
2017	15000	8.10%	2228.15	27508	29736.15
2018	20000	30.75%	15293.87	49736.15	65030.01
2019	25000	17.65%	15890.3	90030.01	**105920.31**

What is the rate of return generated during the period of five years?

By discounting the terminal value of the investment i.e. 105,920.31 and the cashflow contributions made, internal rate of the return for the same can be calculated.

$$5000 = -\frac{10{,}000}{(1+r)^1} - \frac{15{,}000}{(1+r)^2} - \frac{20{,}000}{(1+r)^3} - \frac{25{,}000}{(1+r)^4} + \frac{105{,}920.31}{(1+r)^5}$$

(Internal Rate of Return) IRR = 15.15%

IRR is also referred as MWRR (Money Weighted rate of return). Financial calculators and spreadsheet have inbuilt function for solving the IRR.

MWRR is the annual rate of return at which the cumulative contributions grow over the measurement period. MWRR depends on the timing of the cash flow.

Alternatively, in order to calculate the underlying investment performance without being influenced by the timing of cash flow, TWRR can be calculated.

TWRR is the compound rate of growth over the stated period. In TWRR, portfolio will be valued every time there is an external cash flow. When there is an external cash flow, TWRR requires computing a set of return for each period. These sub period returns will be linked together to compute TWRR for the evaluation period.

The following table gives the contribution made by the investor along with the portfolio value for five years period.

Table: Illustration on Time Weighted Rate of Return

A	B	C
	Investment made at the beginning of the year in Rs.	Portfolio Value at the end of the period in Rs.
2015	5000	4750.00
2016	10000	12508.00
2017	15000	29736.15
2018	20000	65030.01
2019	25000	105920.31

In this example, there are five sub periods. First step towards calculating the TWRR is to calculate each period return as shown below using equation 1 i.e. (E-B)/B.

Table: Calculation of Sub-Period Returns

A	B	C	D	E
	Investment made at the beginning of the year in Rs.	Portfolio Value at the end of the period in Rs.	Portfolio Value at the beginning of the year in Rs.	Return made during the year
2015	5000	4750.00	5000.00	-5.00%
2016	10000	12508.00	14750.00	-15.20%
2017	15000	29736.15	27508.00	8.10%
2018	20000	65030.01	49736.15	30.75%
2019	25000	105920.31	90030.01	17.65%

The next step is to link these five sub period return together. For chain linking these sub period return, we have to calculate wealth relatives. Wealth relative is ending value of one unit of money. Hence what needs to be done to create wealth relative is to add one to each period return, as shown below:

Table: Calculation of Wealth Relative

	Return made during the year	Wealth Relative
2015	-0.05	0.9500
2016	-0.152	0.8480
2017	0.081	1.0810
2018	0.3075	1.3075
2019	0.1765	1.1765

The next step is to create a cumulative wealth relative for the entire evaluation period by multiplying each period wealth relative as shown below.

Cumulative wealth relative = 0.95 x 0.848 x 1.081 x 1.3075 x 1.1765 = 1.3396

Cumulative wealth relative tells us what one rupee has grown over a period of time, in this case five-year period. In this example one rupee has become Rs.1.3396 in a period of five years. The compound annual return can be calculated as:

TWRR = (1.3396 ^ (1/5)) - 1 = 6.021%

The TWRR is the same as geometric return.

Note that unless the sub periods constitute exactly one year, time-weighted rate of return will not be expressed as an annual rate, and we have to annualize the return.

Securities Exchange Board of India (Portfolio Managers) Regulation, 2020 prescribes discretionary portfolio managers to disclose performance using 'Time Weighted Rate of Return' for the immediately preceding three years.

16.2.3 Geometric Mean Return (GMR) vs. Arithmetic Mean Return (AMR)

Suppose there are two portfolio choices available to invest Rs.100,000. First choice produces a holding-period rate of return of -50 percent in the first year and 100 percent in the second year. Another choice produces holding-period rate of return of 10 percent in the first year and 10 percent in the second year. Which one would you suggest?

In case of the first scheme at the end of the second year the investor will end up with Rs. 100,000. The value of the portfolio is the same, as it was two years ago, though the average annual return on the portfolio is 25 percent.

With the second choice the value of the portfolio at the end of the second year is Rs.121,000; an average annual 10 percent gain in value. Clearly, investor is better off with the second scheme, although it produces average annual return lower than the first scheme.

To understand how the outcome in the two cases are so different, it is important to distinguish the two methods of calculating returns. The average annual arithmetic return is the simple average of individual total yearly returns. The yearly return is the sum of (1) the percentage gain (or loss) in the value of your portfolio due to changes in asset prices and (2) any dividends or other cash distributions, expressed as the percent of invested assets.

The arithmetic mean is the “simple average” of a series of returns, calculated by summing all of the returns in the series and dividing by the number of values.

$$AMR = \sum_{t=1}^{n} R_t/n$$

For the first choice the AMR = (-50%+100%)/2 = 25%

For the second choice the AMR = (10%+10%)/2 = 10%

The best estimate of a future year's return based on a random distribution of the prior years' returns is the arithmetic average. Statistically, it is our best guess for the holding-period return in a given year. If we wish to estimate the expected return over a multiyear horizon conditioned on past experience, we may use the arithmetic average.

The second method of calculating returns is the average annual geometric or compound return. The average geometric return is far more important than the average arithmetic return if one is analyzing the long-run return on assets. The average annual geometric return is the rate at which the sum you invested at the beginning of the period will accumulate to a given sum at the end of the period by the process of compounding, or continuously reinvesting your dividends and capital gains. A characteristic of the compound return is that it depends only on the initial and final values of the portfolio, not on the path by which that value was realized.

GMR is based on an exponential function, which represents periodic compounding.

$$GMR = \prod_{t=1}^{n}(1 + R_t)^{1/n} - 1$$

As can be seen in the formula, the process of calculating the GMR is the same as TWRR. We are required to calculate wealth relatives for each HPR. Then we have to link these sub period returns.

In the above example, the evaluation period is two years. Hence to calculate annualized return, the cumulative wealth ratio is raised to (1/2). n being the number of years.

For the first choice GMR = (((1+-50%)*(1+100%))^(1/2)) -1 = 0

For the first choice GMR = (((1+10%)*(1+10%))^(1/2)) -1 = 10%

For a one-year holding period the arithmetic and geometric returns are identical, since both calculate the total return over one year. But over longer holding periods the geometric average return is always less than the arithmetic return except when all the individual yearly returns are exactly the same, in which case the geometric return equals the arithmetic return.

Given the initial and final value of a portfolio, a fund manager can always increase the average annual return by increasing risk. As noted above a manager who takes your portfolio from Rs. 100 to Rs.50 and back to Rs. 100 again, achieves an average arithmetic return of 25 percent. Yet every investor should prefer the second manager to the first. Geometric return is the only way to compare long-term accumulations. It explains what has really happened to the investments. If, however, we wish to estimate the probability distribution of terminal wealth we should use the geometric average.

16.2.4 Gross versus net return

The gross return is the total return generated on investment before the deduction of any fees, expenses or commissions. Gross return is stated for a specified period of time. Net return is calculated after adjusting gross return for fees, expenses or commissions. Net return is the return investor actually makes, hence focusing on gross return can be misleading though it can be used to evaluate the performance of investments at a broader level.

Let us look at the following example of a portfolio to understand the difference between gross return and net return. Given below is the information about the size of the portfolio, investment period, fees, expenses etc.

1. Size of sample portfolio: Rs. 100 lacs
2. Investment Period: 1 year
3. Profit made during the year: 20% on the capital contribution
4. Hurdle Rate: 10% of amount invested
5. Other Expenses such as Brokerages, DP charges etc., charged on gross value of portfolio (0.50%)
6. Upfront fee – Nil
7. Setup fee-Nil
8. Fixed Management fee charged on average of capital contribution and gross value of portfolio (e.g. 1.5%)
9. Performance fee (e.g. 20% of profits over hurdle rate without catch-up)
10. The frequency of calculating all fees is annual.

What is the gross return and net return on investment?

Capital Contribution made at the beginning of investment period (i)	1,00,00,000
Less: Upfront fees	-
Assets under management (AUM)	1,00,00,000
Add/ Less: Profits/ Loss on investment during the year on AUM at 20%	20,00,000
Gross Value of the Portfolio at the end of the investment period	1,20,00,000
Less: Other Expenses (0.50%) (a)	60,000
Gross Value of the Portfolio less Other Expenses	1,19,40,000
Less: Fixed Management Fees (1.50%) (b)	1,65,000
Portfolio Value after charging Fixed Management Fees	1,17,75,000
Required Portfolio Value @ Hurdle Rate (i) * (1.10)^1	1,10,00,000
Less: Performance Fee @ 20% of the Profits over Hurdle Level (c)	1,55,000
Portfolio Value after charging Performance Management Fees	1,16,20,000
Less: Exit Load (2%) (d)	2,32,400
Portfolio Value after charging Exit Load	1,13,87,600
Total Charges (a+b+c+d)	6,12,400
Net Value of the Portfolio	1,13,87,600

Gross return is the total rate of return earned. For the above example it is calculated as follows:

Gross Return = (Gross value of the portfolio – Capital Contribution)/Capital Contribution

Gross Return = (Rs. 1,20,00,000 Lacs. - Rs. 1,00,00,000 Lacs.) / Rs. 1,00,00,000 Lacs.

Gross Return = 20 %

Net Return is the return earned after adjusted for the fees and expenses. It is calculated as follows:

Net Return = (Net value of the portfolio – Capital Contribution)/Capital Contribution

Net Return = (Rs. 1,13,87,600 – Rs. 1,00,00,000) / Rs.1,00,00,000

Net Return = 13.88%

16.2.5. Pre-tax versus post tax return

The pre-tax rate returns are returns before taxes, and post-tax returns are returns after taxes are paid on investment income and realized capital gains. Investors belong to different tax brackets. Hence the performance of the investments is communicated as pre-tax rate of return. Investors or their financial advisors are expected to calculate the post-tax return by adjusting the pre-tax return to the tax rates applicable to the investors.

Pre-tax return = Post Tax Return/ (1-tax rate)

Post-tax return = Pre-Tax Return x (1-tax rate)

Pre-Tax return enables comparisons across different investments and strategies, since different investors may be subject to different levels of taxation. However what really matters to the investor is post-tax return. Hence they make investment decision on the basis of post-tax performance.

An example of post-tax return calculation is given below:

An individual achieves a 5% pre-tax rate of return for stock XYZ, and is subject to a capital gains tax of 15%. The post-tax rate of return is:

Post-tax return = Pre-tax return x (1-tax rate)

Post-tax return = 5% x (1-15%) = 4.25%

16.2.6. Compounded Annual Growth Rate

Compounded Annual Growth Rate is a measure of an investment's annual growth rate over time, with compounding. It assumes that any dividend/income/rent declared by the investment is re-invested in the same investment on that day's market price.

Here is the compound interest formula to determine the CAGR between the opening and closing wealth.

The formula is,

$(A / P)^{(1 / t)} – 1$,

Where

'A' is the closing wealth,

'P' is the opening wealth and

't' is the time period in years.

Suppose an investor has invested Rs. 100,000 in an investment for five years. The year on year return is given as follows:

Year	Return
2015	-5.00%
2016	-15.20%
2017	8.10%
2018	30.75%
2019	17.65%

For calculating the CAGR, we need to calculate the terminal wealth i.e. the end of the period value of the investment.

Year	Return	Investment value at the end of the year in Rs.
2015	-5.00%	95,000
2016	-15.20%	80,560
2017	8.10%	87,090
2018	30.75%	1,13,860
2019	17.65%	1,33,960

As can be seen, Rs. 100,000 has grown to Rs. 1,33,960 in five years. Using the formula for compound interest, CAGR can be calculated as:

CAGR = (1,33,960/1,00,000) ^ (1/5)-1= 6.02%

As demonstrated below, CAGR is the constant rate of growth to reach the same terminal value.

Year	Return	Investment value at the end of the year in Rs.	Investment value at the end of the year growing at the rate 6.0622% in Rs.
2015	-5.00%	95,000	1,06,020
2016	-15.20%	80,560	1,12,410

Year	Return	Investment value at the end of the year in Rs.	Investment value at the end of the year growing at the rate 6.0622% in Rs.
2017	8.10%	87,090	1,19,180
2018	30.75%	1,13,860	1,26,350
2019	17.65%	1,33,960	1,33,960

16.2.7. Annualizing return

For facilitating comparison, rate of return is reported on annualized basis. The annualized return represents the compound average annual return of the investment. The calculation is same as the calculation of CAGR or geometric men return. Return are annualized by following the same chain linking method and the product of the linking is raised to the reciprocal of the number of years in the evaluation period.

For example, a portfolio has generated the following return in the last three years.

Year	Return
2017	15.5%
2018	9.50%
2019	-6.90%

First step in annualizing the return is to calculate the wealth relative:

Year	Return	Wealth Relative
2017	15.5%	1.1550
2018	9.50%	1.0950
2019	-6.90%	.9310

Next step is to take the product of the wealth relative:

1.1550 x 1.1950 x .9310 = 1.1775

Next is to raise it to the reciprocal of the number of years:

1.1775^ (1/3) = 1.0559

Final step is to subtract 1:

1.0559 -1 = 0.0559 or 5.56 %

If the measurement year is less than a year, it is inadvisable to calculate annualized return, as it means extrapolating the return to a full year. Particularly for those investments where returns can fluctuate significantly during the remaining period.

16.2.8 Cash drag adjusted return

Portfolio managers may not invest the entire capital contribution made by investors for variety of reasons. However, while computing return, for the investment period, the capital contribution made by investors need to be taken into consideration. Not taking into account the cash component in computing returns (i.e. ignoring the drag that cash exerts on returns) mis-states the return as shown in the example below:

An investor has invested Rs. 100 lacs in an equity investment portfolio. The manager has invested only Rs. 75 Lacs in the equities and Rs. 25 lacs are lying in the liquid funds. For the period, the equity exposure has generated a return of Rs. 7.5 Lacs, while the liquid fund has given 4% return.

Return on investment (ignoring the drag cash has exerted) = Rs. 7.5 lacs / Rs. 75 lacs = 10%

Return on investment (adjusting the drag cash has exerted) in Rs. = (10% x Rs.75 lacs) + (4% x 25 lacs) = Rs. 85,000 or 8.5% on Rs. 100 lacs

16.2.9. Alpha and Beta return

Most investment portfolios tangle alpha and beta decisions together. The returns from such portfolios can be decomposed into alpha and beta return by using asset pricing models. The most popular asset pricing model is Capital Asset Pricing Model(CAPM). The CAPM theorizes that risk consists of a systematic component (that is non-diversifiable) and a unsystematic (idiosyncratic or unique) component that is diversifiable. Risk that is unsystematic can be diversified away hence an investor should not expect compensation for bearing this type of risk. As per this model, investments are to be priced for their market risk i.e. non-diversifiable risk. Market risk is measured by Beta. Under CAPM, the required return on a security or portfolio is computed as:

Required return = Rf + B (Rm – Rf)

Rf = Risk free return

B = Market Beta of the security/portfolio

Rm = Return on a Market Portfolio (A popular broad market index is a good proxy)

Alpha is the return generated by the portfolio over the over the required rate of return as per CAPM. This is expressed as follows

Portfolio Return - Rf + B (Rm – Rf) = Alpha Return

For understanding decomposition of return, look at the following example.

A portfolio has generated a return of 25%. The market benchmark return for the same period is 15%. The beta of the portfolio is 1.5. Treasury bond yield is 5%.

The return of the portfolio has three components:

Risk free return = 5%

Beta return = 1.5 x(15%-5%) = 15%

Alpha return = Actual Return – Required rate of return

Alpha return = 25% - {5% + 1.5 x (15%-5%)}

Alpha Return = 5%

This is also referred as Jensen alpha.

Alpha return is a reward for bearing non-market risk. Beta return is a reward for bearing market risk.

Some professionals make a distinction between alpha and Jensen alpha. They refer to the excess return over the market benchmark return as alpha.

In the above example, excess return is 25% - 15% = 10%

16.2.10 Portfolio Return

The return of the portfolio is the weighted average return of individual securities in it. The following example, gives the weight (proportion) of four securities in the portfolio and their return.

Security	Return	Weight in the portfolio
A	15%	30%
B	10%	20%
C	12%	20%
D	18%	30%

The weighted average return of the securities is the return of the portfolio, calculated as follows:

Portfolio Return = (15%*30%)+(10%*20%)+(12%*20%)+(18%*30%) = 14.30%

16.3. Risk measures

Risk is the key dimension of performance measurement, and a decisive factor in selecting a portfolio manager.

16.3.1. Total risk and downside risk

Risk in a generic sense is the possibility of loss, damage, or harm. For investments more specific definitions of risk can be given.

It can be defined as variability in the expected return - total risk. Or, it can be limited to losses or worse than expected outcomes only – downside risk.

Two possible measures of risk have received support in theory to capture total risk: the variance and the standard deviation of the estimated distribution of expected returns. Whereas downside risk includes concepts such as semi-variance/standard deviation and target semi variance/standard deviations.

16.3.2. Portfolio risk versus individual risk

Standard deviation or variance of the returns is used as measure of risk. While computing portfolio risk, it is to be borne in mind that portfolio standard deviation is not the weighted average standard deviation of individual investments in a portfolio (except when these investments have perfect positive correlation with each other, which is practically an impossibility). Portfolio risk depends on the weights of the investments, their individual standard deviations and more importantly the correlation across those investments as shown in the formula below:

$$\sigma_{\text{port}} = \sqrt{\sum_{i=1}^{n} w_i^2 \sigma_i^2 + \sum_{i=1}^{n} \sum_{i=1}^{n} w_i w_j \text{Cov}_{ij}}$$

$$\sigma_{port} = \sqrt{\sum_{i=1}^{n} w_i^2 \sigma_i^2 + \sum_{i=1}^{n} \sum_{j=1}^{n} w_i w_j cov_{ij}}$$

Where σ_{port} is the risk (standard deviation of portfolio return) of the portfolio; w_i, w_j are the weights of individual assets in the portfolio, that determined by the proportion of money invested in each of the asset in the portfolio; σ^2_{port} is the variance of returns of the individual assets in the portfolio; cov_{ij} is the covariance of the returns of individual assets. Covariance is

a product of coefficient of correlation between the assets returns and their individual standard deviations. Poorer the correlation across investments, lower would be the portfolio risk.

16.3.3 Market risk

Market risks arise due to the fluctuations in the prices of equity shares due to various market related dynamics. These factors affect all investments irrespective of their business sector. The degree of impact may be different. Market risk is measure by Beta. Market risks cannot be diversified away, though it can be hedged.

16.3.4 Interpreting volatility

- **Standard deviation as a measure of total risk:**

Standard deviation and variance are measures of dispersion in return. Standard deviation is the square root of variance. It quantifies the degree to which returns fluctuate around their average. A higher value of standard deviation means higher risk.

Standard deviation is used probably more than any other measure to describe the risk of a security (or portfolio of securities). In any academic study on investment performance; chances are that standard deviation will be used to gauge risk. It's not just a financial tool, though. Standard deviation is one of the most commonly used statistical tools in the sciences and social sciences. It provides a precise measure of the amount of variation in any group of numbers - the returns of a mutual fund, rainfall in Mumbai, or the weight of professional cricket players.

$$SD = \sqrt{\frac{\sum_{i=1}^{n} \left(x_i - \bar{x}\right)^2}{n}}$$

One of the strengths of standard deviation is that is can be used across board for any type of portfolio with any type of security. The calculation is the same for a portfolio of bonds as it is for a portfolio of growth stocks or any other type of investments.

Standard deviation allows portfolios with similar objectives to be compared over a particular time frame. It can also be used to gauge how much more risk a fund in one category has versus the other.

- **Semi variance / Semi Standard deviation as a measure of downside risk:**

Semi variance measures the dispersion of the return below the mean return. Target Semi variance measures the dispersion of the return below the target return. In case of symmetrically distributed return, semi variance will be proportional to variance and provides

no additional insight. Forecasting asymmetrical distribution of return is very difficult and may not be a good forecast of future risk. Due to these reasons' semi variance is not so popularly used in practice**.**

16.3.5 Tracking error

Tracking error is the standard deviation of the difference between the portfolio and its target benchmark portfolio total return. Generally indices are used to benchmark portfolios. Lower the tracking error, closer are the returns of the portfolio are to the target Index. If the benchmark portfolio is the market portfolio, tracking error measures deviations from the market return. Tracking Error is always calculated against the Total Returns Index which shows the returns on the Index portfolio, inclusive of dividend. Tracking errors primarily arises due to mismatches between portfolio's risk profile and the benchmark's risk profile.

16.3.6 Systematic Risk and Unsystematic Risk

Systematic risk is defined as risk due to common risk factors, like interest rates, exchange rates, commodities prices. It is linked to supply and demand in various marketplaces. All investments get affected by these common risk factors directly or indirectly. Systematic risks cannot be diversified away, though it can be hedged. Systematic risk is measured by Beta.

Risks due to sector specific/company specific factors is referred as unsystematic risks. These risks can be diversified away. Alpha return is a reward for bearing unsystematic risk.

16.3.7 Beta

Systematic risk is measured by Beta. Beta relates the return of a stock or a portfolio to the return on market index. It reflects the sensitivity of the fund's return to fluctuations in the market index.

Beta calculation requires two series of values for a reasonably long period of time, say 3 to 5 years. First series is your portfolio's daily/weekly/monthly prices. The second series would be the market index on all the dates for which the market prices of your portfolio has been considered.

Beta = $Cov(M_rP_r) / Var(M_r)$

Where

$Cov(M_rP_r)$ = Covariance between the market's return and the portfolio return

$Var(M_r)$ = Variance in the Market return

The relationship between the Beta of an individual security with portfolio of securities is linear. Beta of the portfolio can also be calculated by taking the weighted average beta of the individual securities/investments in the portfolio. Thus, if stock A has a beta of 1.2 and stock

B has a beta of 1.1 and they make up the portfolio in the ratio of 60:40, the Beta of the portfolio would be:

B_p= 0.60x1.2+0.40x1.1 = 1.16

Beta is fairly easy to interpret. A beta that is greater than one means that the portfolio or stock is more volatile than the benchmark index, while a beta of less than one means that the security is less volatile than the index.

16.3.8 Liquidity risk

Liquidity is defined as ease of converting an asset into cash at close to its economic worth. The more difficult is conversion, the more is liquidity risk. Liquidity risk is the uncertainty introduced by the secondary market of an investment. Treasury bills have almost no liquidity risk. They can be sold in a fraction of minute at a price worth their economic value. On the other hand, a piece of art may take longer to get converted into cash and the price may deviate significantly from its worth.

16.3.9 Credit risk

Credit risk is the risk that the borrower is not able to repay the amounts on time to the lender. In case of debt instruments the borrower is able to access funds for the time duration fixed in the instrument. At the end of the period the amount has to be returned to the lender. A deterioration in the financial condition can lead to a situation where the amount cannot be repaid and this is the credit risk for the lender. Credit risk arises in case of debt instruments.

16.4 Risk-adjusted return measures

The differential return earned by the portfolio manager may be due to difference in the exposure to risk. Hence it is imperative to adjust the return for the risk. The following are the popularly used risk-adjusted return measures. These risk-adjusted performance measures assess the performance of a fund in terms of return per unit of risk.

16.4.1 Sharpe Ratio:

One approach is to calculate portfolio's return in excess of the risk-free return and divide the excess return by the portfolio's standard deviation. This risk adjusted return is called Sharpe ratio. This ratio named after William Sharpe. It measures Reward to Variability.

$$S = \frac{\left(R_p - R_F\right)}{\sigma_p}$$

Here,

R_p =Return of the portfolio
R_f = Risk-free return

Sigma p = Standard deviation of return on the portfolio

It is to be noted that these three variables should be for the same period. Generally, annualized return and annualized standard deviation is taken for computing Sharpe ratios of the portfolio, for easy comparison across portfolios.

Suppose the annualized standard deviation of the portfolio is 6.50%. Suppose that the annualized return for the same portfolio is 10.50%. The risk-free rate of return is 5.50%.

Then the Sharpe ratio for the portfolio is:

(10.50% - 5.50%)/ 6.50% = 0.7692

This suggests that the fund has generated 0.7692 percentage point of return above the risk-free return for each percentage point of standard deviation.

The Sharpe ratio is a measure of relative performance. It enables investors to compare across investment opportunities. Higher the Sharpe ratio, better is the portfolio's risk adjusted performance. A fund with a higher Sharpe ratio in relation to another is preferable as it indicates that the fund has generated return for every unit of risk.

As can be noted Sharpe ratio adjusts return to the total portfolio risk. Hence it is a useful measure of performance for several mutually exclusive portfolios.

The Sharpe ratio is the simplest measure to compute and that is why it is the most widely used risk-adjusted return measure. However, it has a disadvantage: It Ignores diversification potential of portfolio.

16.4.2 The Treynor Ratio

The Treynor measure adjusts excess return for systematic risk. It is computed by dividing a portfolio's excess return, by its beta as shown in equation

$$T = \frac{\left(R_p - R_F\right)}{\beta_p}$$

where

T = the Treynor measure,

R_p = portfolio return,

R_f = riskless return and

B_p = portfolio beta.

As can be seen the numerator of the equation remains the same as in case of Sharpe ratio. The denominator standard deviation is replaced by Beta.

Suppose in the above case, beta of the fund is precisely 1. The Treynor ratio of the funds would be:

$$\boldsymbol{Treynor\ Ratio} = \frac{(\mathbf{10.50\%-5.50\%})}{\mathbf{1}} = \mathbf{0.05}$$

This indicates that the fund has generated 0.05-percentage point excess returns for every unit of systematic risk.

Like Sharpe ratio it is a measure of relative performance. It enables investors to compare across investment opportunities. A fund with a higher Treynor ratio in relation to another is preferable as it indicates that the fund has higher risk premium for every unit of market risk.

As Treynor ratio indicates return per unit of systematic risk. Hence it is a useful measure of performance if an investor wishes to evaluate a portfolio in combination with other actively managed portfolios. Further, it would be an appropriate measure for investors whose wealth is already well diversified, wherein the unsystematic risk is very minimal, and hence the only risk that matters for such investors is excess return over and above the systematic risk.

16.4.3 Sharpe versus Treynor Measure

The Sharpe ratio uses standard deviation of return as the measure of risk, whereas Treynor performance measure uses Beta (systematic risk). For a completely well-diversified portfolio, the two measures give identical ranking, because total risk and systematic risk would be the same. However, for a poorly diversified portfolio, the raking based on Treynor Ratio could be higher than that on Sharpe ratio as Treynor ratio, ignores unsystematic risk. Thus any difference in rankings based on Sharpe Ratio and Treynor ratio is due difference in portfolio diversification levels.

The Sharpe Ratio is more suitable to evaluate a portfolio performance for an investor who has not achieved adequate diversification on his wealth as a whole, and Treynor Ratio should be used for investors who hold their wealth in well diversified portfolios

16.4.4 Sortino Ratio

For computing Sortino Ratio, portfolio's return in excess of the risk-free return is divided by the portfolio's semi-standard deviation. Thus, Sortino Ratio adjusts portfolio's excess return to the downside risk. This ratio may be very appealing to some investors who view risk as chances of losing money, rather the uncertainty around expected return.

Sortino Ratio = (Rp – Rf)/ Semi Standard deviation of the portfolio

Rp = Return of the portfolio

Rf = Risk-free rate

Like Sharpe and other risk adjusted return ratio, higher level of Sortino Ratio indicates superior performance.

16.4.5 Information Ratio (Appraisal ratio):

If we wish to determine whether or not an observed alpha is due to skill or chance, we can compute information (appraisal) ratio.

IR = (Rp – Rb)/Stdev (p-b)

where

IR = the information ratio,

Rp = Return on the Portfolio

Rb = Return on the benchmark

Stdev (p-b) = Standard deviation of the observations of differences between the return of the portfolio and return of the benchmark

The numerator in the ratio represents the fund manager's ability to use his skill and information to generate a portfolio return that differs from the benchmark (e.g. BSE Sensitive index or Nifty 50) against which his performance is being measured. The denominator could be considered as a measure of the amount of residual (unsystematic) risk that the investor incurred in pursuit of those excess returns. The numerator is often referred to as the active return on the portfolio whereas denominator is referred to as the active risk. It has to be noted that active risk is nothing but tracking error of the portfolio.

16.4.6. Modigliani and Modigliani Ratio (M2) Measure:

Franco Modigliani and his granddaughter Lea Modigliani (1997) derived another risk-adjusted performance measure. They have adjusted the risk of the portfolio to match the risk of the market portfolio. For such a risk adjusted portfolio, they calculated the return, and compared it with the market return to determine portfolio's over or underperformance. To adjust the risk of the portfolio, they resorted to levering or de-levering.

After the standard deviations have been equalized, return can be directly compared with the return in the market. A high (low) indicates that the portfolio has outperformed or has generated a surplus (under-performed or generated a shortfall) the market portfolio.

Suppose the Portfolio has generated a return of 35%. The market (benchmark) portfolio has generated a return of 28%. The treasury bill rate is 6%. The standard deviation of the portfolio is 42%. The standard deviation of the market portfolio is 30%.

Hypothetical Portfolio's vol = Market's vol

30/42 = 0.714 in P; (1-0.714) =0.286 in T-bills

r_p^* = (0.714) (0.35) + (0.286) (0.06) = 26.7%

Since this return is less than the market by 1.3%, the managed portfolio under performed.

16.5 Performance Evaluation: Benchmarking and peer group analysis

Performance evaluation is a relative concept. After measuring the performance, next important step is to evaluate it against some suitable benchmark or similar portfolios to address more important issues like how the returns measure up to the comparable investment opportunities. Performance evaluation also enable the investors to determine if the portfolio manager has enhanced the portfolio's value beyond what could be obtained from a passive indexed strategy, and whether the portfolio management fees are justified.

Performance evaluation involves benchmarking and peer group analysis.

16.5.1 Characteristics of indices for Benchmarking

GIPS defines Benchmark as an independent rate of return (or hurdle rate), forming an objective test of the effective implementation of investment strategy. It is a standard or point of reference. It is a collection of investment opportunities or securities or risk factors which represent the investment characteristics and investment approach of the portfolio being evaluated against it.

Indices make popular choices for benchmarking portfolio. The number and variety of available indices make selection of suitable benchmarks a daunting task. A good benchmark increases the proficiency of performance evaluation hence while choosing an index as benchmark care should be taken to ensure that it is representative of the portfolio.

A good benchmark should be able to satisfy the following criteria:

- The identity of constituents and their weights in the benchmark are clearly defined.
- The benchmark is investable, in other words it is possible to have a passive exposure to the same.
- The benchmark is consistent with the portfolio's investment approach. For example, if the portfolio's investment approach is to invest in blue-chip stocks, the benchmark should also consist of blue-chip stocks. If the investment style of the portfolio is value investing, the benchmark should be of the same orientation.
- The benchmark is having the same risk-return profile as the portfolio
- The performance of the benchmark is measurable.

16.5.2 Customized Benchmark

Sometimes market based indices may not meet the above criteria of a good benchmark, given the portfolio manager's investment strategies and style. Such situation demands for appropriate customized benchmark. When the portfolio managers follow a certain type of investment strategy and style, they create an investment universe reflecting the same to focus their research activities. The portfolio managers then select the most attractive securities from the investment universe. Such investment universes can act as benchmarks for portfolio evaluation when market-based indices are not found to be valid. The advantage

of such benchmarks is that they meet the requirement of valid benchmarks. The disadvantage is that the costs of construction and maintenance of these benchmarks would be much higher than the fee paid for using market-based indices.

16.5.3 Benchmarking errors

There are several errors that might creep in when a benchmark is chosen. Due care has to be taken to ensure that these are avoided. One of the most common errors is to choose a benchmark that is not representative of the portfolio. Often there is a change in the style of investment or its exposure and if this is radically different then the benchmark for this also needs to change.

The benchmark sometimes might not be easily investible which means that it might be difficult to replicate it. This leads to problems in having a portfolio similar to it. The benchmark should not be witnessing huge changes in its components otherwise this would need to be reviewed for its effectiveness. The data for the benchmark should also be available. Increasingly the Total Return Index is a measure that is being used and if this kind of data is not available for the benchmark then it might not be able to give the correct picture.

16.5.4 Managers' universe analysis

Managers' universe analysis or peer group analysis is also a very popular way of conducting performance evaluation. The median portfolio or the universe of investments with similar investment approach and strategies can be taken as the yardstick to evaluate the performance of the portfolio. Investors have a natural interest in knowing how their investments are performing compared to others. Portfolio tracking firms have developed data bases to facilitate managers' universe analysis. They rank the portfolios with similar investment characteristics and risk-return profile on some risk-adjusted return measure.

16.6 Performance attribution analysis

The second phase of performance evaluation is performance attribution. There are different ways of doing the attribution analysis. Performance attribution in simple words is analysing what is driving the performance and the reasons behind this so that the investor is able to take further investment decisions. The underlying theme behind various attribution analysis approaches is to dissect the return into majorly two components: return driven by the benchmark and the differential return. The other part consists of identifying and quantifying the sources of differential return to primarily establish whether it was driven by skill of the portfolio manager or some random factors (in layman terms luck).

16.6.1 Assets and Sector Allocation

Differential return can be achieved by choosing to over-invest in (or being overweight) a particular economic sector that outperformed the total benchmark (sector allocation) for that period or to underinvest in or avoid (or being underweight) an asset category that underperformed the total benchmark (*asset allocation*). This is a critical part because all parts of the benchmark do not perform in the same proportion at all times. Understanding the trends in the economy and various sectors and being overweight or underweight is a key reason to beat the benchmark and earn higher returns.

The allocation effect calculates this difference which is based on the differential in allocation and the return that is actually generated. This is mathematically calculated by

Allocation effect= $$= \mathrm{S}_i \left[\left(W_{ai} - W_{pi} \right) \times \left(R_{pi} - R_p \right) \right]$$

W_{ai} and W_{pi} = the investment proportions of the ith market segment (i.e. asset class, sector / industry group) in the active manager's portfolio (Wai) and the benchmark policy portfolio(W_{pi}) respectively

R_{pi} = the investment return to the $_i$th market segment in the benchmark portfolio

R_p = Total return of the benchmark portfolio

16.6.2. Selection

Differential return can also be achieved by selecting securities that performed well relative to the benchmark or avoiding benchmark securities that performed relatively poorly. There are several individual factors that affect the performance of a security and being able to have an exposure to the winners is another factor that leads to a better performance. Even avoiding the poor performing securities can lead to a big improvement in the overall relative performance of the portfolio.

This can be mathematically calculated by

Selection Effect = $$= \mathrm{S}_i \left[\left(W_{ai} \right) \times \left(R_{ai} - R_{pi} \right) \right]$$

W_{ai} = the investment proportions of the ith market segment (i.e. asset class, sector / industry group) in the active manager's portfolio

R_{ai} and R_{pi} = the investment return to the ith market segment in the active manager's portfolio (Rai) and the benchmark portfolio (R_{pi}), respectively

16.6.3 Market timing versus selectivity

Market timing is the ability of the fund manager to anticipate developments in the market and then invest to take advantage of these and generate superior performance, Selectivity on the other hand is the ability of the fund manager to select securities that will generate extra returns. There has long been a debate over which way is the route to generate extra returns. Most studies have shown that market timing is not the factor resulting in better performance. The results are mixed on the selectivity front with some having this ability.

16.6.4 Net selectivity

The Net selectivity measure of Fama is an absolute measure of performance. It is calculated as the annualised return of the fund less the yield of a risk free investment. This figure is then reduced by the standardised expected market premium times the total risk of the portfolio under review. It shows the excess return earned by the fund manager that cannot have been earned by investing in the market portfolio.

16.6.5. Local currency versus foreign currency denominated investment return

An Indian investor who buys and sells securities that are denominated in currencies other than the Indian rupee needs to calculate the return after adjusting for the fluctuation in Indian rupee against those foreign currencies. The return earned on investments denominated in foreign currencies would not be the same when converted back to rupee term. The fluctuations in currency values can either enhance or reduce the returns associated with foreign investments. This is called currency risk.

Consider the following scenario:

An Indian investor has invested in an US equity fund a sum of Rs. 50 lacs when Rupee was 70 per US dollar. The fund has generated a return of 15%. During the period rupee appreciated to 65 per US dollar. What is the return investor has made?

Capital investment in US based Equity fund (t_0) = $ 71,428.57

Investment Value (t_1) = (71,428.57 x 15%) + 71428.57 = 82,142.86

Investment value in Indian Rupee = 82,142.86 x 65 = 53,39,285.62

Return in Rupee term = Rs. 53,39,285.62 – Rs. 50,00,000 = Rs. 3,39285

i.e. 6.79 % and not 15%. The difference between the two is approximately equal to the appreciation of Indian rupee in percentage terms from Rs.70/$ to Rs.65/$

Module 5 Sample Questions:

1. **If a portfolio comprises two stocks, and if the correlation coefficient between two stocks were to decrease over time everything else remaining constant the portfolio's risk would**

   a) Decrease.
   b) Remain constant.
   c) Increase.
   d) Fluctuate positively and negatively.

2. **Given a portfolio of stocks, the envelope curve containing the set of best possible combinations is known as the**

   a) Efficient portfolio.
   b) Utility curve.
   c) CML
   d) SML

3. **A portfolio is considered to be efficient if:**

   a) No other portfolio offers higher expected returns with the same risk.
   b) No other portfolio offers lower risk with the same expected return.
   c) There is no portfolio with a higher return.
   d) Choices a and b

4. **A positive relationship between expected return and expected risk is consistent with investors being**

   a) risk seekers
   b) risk neutral
   c) risk averse
   d) all of the above

5.The following reason is not an objective of the Investment Policy Statement (IPS)

   a) It allows for the investor to raise their return expectations from the portfolio.
   b) It provides for a clear guidance to the portfolio manager
   c) It provides for proper evaluation of the portfolio manager
   d) It protects against unethical behaviour of the portfolio manager

6.Sustainable investing will consider which of the following factors?

a) Social
b) Environmental
c) Governance
d) All of these

7.Rebalancing the portfolio has to be done at what frequency?

a) Daily
b) Never
c) At regular intervals
d) Every decade

8.Strategic asset allocation does not involve which of the following?

a) It provides target allocation to different assets
b) It is meant to take advantage of the situation in the financial markets
c) It is a long term asset allocation decision
d) It is meant to meet the goals of the investor

9.The measure of performance which divides the portfolio's risk premium by the portfolio's beta is the

a) Sharpe measure
b) Jensen measure
c) Fama measure
d) Treynor measure

10.Sharpe's performance measure divides the portfolio's risk premium by the

a) Standard deviation of the rate of return.
b) Variance of the rate of return.
c) Slope of the fund's characteristic line.
d) Risk free rate.

MODULE 6: OPERATIONS, REGULATORY ENVIRONMENT, COMPLIANCE AND ETHICS

Chapter 17: Operational Aspects of Investment Management
Chapter 18: Key Regulation
Chapter 19: Ethical Issues
Chapter 20: Grievance Redress Mechanism

CHAPTER 17: OPERATIONAL ASPECTS OF INVESTMENT MANAGEMENT

LEARNING OBJECTIVES:

After studying this chapter, you should understand about:

- Investors and the investing process
- Learn about PAN, KYC and other processes
- Demat and Remat processes
- The Power of Attorney (PoA) and other agreements
- Processes involved for account opening of Non-Resident Investors (NRIs)
- Change in status of special investor categories
- Various Payment Instruments
- Documentation required for financial advice
- Process of investing in mutual funds through stock exchange platforms

17.1 Investors and the investing process

17.1.1 Who can Invest?

Investors eligible to invest in the securities markets can be broadly classified into individual investors and institutional investors. Individual investors include resident investors who are competent to contract, Minors, Hindu undivided family (HUF),

Non-resident Indians (NRIs) and Foreign Portfolio Investors (FPI). Individual investors invest and transact from the funds that are owned by them or borrowed by them. Typically, the ticket-size of their investments is small and these investors are spread out geographically.

Institutional investors include companies, trusts, charitable organizations and societies. They may be financial institutions, portfolio investors, pension funds, insurance funds and banks, among other. They differ from individual investors in that they need to follow, a formal process for making and executing investment decisions. The charter of the institution and the laws governing it should enable investments as a permitted activity.

The apex governing body of the institutional investor, usually the Board (or Trustees, as the case may be), has to approve (or authorize) the investment decisions. There may be guidelines that stipulate rules for asset allocation, choice of securities, management of risk and return, and the like. Investment decisions have to adhere to that approved pattern. Institutional investors transact through authorized signatories who are designated to execute the documentation pertaining to investment decisions on behalf of the institution. The

documentation, eligibility, tax treatment and process of investments also depend on the investor category.

Sebi has introduced the concept of “Accredited Investors” which includes individual investors, Sole proprietorship,HUFs, Trusts, Partnerships, Companies that meet prescribed criteria on networth, income, assets under management, as applicable. Accredited investors are expected to have a greater ability and inclination for risk and therefore they have access to products that meet this profile.

The offer document of a product or scheme specifically mentions the persons who are eligible to invest in the product or scheme on offer. Usually, the entities listed below can invest, subject to limits and restrictions laid down by the SEBI regulations, RBI’s norms, if applicable, and the offer document of the particular scheme.

* Resident Individuals
* Hindu Undivided family (HUF)
* Minors through guardians
* Registered societies and clubs
* Non-resident Indians (NRI)
* Persons of Indian Origin (PIO)
* Banks
* Financial institutions
* Association of persons
* Companies
* Partnership firms
* Trusts
* Foreign portfolio investors (FPIs)
* Insurance companies
* Pension funds
* Mutual funds

17.1.2 Client onboarding Process

Investors need to fulfil certain mandatory requirements to be eligible to invest in various investment products. These pre-requisites may be imposed by the prevalent regulations, such as the need to be KYC compliant to be eligible to use any financial product or service, or they may be defined by the product or service providers and may be specific to investing in a particular product and will be specified in the terms of offer.

Once these basic requirements are met then the specific conditions with respect to the instrument like a public issue or a mutual fund investment would have to be completed. For example a public issue is open for subscription during a limited period as notified by the company. The date on which the issue will open for subscription and the earliest closing date

are mentioned in the announcements about the issue. Investors have to make their application during this period. With effect from January 1, 2016 payment for applications made in a public issue must be made only using the ASBA (application supported by blocked amount) facility. ASBA is an application for subscription to an issue containing an authorization to the investors' bank to block the application money in the bank account and release funds only on allotment.

SEBI has introduced the use of Unified Payment Interface (UPI) with facility of blocking Funds (ASBA facility), as a new payment mechanism for retail investor applications submitted through intermediaries.

17.1.3 Terms of Offer

The offer document of a financial product specifies the conditions to be fulfilled by a prospective investor and the documentation that will be needed to support this. Conditions may be laid down in terms of who can invest and how much can be invested in the scheme. Some products may exclude a certain category of investors from investing. For example, NRIs cannot invest in the small savings schemes of the post office. A product may also be launched for a specific category of investors such as provident funds and pension funds. Investment instruments may also have a certain minimum threshold amount for investment which may exclude small ticket investors from it, or there may be a ceiling on the maximum amount that can be invested. Pension plans of mutual funds may have an upper age restriction. Institutional investors, Hindu undivided family and individual investors not meeting the age criteria are not allowed to invest in these schemes. Insurance products may have specifications about age, eligibility and health check requirements.

17.1.4 Regulatory Requirements

Investors must have a Permanent Account Number (PAN) issued by the Income Tax Authorities to be eligible to invest in most financial products in India. Exemptions may be given to certain category of investors or types of transactions. Barring these exempted transactions, providing PAN details is a mandatory requirement to invest in financial products and to access financial services such as banking, insurance, depository services and others.

Capital market investments made through a demat account or in physical mode requires PAN card details to be provided. Investments in deposits with the Post Office Savings Bank, Post Office Savings Schemes and Savings Certificates by investor accounts that are classified as medium and high risk(based on the amount being invested being higher than Rs. 50,000 and the balance in all other schemes not exceeding Rs. 10 lakhs), have to provide the PAN card. Making a bank Fixed Deposits exceeding Rs.50,000 and insurance premium payments in excess of Rs. 50,000 requires the PAN card to be provided for verification. Contributions in

cash in excess of Rs. 50,000 to the NPS account requires PAN details to be provided. Opening a Tier II account with the National Pension System (NPS) also requires a PAN card.

Similarly, the 'Know Your Customer' process has to be undergone by all investors in compliance with the regulations of the Prevention of Money Laundering Act, 2002. It imposes obligations on providers of financial services and products such as banking companies, financial institutions, mutual funds, insurance companies and other intermediaries, to verify and maintain the records of documents that establish the identity of all their investors.

17.1.5 Mandatory Investor Information

An application for buying a financial product or subscribing to a financial service must be complete with respect to certain mandatory fields in the application form, without which the application can be deemed invalid and is liable to be rejected. The mandatory fields are typically marked or highlighted so that investors do not miss providing any such information.

Name: The financial product or service is held in the name of the investor who is identified by name. In the case of mutual funds, shares and bonds, demat account, post office savings bank accounts and most company deposits a purchase application can be made by a maximum of 3 joint holders. In others, such as a fixed deposit with a bank or the senior citizens savings scheme and the NSC, there can be a maximum of two holders. A National Pension System (NPS) account is held in the sole name of the subscriber. Where an investment or account can be held jointly, the investors can decide on the mode of operation. The holders may have the option to operate the investment either jointly or on either or survivor basis. The name of the first holder is used to create the investment records. All payouts, such as dividend, interest and redemptions, are made in the name of the first holder. The tax benefits from the investments and any tax liability on the income accrue to the first holder. Correspondence regarding the investments is sent to the first holder. Names of all the joint holders are however maintained in the records.

Signature: The signature of the investor is the identity of the investor in the records of the issuer. It is verified for every transaction. All valid transactions should carry the signature of the investor. In case of a joint application, the form must provide for signatures of all joint holders irrespective of the holding pattern.

Address: The address of the first holder is mandatory in order to enable physical identification of the investor's location. Address of the investor must match with the address and proof of address provided while completing the KYC formalities.

Bank account information: The application form may require the investors to provide bank account details of the sole or first holder at the time of purchase. Account number, bank and branch details, type of account, IFSC code and MICR code has to be provided. This is the account in which the interest, dividends and redemption proceeds will be credited. Mutual funds and other investments in the capital markets such as, investing through a demat account, or in physical form inequities, bonds and debentures, in secondary markets or IPOs and most deposits made with companies, among others, require the bank account details to

be provided at the time of application. In case of products such as the NPS, bank account details are optional for the tier I account but mandatory for the tier II account. Bank account details are not required for applying to the POSB products though there is an option in products such as the Monthly Income Scheme (MIS) to get the interest credited to a post office savings bank account.

Permanent Account Number (PAN): PAN has been notified as the single identification number for all capital market transactions. Barring some exempted small value transactions, it is compulsory for all categories of investors to quote PAN in the application form. Other financial products, such as fixed deposits with banks and post office and savings certificates, among others, also require the PAN card to be provided for investments over specified limits. The original PAN card is verified against a self-attested photocopy at the time of investment.

KYC Compliance: KYC completion status of the applicant must be provided in the application form, and proof of being KYC compliant also needs to be provided at the time of making the investment.

Risk Profiling : It is mandatory for an Investment adviser to undertake the process of risk profiling of the investor. This gives an idea about the position of the investor and the kind of risk that they are able to take. Risk profiling becomes the basis for the selection of various investment options for the investor. This is a requirement that the investment adviser should never miss out on and it should be made a part of the overall process.

17.1.6 Investor Folio or Account

A folio number or account number, customer identity number or certificate number is allotted to the investor at the time of the initial purchase or investment or account opening. It is created by the investment product or service provider or their agent, such as the registrar and transfer agent, on receipt of a valid application. The information provided in the application form is captured to create a unique customer record. All transactions pertaining to the investment, financial or non-financial, are recorded under this. The identity number assigned to the investor must be quoted at the time of initiating any transaction pertaining to the investment. A certificate, passbook or an account statement giving details of the number allotted, investment made and the investor information that is captured for the records is given to the investor.

Information of the investor used to create the account or folio includes name, status, contact details and bank account information if it is mandatory for the particular product or service. The mode of holding and operating the account, in case of joint holders, is also recorded. The nomination of persons entitled to receive the investment in the event of the death of the holders is also recorded. The folio or account conditions such as address, nature of holding

and operating the account, bank account information and nomination apply to all investments held under it.

Some investment options such as the NPS, recurring deposits with banks and POS scheme and mutual fund schemes allow an investor to make additional investments in the same account over a period of time. The account number or folio number has to be quoted to enable this. In the case of mutual funds, investors have the choice of making subsequent investments in the same scheme or other schemes of the same service provider by quoting the existing folio number. The Unique Customer Identification Code (UCIC) recommended by the RBI to be used by banks and NBFCs for their customers also helps smoothening the process of establishing the investor's identity and address across different products and services of the institution.

Similarly, in the case of POS scheme products, an investor who has undergone the KYC process once to open an account or buy a savings certificate can just quote the existing account number or the certificate numbers in a new application at the same post office. The KYC verification need not be done again in such cases.

Investments made in an open-ended mutual fund scheme after the initial or first investment is called an additional investment. Additional investments can be made in a lump sum or they can be in the form of a systematic investment plan where the investor commits to investing a fixed sum of money at periodic intervals. Additional investments being made under the same folio can be done using a transaction slip. Transaction slips are forms that can be used to carry out various transactions such as additional purchase, switch transactions, redemption and other such services in an existing folio. Transaction slips require minimum details to be filled in by unit holders. These details are name, folio number, scheme name and plan. Apart from this, the investor needs to fill in details with respect to the specific transaction that the investor wishes to carry out, and strike off the other fields. No further information of the investor needs to be provided. Proof of compliance with regulatory requirements of PAN and KYC also need not be provided separately. An application form can also be used to make an additional investment in the same folio by quoting the folio number.

Investors holding an NPS account can make periodic investments into their Tier 1 or Tier 2 account by quoting the Permanent Retirement Account Number (PRAN) allotted at the time of opening the account. Investors can hold only one Tier I and Tier II account each in the NPS. Investors investing in the securities markets can consolidate all their investments into their demat account. Purchases and sales in the stock markets and mutual funds, investing in IPOs of shares and bonds can all be routed to the same account by quoting the demat account at the time of transaction.

17.2 PAN and KYC Process

17.2.1 Permanent Account Number (PAN)

Permanent Account Number (PAN) is an identification number issued by the Income Tax authorities. Form 49A issued is the prescribed form to apply for a PAN. Proof of identity and proof of address must be provided while submitting the form. The Income Tax department has tied up with some organisations such as the Unit Trust of India (UTI) and National Securities Depository Limited (NSDL) who can accept Form 49A and verify the documents.

Section 114 B of the Income Tax Rules lists the transactions that mandatorily require the PAN to be quoted. Most financial market transactions require the PAN details to be provided for all categories of investors, including NRIs and guardians investing on behalf of minors. Some investments or financial transactions may not require the PAN card details for small ticket sizes, but for higher amounts it may have to be provided. Where the PAN card is mandatory, the original is verified against the attested copy at the time of making the investment. For such transactions, in the event that the PAN is not available, then a declaration in form 60/61 giving details of the transaction has to be provided.

For mutual fund transactions, the verification and attestation can be done at the distributor, broker or mutual fund's office, or by a bank manager or a gazetted official. The investor's financial advisor can also attest the PAN card, if the advisor has complied with the Know Your Distributor (KYD) norms and registered as such, with Association of Mutual Funds in India (AMFI).There are a few exemptions to the requirement for PAN card in mutual fund transactions. An attested copy of the PAN card is maintained by the Registrar and Transfer agent. Any subsequent transactions require the investor to mention the PAN. The PAN is then verified at the back-end from the investor records.

Similarly, other service and investment product providers maintain the records of PAN card verification conducted and use it for future transactions and investments of the investor.

Exemptions from PAN

There are certain mutual fund transactions which are exempt from the requirement for submitting PAN. These are micro investments, i.e. investments upto Rs.50,000 in aggregate under all schemes of a fund house. The limit of Rs. 50,000 is reckoned on a rolling 12 month period or in a financial year.

Micro investments in mutual funds made by individual investors alone are exempt from PAN requirement. Hindu undivided families and non-individual investors are not eligible for this exemption. Investments in mutual funds exempt from the requirement of PAN may be made as a lump sum investment or through a systematic investment plan. Such investors must enclose a copy of the KYC acknowledgement letter quoting 'PAN Exempt KYC' Reference

number obtained from the KYC Registration Agency along with the application form. Eligible investors must hold only one PAN Exempt KYC Reference number. Cash investments not exceeding Rs. 50,000 per mutual fund in a year is permitted for investors who may not have a PAN.

Opening a Basic Savings Bank Deposit Account (BSBDA) does not require a PAN card. Similarly, insurance premium payments in cash up to Rs. 50,000 per transactions, cash contributions to the NPS account to the extent of Rs. 50,000 do not require PAN details to be provided. The PAN card is not a prescribed proof of identity for investments in Post Office Savings Bank deposits, schemes and savings certificates by investors categorized as 'low risk' based on the value of the investment being made and the balance of all previous investments not exceeding Rs. 50,000.

17.2.2 Know Your Customer Process

In order to ensure that illegal funds are not routed into Indian markets, the government has promulgated the Prevention of Money Laundering Act (PMLA). According to this Act, the identity of those entering into financial transactions must be known and verified. The procedure to do this is known as Know Your Customer (KYC) norms.

KYC norms apply for opening bank accounts, trading accounts, demat accounts, capital market investments, life and general insurance policies, investments in POSB products, fixed deposits, National Pension System (NPS) and other such financial transactions. Banks, depository participants, insurance companies, post office, brokers and other financial intermediaries conduct the KYC compliance process at the time of initiating a transaction with an investor.

The KYC process involves verification of proof of identity and proof of residence of the customer. Investor's identity has to be verified with a document carrying their photograph. Such identification can be a passport, driving license, voter's identity card, Aadhaar Card and the like. Proof of address can be verified from address as stated in the passport, ration card, voter's identity card, and latest utility bills. The KYC process also requires verification of the PAN card where available.

It is mandatory for all investors who wish to invest in mutual funds to complete KYC formalities with a KYC Registration Agency (KRA). The e-KYC services of the Unique Identification Authority of India (UIDAI) have also been recognized as valid process for KYC verification. The client will have to authorize the intermediary to access the identity and address data from the UIDAI system. Investors making micro investments must comply with the KYC requirement through a registered KRA or UIDAI. The exemption available to micro investments from providing PAN details will continue to apply for the KYC process. The investors will have to quote the 'PAN Exempt KYC Ref No.' in the application form.

Registered Investment Advisers (referred to in the circular as Registered Intermediaries (RI)) make use of following technological innovations which can facilitate online KYC:

eSign service is an online electronic signature service that can facilitate an Aadhaar holder to forward the document after digitally signing the same. The eSign signature framework is operated under the provisions of Second schedule of the Information Technology Act and guidelines issued by the controller.

e KYC and Technology

Technology is playing an increasing role in making the investment process simpler and there are new guidelines with respect to the use of this through a circular dated April 24, 2020 by SEBI. This covers the use of eSign, e documents under the digi locker and electronic signature. The process allows for the KYC to be completed through an app or online, the in-person verification can be done through video and online submission of documents under eSign.

The process involves the investor visiting the app or the online website of the Registered Intermediary (RI) and then filling up the KYC form online along with the submission of documents too online. Details like the name, photograph, address, mobile number, email id, bank details of the investor are captured online along with the PAN , signed cancelled cheque which is provided through eSign. This is then verified through various means. The mobile number and email is verified through a One Time Password or other verifiable mechanism. The Aadhar number is verified through the UIDAI authentication system, PAN is verified through online Tax database, bank account system is verified through penny drop mechanism or some other mechanism using API of the bank. Any other Officially verified documents has to be submitted through digilocker or eSign mechanism. Once this is done the online process can be completed by the investor taking a printout of the KYC form and submitting this along with their wet signature through a scanned copy under eSign or affixing the online cropped signature and submitting the same to the RI by eSign.

This route can be used by the Investment adviser as a way of completing the e KYC process easily, without the investor having to submit a lot of physical documents. At the same time this can be done from the confines of the home of the investor, so this is also able to bring a lot of people on board the investment process without having to spend a lot of time and effort in doing all this physically. This also leads to saving of a lot of paperwork. The adviser must encourage their clients to use this route for the completion of their KYC.

When it comes to the issue of Aadhar based KYC there is a detailed procedure that investors can follow. A KYC User Agency (KUA) and sub KUA also need to follow the laid down procedure. An investment adviser who wants to be registered as a sub KUA needs to enter into an agreement with an one KUA. They also should be registered with the UIDAI as a sub

KUA. This will lead to easier online onboarding of clients plus it gives a lot of convenience to the clients in their management of the processes. This leads to saving of time and hence is beneficial for everyone.

In person verification

For the first time investor, this is a mandatory step which is required to be followed. The KYC procedures require the intermediary with whom the client conducts the Know Your Customer formalities to do, an 'In Person Verification (IPV)' of the client. The name, designation, organisation, and signature of the person doing the verification have to be recorded in the form. The officials of the asset management company and the distributors who are compliant, with the KYD norms are eligible to conduct, the in person verification.

At the time of making an investment, the investor needs to furnish a proof of being KYC compliant. This is the acknowledgment sent by the KYC Registration Agency or from the UIDAI in case of e-KYC.

An authorized official of the intermediary conducts an in person verification of the applicant as part of the process. Banks categorize investors as low medium and high risk based on their financial implications of the relationship to the bank and the profile of the account holder(s). While a proper introduction from an existing account holder with the bank and verification of proof of address will suffice for the low risk category, medium and high risk categories have greater diligence exercised in establishing identity, address and source of funds. Periodic updation of records is also done with more frequent updation being done for the higher risk category investors. Insurance companies are permitted to use KYC compliance process conducted on an individual by a bank. The POS scheme also categorizes investors based on the risk perception, like banks, and the rigor of the KYC process is higher for the higher risk categories. For the medium and high risk category, the PAN card or form 60/61 declaration is mandatory. For the high risk category, the source of funds invested has to be established.

Circular specified above modifies the IPV requirements for intermediaries. IPV/ VIPV would not be required when the KYC of the investor is completed using the Aadhaar authentication / verification of UIDAI. IPV / VIPV shall not be required by the RI when the KYC form has been submitted online, documents have been provided through digilocker or any other source which could be verified online.

Feature for Video in Person Verification (VIPV) for Individuals – To enable ease of completing IPV of an investor, intermediary may undertake the VIPV of an individual investor through their App. The following process shall be adopted in this regard:

i. Intermediary through their authorised official, specifically trained for this purpose, may undertake live VIPV of an individual customer, after obtaining his/her informed consent. The

activity log along with the credentials of the person performing the VIPV shall be stored for easy retrieval.
ii. The VIPV shall be in a live environment.
iii. The VIPV shall be clear and still, the investor in the video shall be easily recognisable and shall not be covering their face in any manner.
iv. The VIPV process shall include random question and response from the investor including displaying the OVD, KYC form and signature or could also be confirmed by an OTP.
v. The RI shall ensure that photograph of the customer downloaded through the Aadhaar authentication / verification process matches with the investor in the VIPV.
vi. The VIPV shall be digitally saved in a safe, secure and tamper-proof, easily retrievable manner and shall bear date and time stamping.
vii. The RI may have additional safety and security features other than as prescribed above.

Investors subscribing to the NPS will have the KYC process conducted by the Points of Presence Service Providers (POP-SP). Two sets of the proofs of identity and address along with a photo-identity are handed over to the POP-SP. After verification, the POP-SP retains one set while the other set is sent along with the account opening forms to the Central Recordkeeping Agency (CRA) of the NPS. The Banks functioning as POP in NPS also play a pivotal role in enabling the subscriber to get his/her KYC verification done for their PRANs generated under eNPS.

Uniform KYC Process for Securities Markets

Investors deal with multiple capital market intermediaries such as mutual funds, Depository Participants (DPs), stock brokers, portfolio managers, venture capital funds and others. Thus far, investors were required, to undergo, the KYC process at the time of initiating transactions with each intermediary. To eliminate this duplication, SEBI has mandated a uniform KYC procedure for compliance by clients from January 1, 2012. This means that an investor who has undergone a KYC procedure with any of the specified intermediaries can use the same to invest with a mutual fund and vice versa.

The new KYC form has two parts. Part one will have information to establish identity and address, common to all intermediaries. Additional information as required by each intermediary can be collected using part two of the KYC form.

SEBI has introduced the system of KYC Registration Agency (KRA) to enable this. Intermediaries covered under the uniform KYC norms include mutual funds, DPs, stock brokers, portfolio managers, venture capital funds and collective investment schemes.

As a part of this uniform KYC Process for Securities Markets, a Central Registry has been set up which functions as the Central KYC Record Registry under the PML Rules. This has been discussed hereunder:

17.2.3 Centralised KYC Registration Agencies (KRA)

Vide Notification dated November 26, 2015, the Government of India authorised the Central Registry of Securitisation and Asset Reconstruction and Security Interest of India (CERSAI) to act as and to perform the functions of the Central KYC Record Registry under the PML Rules 2005, including receiving, storing, safeguarding and retrieving the KYC records in digital form of a client.[15]

As per the 2015 amendment to PML (Maintenance of Records) Rules, 2005 every reporting entity shall capture the KYC information for sharing with the Central KYC Records Registry (CKYCR) in the manner mentioned in the Rules as per the KYC template for 'individuals' finalised by CERSAI. The Registered Intermediaries (RI) are required to upload the KYC records with CKYCR, in respect of all individual accounts opened on or after August 01, 2016.

Some of the key functions of Central KYC Registry have been mentioned below:

It shall be responsible for electronically storing, safeguarding and retrieving the Know Your Customer (KYC) records and making such records available online to reporting entities or Director. Information updated about a customer shall be disseminated on request by Central KYC Registry to any reporting entity that avail the services of the Central KYC Registry in respect of the customer. The services of the Central KYC Registry will be available on payment of prescribed fee, in advance. It shall process the KYC records received from a reporting entity for de-duplication and issue a unique KYC Identifier for each client to the reporting entity.

The Central KYC Record Registry, which started operating from 2016, caters to Reporting Entities (REs)of all four major regulators of financials sector i.e. RBI, SEBI, IRDAI & PFRDA.

Where a customer submits a KYC identifier to a reporting entity, then such reporting entity shall download the KYC records from the Central KYC Registry by using the KYC Identifier and shall not require a customer to submit the documents again unless:
* There is a change in the information of the customer as existing in the records of Central KYC Registry.
* The current address of the client is required to be verified.

[15]Client as defined in clause (ha) subsection (1) of Section 2 of the Prevention of Money Laundering Act, 2002 Dated November 2015.

* The reporting entity considers it necessary in order to verify the identity or address of the client, or to perform enhanced due diligence or to build an appropriate risk profile of the client.

17.3 Dematerialisation and Re-materialisation of Securities

A depository is an institution that offers the service of holding the securities of the investors in electronic form. Its services can be compared to that of a bank which holds the depositors' funds and facilitates the conduct of fund related transactions. Similarly, a depository allows the investors to hold their securities in electronic rather than physical form and provides services related to transaction in securities.

The Depositories Act was passed in 1996 which allow companies and investors to issue, hold and transact in securities through a depository. There are currently two depositories operational in India, National Securities Depository Ltd. (NSDL) & Central Depository Services (I) Ltd. (CDSL). The securities can be dematerialised at the time of issue or subsequently. SEBI Regulations requires all public issues whose size is in excess of Rs. 10 crores to be issued only in dematerialised form. Investors in mutual funds can either ask for a demat issuance of units, or convert their holdings into demat mode. However, they are free to hold them in physical form. Companies are required to apply to a depository for dematerialising their securities.

Under the SEBI (Depository and Participants) Regulations of 1996 the categories of securities eligible for dematerialisation are:
* Shares, scrips, stocks, bonds, debentures, debenture stock or other marketable security of any incorporated company or other body corporate.
* Units of a mutual fund, rights under a collective investment scheme, venture capital funds, certificates of deposit, commercial paper, money market instruments, government securities and unlisted securities.

As per the Depositories Act, 1996, the physical securities that are dematerialised are required to be destroyed by the R&T agent and a credit entry is made in the electronic records of the depository. The dematerialised securities are fungible. This means that once a share is dematerialised, it does not have a distinctive identity in terms of share certificate number or distinctive numbers or folio numbers. The investor's ownership of the security is described in terms of number of shares held. In the depository, the dematerialised securities are identified in terms of the ISIN[16] (International Securities Identification Number) and the number of shares.

[16]The ISIN is a 12-character long identification code. It has three components--a pre-fix, a basic number and a check digit. Securities issued by the same company, issued at different times or carrying different rights, terms and conditions are considered different securities for the purpose of allocating ISIN and are allotted distinct ISINs.

17.3.1 Dematerialisation

Dematerialisation is the process of converting physical securities into electronic form. It involves the investor, the DP, the issuer/R&T agent and the depository.
The steps in this are:
* Investor hands over the securities to be dematerialised along with the Dematerialisation Request Form (DRF) to the DP.
* The DP sends the request through the electronic system to the issuer/R&T agent and the depository. The Dematerialisation Request Number (DRN) that is generated by the system is entered on the DRF and sent along with the physical documents and a standard covering letter to the R&T agent.
* The certificates received by the R&T agent will be mutilated and have the words 'Surrendered for Dematerialisation" on it.

The R&T agent has to verify that:
* The DRF has the DP's authorization
* The dematerialisation request has been received in electronic as well as physical form.
* The DRN in the physical documents matches with the DRN in the electronic request.
* The certificates have the distinguishing marks such as hologram/water mark.
* The mutual fund account statements have all the complete details and match with ISIN provided in the demat form.

The R&T agent will verify the physical documents with the details in the covering letter and DRF and forward the documents for dematerialisation. The process of giving effect to dematerialisation by the R&T agent is similar to that of transfer of registered ownership. The data to be captured, reports to be generated, documents to be filed are similar. In the Register of Members (RoM) of the company, the depository's name is included in the place of the investor to the extent of securities dematerialised. However, no stamp duty is payable on dematerialisation unlike other transfer of ownership transactions. Once the RoM of the company is amended, confirmation is sent to the depository and the investor's account with the DP is credited with the number of dematerialised shares.

A dematerialisation request may be fully or partially rejected for some of the following reasons:
* Mismatch in the information between the DRF and physical certificates.
* Certificates are fake, stolen or for which duplicates have been issued.
* Securities stand in a different name(s) from that mentioned in the DRF.
* The Securities do not pertain to the issuer/R&T agent.
* Signature of the holders does not tally with the records of the R&T agent.

The R&T agent mutilates the physical certificates once the process of dematerialisation is complete. The details of the certificate destroyed are entered into the Register of Destroyed Certificates. The account number of the beneficial owner is entered into the holding master maintained by the R&T agent for future reference.

For dematerialisation at the time of an IPO, the following steps have to be followed:
* The Company, R&T agent and the depository enter into an agreement for admission of securities in the depository.
* The depository assigns an ISIN for the security.
*The allotment advice for demat shares will have the client account number, DP id and depository details.
*For the demat shares, the depository will be entered as the registered holder in the register of members of the company and the details of the corresponding beneficial owners will be uploaded in the depository's system.
*The issuing company or the R&T agent may also maintain the details of the beneficial owners.
Physical transfer of shares has been discontinued from 01 April, 2019. The DRFs are required to be stored for at least a period of 5 years.

17.3.2 Rematerialisation of Securities

Rematerialisation of securities is the process of converting the electronic holding of a security to physical form.
The steps involved in this process are:
* Investor submits a Rematerialisation Request Form (RRF) to the DP.
* The DP validates the signature and the availability of the shares in free form in the investor's account.
* The request is then electronically forwarded to the depository.
* The RRF will have details such as the name(s) of the holder(s), signature, Number of shares to be rematerialized, address, bank account details, PAN Number, age, tax status and nominees, if any.
* The depository validates the information and forwards an electronic request through the depository system to R&T. This can also be viewed by the DP.
* The DP sends the RRF to the Issuer/R&T agent who cross verifies it with the electronic confirmation received from the depository and forwards it for processing.
* Acknowledgement of this is sent to the DP.
* The R&T agent will capture the information in the RRF and create a new folio or add to an existing folio. The procedure to be followed is the same as that for creating a folio in other circumstances.
* The R&T agent will assign a new certificate number and distinctive numbers from the set of shares already dematerialised.

* The names of the beneficial owners will be included in the Register of members of the company and the name of the depository removed to that extent.
* In the records of the depository, the investor's account will show a reduction to the extent of rematerialization.
* The R&T agent shall ensure that the applicable revenue stamps are affixed.
* The R&T agent will print certificates in the name of the investor and dispatch them directly to the shareholder.
* Confirmation of the rematerialisation will be electronically sent to the depository and the DP will be informed of the same.

17.4 Power of Attorney

Individual investors can empower someone they trust to do transactions on their behalf, by granting and executing a Power of Attorney (PoA). This facility is generally used by non-resident investors who stay in a foreign country and are thus unable to manage their financial transactions, or by investors who like their brokers or advisors to manage their investments on their behalf.

A Power of Attorney has two parties: the grantor, who is the primary investor or account holder and grants the rights; and the Attorney, or holder, who is authorised to execute an agreed set of actions on behalf of the grantor. The grantor and the holder have to abide by the guidelines for PAN and KYC compliance. Power of attorney holders usually exercise all the rights of an investor. They can do normal transactions such as purchase, payment for purchase, sale, settlement of transactions and redemptions. The rights of the holder depend on what the grantor is willing to delegate under the power of attorney and what is allowed for PoA transactions by the investment or service provider. However, the attorney cannot appoint a nominee for the investment. The grantor of power of attorney can continue to operate the account even after giving a power of attorney.

To be valid the PoA must be:
Typed on a non-judicial stamp paper.
* Stamped according to the rules applicable in the state in which it is executed.
* Signed by the grantor on all pages.
* Signed by the grantor and the holder of the power of attorney on the last page.
* Notarised by a notary public. This requirement varies among different entities and intermediaries. For example, some mutual funds may require the PoA to be notarized, while a PoA to operate a demat account needs to notarized only if the depository participant so requires.

If the Power of Attorney is executed abroad, it can be typed on a plain paper, attested by a designated official of the Indian embassy abroad or by a notary abroad, signed on all pages

by the grantor and sent to India for the holder of the power of attorney to sign on the last page. It is then stamped and notarized in India, if required.

Since minors cannot enter into valid contracts, there can be no PoA for a minor's transactions. The guardian plays a role similar to a PoA holder acting on behalf of the minor.

A certified copy of Power of Attorney, with signatures of both the parties has to be submitted to the entity where the PoA will be exercised. A PoA holder cannot open or close a bank or a demat account. The signatures of the holders of the account are necessary for this. The holder of the PoA can operate the account on the basis of the rights granted. In case of investments such as mutual funds, POS schemes, the PoA holder can make the initial investments and subsequent purchases and operate the account on behalf of the grantor. The grantor's signature is also recorded in the folio for purposes of verification. Typically, the grantor of the PoA can also conduct the transactions for which the PoA has been granted. A PoA holder cannot make or change nominations in an account or investment.

17.4.1 General Power of Attorney

A General Power of Attorney gives the agent the authority to handle all the affairs during a period of time when the investor is unable to do so, such as when he is travelling out of the country or when his physical and/or mental health are compromised. A General Power of Attorney is typically very broad, giving the agent extensive powers and responsibilities. General Power of Attorney typically includes (but is not limited to):

* Handling banking and other transactions
* Filing tax returns
* Buying, selling, or managing real estate and other property
* Entering contracts
* Settling claims

17.4.2 Specific Limited Power of Attorney

A Specific Power of Attorney gives the agent the authority to conduct a specific act or acts on the investor. Because this type of Power of Attorney is limited to the act or acts designated in the document, it is especially important to be very clear about the powers one wishes to give to the agent.

One may use a Special Power of Attorney to appoint an agent to act on his behalf in the event that if he becomes ill or disabled, are embarking on extended travel, or are otherwise unable to handle a specific type of task. He may designate any of the powers listed above (under General POA) to the agent, or any other powers he deems necessary.

17.5 Account Opening Process for Non-Residents

'Non-resident Indian' is an individual who is a citizen of India or a person of Indian origin and who is not a resident of India. Thus, in order to determine whether an Individual is a non-resident Indian or not, his residential status is required to be determined under Section 6 of the Income Tax Act. As per section 6 of the Income-tax Act, an individual is said to be non-resident in India if he is not a resident in India and an individual is deemed to be resident in India in any previous year if he satisfies any of the following conditions:

1. If he is in India for a period of 182 days or more during the previous year; or
2. If he is in India for a period of 60 days or more during the previous year and 365 days or more during 4 years immediately preceding the previous year.

However, condition No. 2 (mentioned above) does not apply where an individual being citizen of India or a person of Indian origin, who being outside India, comes on a visit to India during the previous year.

A person shall be deemed to be of Indian origin if he, or either of his parents or any of his grand-parents, was born in undivided India.

An NRI under Indian Income Tax Act is defined as a Person of Indian Origin (PIO) if he or she:

* Has held an Indian passport at any time, or
* Is a grandchild of citizens of India, or
* Is a spouse of an Indian citizen, or
*Is a spouse of a person covered under the first two points above

In terms of Regulation 2 of FEMA Notification No.13 dated May 3, 2000, Non-Resident Indian (NRI) means a person resident outside India who is a citizen of India. NRI investors, including Persons of Indian Origin and FPIs, are allowed to invest in India. The key issue in NRI investment pertains to repatriation of investment proceeds on sale or redemption of units. Repatriation norms vary depending upon the source of the funds from which the original investment was made. NRIs can earn income in rupees from India, or in foreign currency from another country. If the source of funds for an NRI investment is foreign currency, it can be freely taken outside the country; that is, it is repatriable. If the source of funds is Indian Rupees, it is non-repatriable. Investment made from these two sources of income cannot be clubbed together.

The reason for the rupee investment proceeds being non-repatriable is that since the rupee is not fully convertible on capital account, RBI norms do not permit investment in Indian rupees to be freely converted to other world currencies and to be taken out in foreign currency.

Since the treatment of investment proceeds from NRI investment depends on the source of funds, the source has to be identified at the time of making the investment. The bank account

through which the investment is routed is used to determine the source of funds. The funds that are remitted from abroad into the Non Resident External (NRE) Account or Foreign Currency Non Resident (FCNR) Account and invested can be freely repatriated back. NRI investors have to give a declaration in the application form about the type of account from which the investment was made and indicate whether it is on a repatriation basis. The rules and regulations pertaining to repatriation can be modified by the Reserve Bank of India. If investments are made from Non-Resident Ordinary (NRO) account, proceeds are repatriable only to the extent of USD 1 Million per financial year. If made from NRE account, FCNR account, or through a draft drawn on a foreign bank and supported by Foreign Inward Remittance Certificate (FIRC), then the proceeds are repatriable without any limit.

All incomes earned in India on investments are freely repatriable, irrespective of the source of funds used to make the investments, provided taxes as per Indian laws have been paid. Such income may include interest on bonds and bank accounts, rental income, dividends from shares and mutual funds. Income in the form of sale proceeds of capital assets such as property, land, shares, bonds, mutual funds held in India are repatriable to the extent of funds remitted from abroad for buying those capital assets.

KYC for NRIs

NRIs have to be KYC compliant in order to make investments in India. A soft copy of the KYC form is widely available at the websites of mutual funds, brokers, service providers and KRAs. It has to be completed and submitted along with the necessary documents to a point of service (PoS) in person, or mailed to the KRA agency directly.

The following is the additional documentation, apart from proof of identity, proof of address and PAN card, for NRIs and PIOs:
* Certified True Copy of Passport
* Certified True Copy of the Overseas address
* Permanent address
* A certified true copy of the PIO Card (for PIOs)
* In case of Merchant Navy NRIs, Mariner's declaration or certified copy of CDC (Continuous Discharge Certificate) is to be submitted.

All documents must be submitted in English and can be attested by the Consulate office or overseas branches of scheduled commercial banks registered in India.

The Central Board of Direct Taxes has notified Rules 114F to 114H, as part of the Income-tax Rules, 1962, that require Indian financial institutions to seek additional personal, tax and beneficial owner information and certain certifications and documentation from all investors/account holders.

From January 2016, it is mandatory for all Indian and NRI investors (existing and new) to file a Foreign Account Tax Compliance Act (FATCA)/Common Reporting Standards (CRS) self-declaration to comply with the above Income Tax/CBDT guidelines.

While the details might be slightly different with each financial institution, the common information mandated are fields such as—Name, Permanent Account Number (PAN), Address, Place (city/state) of birth, Country of birth, Nationality, Gross Annual Income, occupation and if a person is the resident of another country. If the country of residence is other than Indian then the Tax ID number, and type are required. In case of non-individual entities, the details of the Ultimate Beneficial owner (UBO) are also required to be submitted.

Portfolio Investment (NRI) Scheme (PINS) Account

The Portfolio Investment (NRI) Scheme (PINS) is a scheme of the Reserve Bank of India (RBI) and is mandatory for Non-Resident Indians (NRIs) and Persons of Indian Origin (PIOs) who like to purchase and sell shares and convertible debentures of Indian companies or units of domestic mutual funds on a recognised stock exchange in India. All purchase and sale transactions in listed securities of NRIs is routed through their PINS account held with a designated bank, which maintains and reports to RBI as required, the investments made by NRIs.

Only an NRI/PIO can open a PINS account. PINS account with the bank is identical to the NRE account. However, even if the NRI has an existing NRE account, he must open a separate PINS account for the purpose of trading in shares. An NRI/PIO can have only one PINS account (One NRE (PIS) account for investment on repatriation basis and one NRO(PIS) account for investment on non-repatriation basis) at a given point of time.

PINS account can be opened only in designated branches of banks (authorised dealers) as authorised by RBI under the Portfolio Investment Scheme. Addresses of designated branches are usually available on the bank's website. NRI can select only one authorised dealer for the purpose of investment under Portfolio Investment Scheme and route the transactions through the branch designated by the authorised dealer.

Application for PINS permission can be made through the bank by filling the PINS application form. Details of all shares purchased through the primary market need to be enclosed. Along with PINS account, PINS demat account opening form also needs to be enclosed.

Documents Required

Copy of current passport, valid work permit or employment visa, PIO card (if applicable) and address proof need to be enclosed with the application. The application form with required documents needs to be submitted at the designated branch.

Seafarers employed by foreign shipping companies can open a PINS account by submission of required documents such as Continuous Discharge Certificate.

Permitted credits to the NRE(PIS) account for routing PIS transactions include foreign inward remittance by way of Telegraphic Transfer, Demand Draft, cheque, traveller's cheque, foreign currency or transfer from existing NRE or FCNR accounts as well as dividends from shares or mutual funds or sale proceeds of shares/mutual funds acquired on repatriation basis. Debits to the account includes outward remittance of income or dividend earned, amounts paid for purchase of securities and charges applicable for acquiring these securities.

Credits to the NRO (PIS) account will include inward remittance of foreign exchange, dividends and income earned under the PIS, net sale proceeds and transfer from other NRO, NRE of FCNR(B) accounts. Debit to the account will be in the form of outward remittance of income or dividend earned, amounts paid for purchase of securities and charges applicable for acquiring these securities.

NRIs cannot purchase more than 5% of the paid-up capital of a company on both repatriation and non-repatriation basis subject to an overall limit of 10% by all NRIs. The purchase of debentures of each series of an Indian company shall not exceed 5% for each individual within an overall limit of 10% for all NRIs. This limit can be increased by an Indian company to 24% by passing a General Body resolution.

NRI Demat account

NRIs can open a demat account with any Depository Participant in India. NRI's needs to mention the type ('NRI' as compared to 'Resident') and the sub-type ('Repatriable' or 'Non-Repatriable') in the account opening form.

No permission is required from RBI to open a demat account. However, credits and debits from demat account may require general or specific permissions as the case may be, from designated authorised dealers. Holding securities in demat only constitutes change in form and does not need any special permission.

NRI must open separate demat accounts for holding 'repatriable' and 'non-repatriable' securities. NRIs can hold joint demat accounts. For the purpose of determining ownership of holding, the first holder is taken into account. Hence, even though other joint holders may be

person residing in India, the sale proceeds of such securities can be repatriated in case the first holder is permitted to repatriate funds. Trading in Currency or Commodity segment is not allowed using such demat accounts. Short selling of stocks is not allowed using such demat accounts.

NRI Trading account

NRI investors can open a trading account with a registered broker of a stock exchange. NRIs can have two separate trading accounts linked to NRE & NRO accounts. Special considerations in case of NRI trading accounts:

* NRIs cannot trade in securities which are in the breach list (List of companies where foreign investment has reached its permissible limit as applicable for FPI/NRI/Overall Sectoral Limit)
* Clear funds should be available for purchases
* Securities should be available before making a sell order
* Depending upon whether the purchases are made on repatriation/non-repatriation basis, pay-out of the securities is transferred to the respective demat account.
* Purchase/Sale transactions in cash segment are settled by delivery only.
* The contract notes in original have to be submitted to the designated branch where the investor holds the PIS account within the time specified.

17.6 Process of Consolidating, reorganising and folio keeping/Maintenance of Investments

Investor accounts and folios require maintenance for changes to the details provided at the time of opening an account. Investor information such as contact address and bank account details are provided in the application form which is used to allot a unique identification number to the investor. Request for changes to static or personal information in the folio or account have to be intimated to the investment company or service provider or their agent, such as the registrar and transfer agent, to update the investor records. Documents that prove the change also needs to be furnished along with the request. All joint holders need to sign such change requests in order to be valid.

Once the request is received, the supporting documents are verified and necessary changes are made to the investor records. An intimation of the updation or statement of account showing the change as a transaction is sent to the investor.

17.6.1 Change of Address and Contact Details

The KYC process that has to be undertaken by each investor or account holder in a financial transaction establishes the identity and address of the investor. The proof and record of the identity and address of an investor are maintained with the entity that conducted the KYC process, such as the KYC registration agency (KRA) in case of capital market transactions or

the concerned bank or insurance company or other product provider as the case may be. Hence, any change to these details must be carried out in the KYC records. In case of capital market transactions, such as investment in mutual funds, opening a demat or broking account, investing in a portfolio management scheme, venture capital fund or other collective investment schemes, the uniform KYC process is done through the KRA. The KYC details change form can be used to carry out such changes. The form should also be accompanied by a documentary proof of the new address, such as passport, current utilities bill and other approved address proof documents. The KRA will update the records and communicate the change of address to all the entities with which the investor has holdings.

Only intimation to the Asset Management Company, Registrar and Transfer Agent, DP, Broker or PMS provider about change of address will not be sufficient unless the change has been carried out in the KYC records available with the KRA.

In case of other financial products and services, the change in address has to be intimated to the provider for updation in the records. Banks follow a system of periodic updation of account holder records. In case of POSB accounts and savings certificates, a change of address may involve a transfer request to a new post office in which case documents to establish the new address has to be provided at the new post office. If encashment of certificate is requested at a post office other than the one at which it was purchased, the present address is verified before the payment is made.

Investors in the NPS have to use form S2 prescribed by the CRA to record the change in address in their account. Insurance policy holders need to inform the insurance company of the change in address. In all cases of change of address, it is essential to provide self-attested documentary proof of the new address such as passport, current utilities bill, and ration card.

17.6.2 Change in Name

Investors may request a change of name in their investment records or folio. For instance, women investors may like to change their maiden name to married name. The letter requesting the change in name should be supported by the name change certificate issued by a regulatory authority, an official gazette copy announcing the new name and a copy of marriage certificate, if applicable. There may be a form specified for this purpose, such as the form S2 prescribed by the NPS or the KYC details change form specified by KRAs or a form specified by the concerned bank, insurance company or other intermediaries, to request a change in name.

17.6.3 Change in Status

Investors who undergo a change in status from resident to non-resident or vice versa have to inform the change of status to the investment companies and financial service providers. This is because a change in status will imply a change in the type of bank accounts from which payments can be made and received, a change in the tax implications of investments and a change in the address recorded under the KYC process.

A change in status can be recorded with the capital market companies and intermediaries by using the KYC details change form to register these changes in the records of the KRA. The change will be intimated to all the capital market participants with whom the investor has transactions. Insurance companies have to be intimated of the change and the new address and mode of premium payment details provided in an NRI questionnaire that is prescribed by the company. Bank accounts held as resident should be re-designated to NRO account through an application signed by all the holders. If there is a change of address, then the new address should be provided supported with documentary proof. If a trading account is linked to the account, then it should be delinked.

A new demat account and trading account will be opened which will reflect the NRI status of the investor and will be linked to the NRO/NRE bank account. All securities held in the resident demat account will be transferred into this new account and will be non-repatriable.

New bank account details have to be provided to all investment providers such as asset management companies, depository participants and brokers. Existing investments in small savings schemes can continue and maturity values will be credited to the NRO account of the investor.

Similarly, a change in status from NRI to resident has to be intimated and necessary action taken to reflect the changed status.

17.6.4 Marking a Lien

Investors may pledge their investments such as shares and bonds, mutual fund units, bank deposits, small savings schemes and others as collateral to borrow money from scheduled banks, financial institutions, or non-banking finance companies (NBFCs). A loan can also be taken against a life insurance policy by assigning the policy to the lender or to the insurance company itself if the loan is taken from the company. The lender will create a lien or charge on the securities pledged with them. The investor cannot redeem the securities under lien. If they fail to pay the loan amount the lender can sell the securities and recover their dues.

The investor and the lender must inform the investment provider, such as the mutual fund, bank, insurance company, depository participant or insurance company of the lien through a letter. In some cases, such as assignment in an insurance policy or for savings certificates, there may be a specified form for the purpose. Typically, the information that requires to be provided in creating a charge includes:

*The folio number, account number, certificate number, FDR number, demat account number, insurance policy details of the investments offered as security.

* The scheme / plan / option if applicable

* The number of units/securities pledged with ISIN as applicable

*The details of the bank account of the financier or lien holder.

*The demat account details of the lien holder or pledgee if shares in a demat account are being pledged.

The lien or pledge is recorded by the investment or service provider in the investor records. In case of mutual funds, the R&T agent records the lien against the securities and informs the investor of the lien through the account statement. The lien appears as a transaction in the account statement. Lien can be for all or part of the securities in a folio.

An investor cannot redeem or transfer the securities under lien until the lien holder provides a written authorisation to revoke the lien or pledge. The investor can conduct transactions such as change in address or bank details, unless specifically denied by the lien holder. Once the investor repays the loan, the securities become free from lien and are unmarked. For unmarking of lien, the lien holder should send a written communication to the company. If the request for unmarking is sent by the pledger or the holder of the investments, then the application must also be signed by the pledgee or the lender. Dividends and other benefits from the securities under lien will go to the investor unless specifically barred by the lien holder.

As long as securities are under lien, the lien holder can exercise or invoke the lien. Invoking the lien means redeeming or selling the pledged securities. The lien holder receives the proceeds by selling/redeeming the securities. There is no transfer of securities from the investor to the lien holder. The investor receives information about lien invocation through the account statement. If the lien or charge is created on a bank fixed deposit, then the bank will undertake to pay the amount of FDR to the lien holder in the event they exercise the lien. Similarly, any payouts by the insurance company on a policy that has been assigned, will go to the assignee till the loan is repaid and the insurance company is so intimated.

17.6.5 Transmission

Transmission means 'an act of passing on something'. In the context of investments, it refers to passing on the investments on the death of the investor to another person. To complete a transmission process, on receiving a claim with documents to support it, the name of the investor is removed from investment records and the investment is transferred to persons entitled to receive them.

After the death of a person there may be several claimants to the investments made by the deceased security holder. The investment provider or their agent such as an R&T agent of a mutual fund, do not take responsibility for the equitable distribution of the investments among the heirs of the deceased investor. They follow the directions of the original investor or follow a prescribed process if there is no such instruction. There could be joint holders, nominees, legal heirs and other claimants. The eligibility of claimants to get the investments transmitted in their name on the death of the first holder will depend upon the way the investment account was held. Broadly, the process followed in transmission of investments may be as under:

- If the investment account was held jointly and did not have nominations, then the investments are transmitted to the joint holders in the same order. The second holder will now become the first holder of the investments. In case of a bank account or fixed deposit, the account balance may be paid jointly to the heir of the deceased and the surviving holder. In the event the mode of operation of the account was specified as either or survivor, then it is passed on to the remaining holders.
- If the folio was held jointly and had nominations, the right of the joint holders to transmission supersedes the right of the nominee.
- If the investment account was held singly (only one holder) and had a nomination, then the investments will be transmitted to the nominee.
- If the investment account was held singly and there was no nomination, then it would be transmitted to legal heirs or other claimants where there are documents to establish succession.
- On the death of Karta of HUF, the investment will be transmitted to the new Karta on receipt of indemnity bond signed by all the remaining co-parceners.

Companies take a sensitive approach to dealing with transmission cases. They explain the documentation correctly and completely to the claimants. In cases where the amount involved is not large, some of the requirements may also be waived. For example, DPs may not insist on documents such as a succession certificate or the probate or letter of administration, if the application for transmission is for securities whose value does not

exceed Rs. 50,000[17] A copy of the death certificate, letter of indemnity and NOC from other legal heir is seen as adequate to process the transmission request. The threshold for simplified documentation for transmission incase of securities held in the physical form has been revised to Rs.5 lakhs and in case of dematerialised securities the limit is Rs.15 lakhs.

The transmission of investments to the claimant is done on the assumption that if there is a dispute, the person holding the investment or redemption proceeds is only holding it in trust, pending final settlement. Payment to the nominee or claimant as per the processes, absolves the investment entity of its responsibilities.

A request for transmission has to be made in the format, prescribed by the mutual fund, bank, depository or other investment provider as the case may be. The claimant may be required to sign an indemnity bond, indemnifying the bank, depository or AMC or others from any losses or disputes that may arise later. There are specific documents that support a transmission request. Documents submitted with a transmission request will have to be attested or notarised, and also verified with the originals. The following are the documents required for transmission depending upon the nature of the transmission request.

* Death certificate has to be provided as evidence of death in all requests for transmission.
* Probate of will to evidence validation of the will by the court as the last and final will of the deceased investor. However, it may be noted that probate is not always needed in all parts of India.
* In the event of death without a will, the legal heirs obtain a succession certificate from court. This certificate gives details of persons who are 'succeeding' the deceased.
* Documents establishing relationship with the deceased investor, such as birth certificate and marriage certificate, may have to be provided.
* An indemnity Bond may be required for absolving the company from any future claims that may be made by other claimants, after the transmission is made.
* No Objection Certificate (NoC) signed by the remaining legal heirs if the claim for transmission is made by one of them.
* Bank account details of the new first holder supported by cancelled cheque bearing account holder's name and account details.
*KYC compliance documents of the person in whose name the investments are being transmitted.

17.6.6 Nomination and change in nomination

Nomination is a facility provided to the holder of an investment to designate the person(s) who will be entitled to receive the benefits of the investments, in the event of the death of

[17]According to the depository bye-laws, if value of the securities in the deceased beneficial owner account is less than Rs. 5 lakhs then the successor need not provide either the succession certificate Probate of the will / Letter of administration.

the investor. The investor can make the nomination either at the time of making the investment or subsequently. Investors subscribing to mutual fund units on or after October 1, 2022 shall provide nomination in the prescribed format or opt out of nomination through a signed declaration.A nomination made in a folio or account will apply for all the investments held under it. While a demat account can have only one nominee, mutual funds, insurance policies, NPS, Post office savings deposits and schemes all allow multiple nominations. Nomination is optional. However, mutual funds are making nominations mandatory for folios held singly. Nominations can be made only by individual investors.

Nomination can be changed or cancelled at any time. All the joint holders must sign to make the nomination, change it or cancel it. A power of Attorney holder cannot make or change a nomination in an account or folio.

17.6.7 Assignment especially in case of insurance policies

Assignment means a transfer of an individual's rights or property to some other person. An assignment can be done in several areas including investments, loans and even insurance. When it comes to an investment the best example is that of an option, where the option writer is assigned the option contract, then he has the obligation to complete the option contract.

In case of a loan there might be a mortgage, which gives the lender interest in the property in return for the payments received. The lender might sell the mortgage to some other lender. In this case there would be an assignment document that clarifies the details of this sale and transfer.

An insurance policy can involve the transfer of the rights in the policy to some other party who might be a lender or a relative. The assignment in this case can be conditional or absolute. An assignment to a lender is absolute and this cannot be changed. On the other hand, an assignment of a policy in case of an early death could be a conditional one. Here the condition is specified when the assignment would take place.

The insurance policy can be assigned by either endorsement of the policy or by signing a deed of assignment and registering this with the insurance company. A form has to be filed in for this purpose and in case of a conditional assignment the condition also needs to be mentioned.

17.7 Change in Status of Special Investor Categories

Minors, NRIs and investors investing through a constituted attorney constitute a special category of individual investors. Some of these investors do not make investments directly instead investments are made by designated entities on their behalf. These categories of

individual investors require additional documentation and process, due to their differential status with respect to taxation and mode of operation of investments or restrictions on certain components of investment activity.

17.7.1 Minors as Investors

Minors are investors who are less than 18 years of age on the date of investment. Minors cannot enter into contracts on their own and if they, then such contracts are null and void by law. Therefore, the financial transactions of minors are conducted by adults on their behalf. Those transacting on behalf of the minor child are called guardians. Parents are the natural guardians of their minor children. If the application form identifies the status of the investor as a minor, then the date of birth of the minor investor becomes mandatory information that has to be provided along details of the guardian.

When investments are made on behalf of minors some additional documents need to be submitted with the application form. These include:
*The date of birth and proof of the same
*Document to establish the relationship of the guardian with the minor
*The PAN of the guardian who is investing on behalf of a minor

An investment on behalf of a minor cannot have joint holders. Thus, investments can be held solely by the minor or jointly with the guardians, as allowed by the terms of the investment product. Minors have to be sole holders or first holders of the investment. Guardians have to provide all details and complete the Know Your Customer (KYC) formalities, as if they were investing themselves. Guardians also sign the application and payment instruments on behalf of minors.

Minors may have a PAN card obtained by their guardian on their behalf. Depending on the requirements of the investment product, the PAN of the minor or of the guardian or both may have to be provided while making the investment.

The guardian of a minor may change due to demise of the existing guardian, or through mutual consent. When there is a change in guardian, an application has to be made for registration of the new guardian. For this the new guardian has to send a request letter to the company along with prescribed documents. If the existing guardian is alive, a no objection letter or consent letter from existing guardian or a court order appointing the new guardian needs to be submitted. If the previous guardian is deceased, a copy of the death certificate, duly notarized or attested has to be submitted. Attestation may be done by a special executive magistrate or an authorized official of the Company, or manager of a scheduled bank.

The new guardian could be a natural guardian (mother or father), or a court appointed legal guardian. A court appointed legal guardian has to submit supporting documentary evidence. A natural guardian also has to submit documentation evidencing the relationship. The signature of the new guardian in the bank account of the minor attested by the bank as such needs to be submitted. The new guardian also needs to obtain KYC compliance and furnish evidence of the same to the asset management company.

A petition can be filed in the High Court under the Guardians and Wards Act, 1890, or the Hindu Minority and Guardianship Act, 1956, by a person seeking to be a child's guardian, for being appointed as the legal guardian.

17.7.2 Minor turned Major

Once the minor become major, financial transactions are disallowed in their account. No debits or redemptions can be made in bank accounts; mutual funds folios or demat account of minors-turned-major. Minors are not eligible to sign documents, enter into contracts, or issue third party cheques. However, after a minor becomes major, they can conduct such transactions, only after their signature is attested by their banker.

KYC: Minors attaining majority will have to complete all the KYC process by submitting proof of identity and address. Banks and depositories may also insist on personal verification of the minor-turned-major. It is important to plan for such verification if the child is away at a different location for higher studies.

Bank Accounts: Holding details for minor's investments will undergo change so that the account is operable by the minor-turned major. Banks will ask for proof of age and ask for an application to attest the signature of the minor-turned-major.

PAN Card: The PAN issued to a minor will have to be resubmitted to the Income Tax authorities, for issuance of a new card, with the same number, but the new signature of the minor-turned-major.

Demat Account: Since demat accounts of minors can be held only on single-name basis, the account opening process has to be redone for a minor-turned-major. This involves opening of a new demat account. Securities held in the old demat account with minor status are transferred to the new demat account. Depositories may waive transaction charges on such transfers.

Mutual Fund Investments: In case of mutual fund investments, notification to the registrars, with a copy of the banker's attestation of the signature is adequate. R&T agents make the

change in status, register the new signature and notify the investor. Minors can then operate the folio or investment account and the guardian will not have any rights to the mutual fund folio or demat account after this change has taken effect.

Systematic Transactions (SIP, SWP, STP and others): Standing instructions like Systematic Investment Plans (SIP), Systematic Withdrawal Plans (SWP), Systematic Transfer Plans (STP) are registered in a minor folio only till the date of the minor attaining majority, even though the instructions may be for an extended period. When the minor is approaching the age of majority, AMCs usually send letters advising the guardian and the minor to submit the form along with prescribed documents to change the status of the account/folio to "major". All SIP, STP, SWP and any other standing instruction registered in the minor's account are suspended if the documents are not received by the date when the minor attains majority. The folio is frozen for operation by the guardian on the day the minor attains the age of majority and no transactions shall be permitted till the documents related to minor turned major are received.

17.7.3 NRI to Resident Indian (RI)

If a person returns to India and forgoes the NRI status, he needs to carry out certain procedures with respect to his investments and bank accounts.

Bank Account: Once an NRI becomes a RI, he cannot operate his NRO/NRE/FCNR (B) accounts. He needs to inform to the bank about the change of status to resident Indian and needs to open a Resident Rupee Account. Account opening documents such as address proof, identity proof, photographs need to be submitted. A Resident Foreign Currency (RFC) account may be opened by a returning Indian to transfer balances from NRE /FCNR (B) accounts. This account can hold foreign currency and continue to receive funds in foreign currency from investments abroad.

Demat Account: Just like bank account, the returning NRI needs to inform change of status to the designated authorised dealer branch through which the investor had made investments in the Portfolio Investment Scheme, as well as the DP with whom he has opened a demat account. A new demat account with ‘Resident’ status needs to be opened. All the balances held in the NRI demat account shall be transferred to the new ‘Resident’ demat account. After transfer, the NRI demat account will get closed.

Trading Account: If the NRI was operating an online trading account, the broker also needs to be informed about the change. The trading account with NRI status will get closed and a new trading account with resident status needs to be opened.

Mutual Fund Investments: Respective AMC with whom the NRI holds mutual fund investments needs to be informed about the status change. KYC change form needs to be

sent to the KYC registration agency for change of status, address and bank details. An acknowledgement shall be issued by the KYC registration agency on submission of request and will carry out the necessary changes in its records.

17.7.4 Resident Indian to NRI

Different rules apply fora Resident Indian when his status changes to a Non Resident Indian. On becoming an NRI, a person needs to carry out certain formalities with respect to his existing investments and bank accounts.

Bank Account: Once a person changes his status from Resident Indian to NRI, he can no longer operate his Resident savings account. He needs to open a Non Resident External (NRE)/ Non Resident Ordinary (NRO) account with the Bank. Investments can be routed only through NRE/NRO account. Bank fixed deposits should also be converted to NRO fixed deposits and the original fixed deposit receipt has to be submitted and a new deposit confirmation advice with the applicable terms and conditions will be issued.

Demat Account: A person may be holding securities in a demat account in the Resident status. On becoming NRI, a new depository account with NRI status needs to be opened. All the balances held in account with 'Resident' status should be transferred to the new account. Securities held under this account will be treated on non-repatriable basis.

In case of physical securities held by the resident investor, a NRI needs to regularise his holdings to reflect NRI status. For this, NRI must submit a letter addressed to the issuing company along with the Demat Request Form stating change of status and giving details of foreign address.

Trading Account: On becoming NRI, a new trading account needs to be opened for future investments. NRI trading accounts usually have higher brokerage rates compared to resident investors. NRI can continue to hold the securities that were purchased as a resident Indian, even after he becomes a non-resident Indian, on a non-repatriable basis.

Mutual Fund Investments: The NRI needs to inform the relevant AMCs about the change of status, change of address and bank details with respect to mutual fund investments. KYC change form needs to be sent to the KYC registration agency for change of status, address and bank details. An acknowledgement shall be issued by the KYC registration agency on submission of request and will carry out the necessary changes in its records. Once the investor is flagged as an NRI, TDS will be deducted at source on gains made on sale/redemption of mutual fund investments by NRIs as applicable.

17.7.5 Addition or deletion of name in an account

There might be one or more holders in an account and there would be situations wherein it might be required to either add or delete a name in the account. This will require some specific procedure to be followed

Bank account : A name can be added or deleted from the bank account by following a simple procedure. There has to be an application made for the purpose of either the addition or the deletion. In case of addition the bank will collect the necessary documents from the person being added and the KYC will be completed. At the same time there is a specimen signature card where all the signatures of the account holders are maintained. This would have to be updated with the new account holders in the manner in which the account would be operated.

Mutual Fund investment: Mutual funds do not usually allow for addition of a name because it amounts to transfer of the units being held. The solution that is offered is to open a new folio with the desired holdings and then get the units in that folio after closing out the existing holding.

17.7.6 Addition or deletion of a bank mandate

The bank mandate which consists of the details of the bank account of an individual are linked to the various investments. These can be changed by either adding a new bank or removing an existing one. It can happen due to the bank account being closed or a new account being opened, which is used for the purpose of investments and so on. In case of a bank account that is linked to the trading and demat account the investor needs to fill in a form that has the particulars for change of the bank mandate. They would need to give a copy of a cancelled cheque for the confirmation of the details. In case of a trading account the broker could allow for multiple accounts being linked to the trading account. In this case too a form with the details of the bank account needs to be filled in so that the additional account can be added. However, there will be a main account to which the payout will be made in case of withdrawal of funds.

Mutual funds have a clear process to be followed for the addition or deletion of a bank account. There is a form that is present for the bank accounts that have to be linked to a folio. These allow for multiple bank accounts to be linked because the payment for the mutual fund has to come from one of these accounts only. One of the accounts would be designated as the main account, where the payment of the dividends and the redemption amount would go. The investor can submit a copy of the cancelled cheque of account and fill up the form and add or delete the desired bank account.

17.8. Payment Instruments

There are several accepted modes of payment for making investments. These include the following:

* Local cheques and at par cheques
* Demand drafts
* Post-dated cheques, for SIP transactions in mutual funds
* Electronic and digital payment modes such as Automated Clearing House (ACH),Real Time Gross Settlement (RTGS), National Electronic Funds Transfer (NEFT)
* Standing Instructions where periodic payments have to be made as in the case of premium payments and mutual fund SIPs.
* Cash is an accepted mode of payment for some investments such as post office savings schemes. Insurance premiums can also be paid in cash. For mutual funds, cash is accepted up to Rupees 50,000 per investor per mutual fund per year
* Applications Supported by Blocked Amount (ASBA), for New Fund Offer and initial public offer purchases

17.8.1 Traditional modes of making payment

All payments for transactions on the capital markets have to be routed through the first holder's bank account. This includes payments due on stock market trading account and primary market investments. Payments can be made through cheques, demand drafts and electronic payment modes.

In case of Mutual Funds, cheque payment is the most common mode of payment. Local cheques and At-Par cheques are accepted as payment but out-station cheques and post-dated cheques (except for SIPs) are not permitted mode for payment. The details of the cheque such as the cheque number, account number and type, bank and branch address have to be provided in the form. Demand draft is accepted as payment for applications from centres where the producer does not have an office or collection centre. Systematic Investment Plan (SIP) allows investors to accumulate a target investment sum through periodic recurring investments. The payment for purchase of units through an SIP can be through post- dated cheques or through an ACH mandate. The date on the cheque should match the date chosen for SIP instalments.

17.8.2 Digital Payment Systems

In case of ACH, the investor has to submit the bank account details of the beneficiary such as name, bank, branch, account number, MICR codeof the destination bank branch, date on which credit is to be afforded to the beneficiaries and the amount.[18] Investors fill up the ACH

[18]MICR is an acronym for Magnetic Ink Character Recognition. This is a 9 digit code to identify the location of the bank branch; the first 3 characters represent the city, the next 3 the bank and the last 3 the branch. The MICR Code allotted to a bank branch is printed on the MICR band of cheques issued by bank branches.

mandate form and submit it with their application. ACH facility is available only in select cities as given by the AMC. The form should be signed by all bank account holders. The bank account has to be MICR-enabled.

Applications Supported by Blocked Amount (ASBA), is a facility that has been extended to investors subscribing to securities. ASBA is an application containing an authorization to block the application money in the investor's bank account for subscribing to a primary market issue. Application money is debited from the bank account only if the application is selected for allotment. The debit takes place only at the time of allotment. ASBA facility can be availed through banks specified in SEBI's list.

Payment through ASBA has two advantages. First, since the application money remains in the bank account, it continues to earn interest. Second, only funds to the extent required for allotment of units are debited from the bank account so the need for refunds is eliminated.

Payment can be made electronically in several ways. If the investor has internet banking facility, direct transfer of funds can be done online from the investor's account to that of the product or service provider. If the investor and the service provider have their account with the same bank, investors can provide instructions to their bank to transfer the money to the investment account as a direct transfer. The list of banks with whom they have tied up is provided by the service provider for such facility.

Debit cards issued by selected banks can also be used to make payment. The investor can access this payment mode through the website of the service provider. Alternately, the investor could opt for electronic fund transfer modes such as NEFT/RTGS. The NEFT and RTGS systems of RBI allow transfer of funds electronically from the account of the remitter maintaining an account in one bank to a beneficiary in his account maintained with another bank/branch. These facilities benefit investors who do not have internet banking accounts with the designated banks specified. For a transfer to go through, both sending and receiving banks have to be RTGS/NEFT enabled.

In order to perform a transaction using NEFT or RTGS, the Indian financial system code (IFSC) is necessary. IFSC is an eleven digit alphanumeric code and unique to each branch of a bank. The first four letters indicate the identity of the bank and remaining seven numerals indicate a branch. This code is provided on the cheque books.

The RTGS system is for transactions of Rs. 2 lakhs and above, so the online system will not display the RTGS option for lower investment amounts. There is no minimum amount for NEFT transactions. In order to carry out a transfer of funds through NEFT or RTGS, the bank

account details of the beneficiary account holder including account number, bank and branch name and the IFSC code of the beneficiary bank branch have to be provided.

NEFT transfer takes place in batches at times defined by the RBI. RTGS transactions are settled continuously as and when they are put through on a real time basis. The charges under NEFT range from Rs. 5 to Rs. 25 per transaction depending on the amount being transferred. In case of RTGS, the charges range from Rs. 5 to Rs. 55 per transaction. Goods and Services tax is applicable on these charges.

Even if an investor does not have access to internet banking, he can opt for RTGS or NEFT by filling a request form and submitting at the bank branch with details of bank name, branch, account number and type of account, and IFSC code of the scheme, along with name and address of the fund. Once the request form is received, the bank will generate a unique transaction reference number. The bank's acknowledgement for the transfer request has to be appended along with the application as proof of transfer. The account number mentioned in the transfer instruction copy provided as proof should have one of the account holders as the first holder.

Other digital payments available to the individual include the Unified Payment Interface (UPI), Aadhaar Enabled Payment Service (AEPS), the National Unified USSD Platform, E wallets and others, that are primarily mobile-based applications that allow transfer of funds from bank accounts to meet payments and receive funds using the mobile phone number, Aadhaar number or other identification data registered with the bank.

17.8.3 Prevention of Money Laundering Act

Since September 2012, SEBI has permitted cash investments in mutual funds to the extent of Rs. 50,000 per investor per mutual fund, per financial year. This was initiated in order to enhance the reach of mutual fund products amongst small investors, in particular those who do not have bank accounts. Such cash applications should be in compliance with Prevention of Money Laundering Act, 2002, Rules and Circulars issued by SEBI, from time to time. Additionally, the asset management company should have sufficient systems and procedures in place for accepting cash transactions. Though subscriptions in cash are allowed, repayment in the form of redemptions and dividends is only permitted through banking channels.

Third party payments or payments made through an instrument issued from a bank account other than that of the investor mentioned as the first holder in the application form, will not be accepted for payment for investing in capital markets. In case of mutual fund investments, exceptions on the third party payment rule are made for grand-parents/parents making payments not exceeding Rs. 50,000 (per transaction) on behalf of a minor, employer making payments on behalf of employee through payroll deductions and custodians making

payments on behalf of FPIs. A third party declaration form in which the relationship with the beneficiary has to be stated and details of the bank account through which payment will be made has to be provided. This has to be attached to the application form. The person making the third party payment must be compliant with the PAN and KYC requirements.

17.8.4 Prevention of frauds

A very important part of the investment process is to ensure that the amounts being invested are safe from fraud. There have been several instances when the investor gave cheques for investment in a fund and the cheques went into the account of some other person, who then encashed the amount and disappeared. This is why the amount that is being invested would have to come from the investors own account and not a third party.

Similarly, there is a bank account that is linked with the investment and this is meant to ensure that the dividends and the redemption proceeds go to the right place. If this does not happen then the investor would have no idea where their money has gone. Initially the cheques used to come with the name printed but this could be deposited in any account, so then the account number was printed on them so they could not be deposited in some other account. Now the amount is credited directly into the investors bank account so this reduces the risk of the amount being stolen even further.

Electronic modes of payment take away the physical handling of the money in some form or the other. This ensures that the element of fraud is brought down to the minimum. The various places where the investment is made also take the necessary precautions in the form of collection of various documents, matching the names of the investment holding and the bank accounts while processing the payment mode etc. All this goes on to reducing the element of fraud.

17.9 Documentation for Financial Advice

The process of providing financial advice involves collecting information from the client, evaluating the investor's situation, determining a realistic saving and investment plan that will help the client achieve their goals and executing the plan. The suitability and success of the plan will depend upon how effectively the information was captured, interpreted and acted upon. Clear documentation of the entire process will exclude chances of information being misinterpreted. From an investor protection point of view, the evaluation and advice process is expected to be documented so that unsuitable advice is not given. The SEBI (Investment Adviser) Regulations, 2013 prescribes the documentation essential to make the process of financial advice complete.

The financial adviser must enter into an agreement with the client laying out the roles and responsibilities of each party. This should include the scope of the work that will be

undertaken, the agreed remuneration and an undertaking by all parties to act in good faith. The adviser must take the client through all the clauses and make sure they understand the implications. A signed copy of the agreement must be available with both parties.

The adviser must collect information on the client that is essential to advising. This includes the age, income and asset details, details on existing borrowings and liabilities and needs and goals for which they wish to save and invest. This is fundamental information based on which the financial plan will be made and it is best that it is recorded and verified by the client before it is used.

The suitability of investment products will depend upon the risk tolerance of the investor. This can be assessed using risk profiling tools such as questionnaires. The adviser must ensure that the investor understands the questions clearly. The interpretation of the responses must be correctly done. The responses must be seen in conjunction with the financial and personal situation of the client to arrive at the appropriate risk tolerance. The risk profile arrived at should be communicated and explained to the client. All this information should be maintained in records and periodically updated.

The investment adviser must document the process by which they short-list investment products for the client. The parameters considered to select a product must be clearly laid out particularly the performance track record. The products that are recommended to a client should be those that are suitable given the client's goals and risk profile and their ability to understand the risk and performance of the investment. The reasons for such selection must be explained to the client and documented. The key features of the investment product must be clearly laid out and explained.

The investment advice given on saving and investing for the goals must be recorded and maintained. The adviser must communicate it clearly and ensure that the implications are understood. There are pre-investment requisites that have to be met by the client. These include undergoing through the KYC process, having a demat account for holding certain types of investments, and specific type of bank account and investment account such as in the case of NRI investors, among others. The documentation associated with all these must be maintained.

Once the investments are made, the documents such as proof of investments, account statements have to be maintained for which a system has to be in place. Regulations allow records to be maintained physically or in electronic form. If it is maintained in electronic form, then it has to be digitally signed. All records must be maintained for a period of five years. The regulatory requirements for maintenance of records and documents are discussed in detail in chapter 6.

17.10 Investing in mutual funds through the stock exchange platform

17.10.1 Stock exchange platforms for mutual funds

Investing in mutual funds has spread far and wide and there are a large number of investors, who now use this investment avenue to deploy their funds. One way of transacting in the mutual fund units is to use the services of a distributor or complete the process with the mutual fund directly. An additional route has opened up for investors through the stock exchange platform route, where the recognised stock exchanges offer the facility to investors to buy and sell MF units through their platform.

There is an element of convenience that is available for investors, when they transact on the stock exchange. This is because the entire system is seamless and the investor is familiar with it. In case of stocks the investor needs to enter their order details either through their broker or online and these are routed to the stock exchange and then executed. The same route is followed for mutual fund units where the investor is able to transact in a seamless manner and get the units in their demat account.

SEBI has allowed mutual fund distributors to use the platform of recognised stock exchanges for the purpose of buying and selling mutual fund units on behalf of their clients. One of the primary condition that has to be followed is that the distributor has to be registered with Association of Mutual funds in India (AMFI) to be able to use the infrastructure. The units are purchased from and redeemed with the Asset Management Companies (AMC) directly.

One of the main features of this platform is that the distributor only handles the transactions of the investor. The rest of the process, including the pay in and pay out of money as well as the units takes places through the stock exchange infrastructure. This involves the clearing corporation too, and this system eliminates counterparty risk.

The BSE and the NSE mutual fund platforms are examples of the two types of stock exchange platforms that are present for investors to use. The beneficial part of this entire system is that apart from normal purchase and sale of units there is also the facility of undertaking a SIP which is a very crucial way of investing for investors. STP (systematic transfer plan) and SWP (systematic withdrawal plan) transactions apart from a switch are also possible on the stock exchange. The ease of making the investment and the facility offered is also a reason why the investor might find this an attractive route to invest.

The investment on the stock exchange platform can be made in the demat form and also in the physical form. When the investment is made online, there is no need for submission of the documents, which has to be kept with the mutual fund intermediary. In case of a physical application there is a need to submit the documents along with the application. It is easier to

undertake the online transaction and hence this can be done quickly and the same time the units will also be allocated immediately.

17.10.2 Role of investment adviser

The investment adviser has the ability to make the process of investing easier because they can advise on the use of the online platform for the mutual fund investments. Investors might already be using the stock exchange for their equity exposure and at the same time they would be having a demat account, so extending this to mutual fund purchases would be easier.

The adviser has to guide the investor on the manner in which the investment will be done and the process that they need to follow. It could be that the investor has various questions on the mode of operation of this system and it is the role of the investment adviser to answer them. The manner in which the transaction will be undertaken and the allocation of units will take place has to be understood by the investor.

The investment adviser while constructing the portfolio of the investor can also suggest the route that they can take for the purpose of making the investment and this can be the stock exchange platform. This will depend on the convenience of the investor and hence this factor also needs to be taken into the calculation.

17.10.3 Transaction feed available to investment advisers

One of the biggest benefits for the investment advisers is that they are able to see the entire mutual fund portfolio of their clients at a single place. The stock exchange provides the details of the holdings of the investor, along with the transactions that have taken place. This ensures that the entire portfolio details are available at a single place.

There is also the facility in which the status of various transactions can be seen on the platform. The portfolio holding statement can be generated as and when this is required, which helps in getting a proper view of the situation for the client. Other facilities include the clubbing of family members together so that they can be seen at the same place. It could be that there is a need to change some non-financial information of the client then this can be done through the stock exchange platform itself.

The investment adviser is thus able to take an independent view of the portfolio and make their decisions accordingly. It makes the decision making process easier because of the wealth of information available. All details related to the investment is there so it is just a matter of making the right decision based on this information.

There is almost no paperwork in the entire process and this makes the process quite smooth. This is a benefit for the investment advisers as they can undertake a larger amount of business and thus are also able to service their clients in a better manner.

One of the main problems for clients is that when there is something that has gone wrong in the process, it is very difficult to address and rectify. This becomes simpler to handle when the stock exchange platform is used because all the information is available at a single place. This will ensure that the service standard is also improved. It ensures effective transparency for everyone present in the process. Ultimately the investment adviser is able to charge fees in the right manner and at the correct point.

There is also ease of payment through the system as payments are accepted through cheque, demand draft, electronic modes like NEFT/RTGS, internet banking and even debit card.

CHAPTER 18: KEY REGULATIONS

LEARNING OBJECTIVES:

After studying this chapter, you should understand about:

- Securities Contracts Regulation Act (SCRA 1956)
- SEBI Act 1992
- key provisions of SEBI Prevention of Fraudulent and Unfair Trade Practices Regulations
- SEBI Intermediaries Regulations
- SEBI (Prohibition of Insider Trading) Regulations
- SEBI Investment Advisers Regulations, 2013
- Prevention of Money Laundering Act, 2002
- Key provisions of various other acts, as applicable to investment advisory profession
- Orders issued by SEBI
- Violation of Regulations by Registered Investment Advisers and their consequences

Key regulations which need to be kept in mind by Investment Advisers while dealing with clients and relevant regulators are given below briefly:

18.1 Securities Contracts Regulation Act (SCRA 1956)

Securities Contracts (Regulation) Act, 1956 is an Act to prevent undesirable transactions in securities by regulating the business of dealing therein by providing for certain matters connected therewith. It provides for direct and indirect control of virtually all aspects of securities trading and the running of stock exchanges. It gives the Central Government the regulatory jurisdiction over (a) stock exchanges through a process of recognition and continued supervision, (b) contracts in securities, and (c) listing of securities on stock exchanges. A transaction in securities between two persons is essentially a contract and this law that specifically applies in the case of a securities contract.

18.2 SEBI Act 1992

The SEBI Act of 1992 was enacted upon "to provide for the establishment of a Board to protect the interests of investors in securities and to promote the development of, and to regulate, the securities market and for matters connected therewith or incidental thereto".

The SEBI Act in the broader sense performs the functions as stated in the above para, however, without any prejudice to the generality, the Act also provides for the following measures:

a. Regulating the business in stock exchanges and any other securities markets;

b. Registering and regulating the working of the stock brokers, share transfer agents, bankers to an issue, registrars to an issue, merchant bankers, underwriters, portfolio managers, investment advisers and such other intermediaries who may be associated with the securities manner in any manner;

c. Registering and regulating the working of the depositories and its participants, custodians of securities, foreign portfolio investors, credit rating agencies and such other intermediaries as notified by the SEBI;

d. Registering and regulating the working of Venture Capital Funds and other Collective Investment Schemes, including mutual funds;

e. Promoting and regulating self-regulatory organisations;

f. Prohibiting fraudulent and unfair trade practices relating to securities markets;

g. Promoting investors' education and training of intermediaries of securities markets;

h. Prohibiting insider trading in securities;

i. Regulating substantial acquisition of shares and take-over of companies;

j. Calling for information from, undertaking inspection, conducting inquiries and audits of the stock exchanges, mutual funds, other persons associated with the securities market, intermediaries and self-regulatory organisations in the securities market;

k. Performing all such functions and exercising such powers under the provisions of the Securities Contracts (Regulation) Act, 1956 as maybe delegated to SEBI by the Central Government;

l. Levying fees or other charges for carrying out the purposes of this section;

m. Conducting research for the above purposes;

n. Calling from or furnishing to any such agencies, as may be specified by SEBI, such information as may be considered necessary by it for the efficient discharge of its functions;

o. Performing such other functions as may be prescribed.

SEBI Act also empowers SEBI to impose penalties and initiate adjudication proceedings against intermediaries who default on the following grounds such as failure to furnish information, return etc. or failure by any person to enter into agreement with clients etc.

18.3 SEBI Prevention of Fraudulent and Unfair Trade Practices Regulations, 2003

SEBI (Prohibition of Fraudulent and Unfair Trade Practices relating to Securities Market) Regulations, 2003 prohibit fraudulent, unfair and manipulative trade practices in securities. Fraud is defined as inclusive of any act, expression, omission or concealment committed to induce an-other person or his agent to deal in securities. There may or may not be wrongful

gain or avoidance of any loss. However, that is inconsequential in determining if fraud has been committed. Some of the instances cited are as follows:

a) A wilful misrepresentation of the truth or concealment of material fact in order that another person may act, to his detriment.

b) A suggestion as to a fact which is not true, by one who does not believe it to be true.

c) An active concealment of a fact by a person having knowledge or belief of the fact.

d) A promise made without any intention of performing it.

e) A representation, whether true or false, made in a reckless and careless manner.

18.4 Securities and Exchange Board of India (Intermediaries) Regulations, 2008

Code of Conduct and Ethics

I. **Investor Protection**

a. Investors/Clients

Every intermediary shall make all efforts to protect the interests of investors and shall render the best possible advice to its clients having regard to the client's needs and the environments and his own professional skills.

b. High Standards of Service

An intermediary shall ensure that it and its key management personnel, employees, contractors and agents, shall in the conduct of their business, observe high standards of integrity, dignity, fairness, ethics and professionalism and all Professional dealings shall be affected in a prompt, effective and efficient manner. An intermediary shall be responsible for the acts or omissions of its employees and agents in respect to the conduct of its business.

c. Exercise of Due Diligence and no Collusion

An intermediary shall at all times render high standards of service, exercise due skill and diligence over persons employed or appointed by it, ensure proper care and exercise independent professional judgment and shall not at any time act in collusion with other intermediaries in a manner that is detrimental to the investor(s).

d. Fees

An intermediary shall not increase charges/ fees for the services rendered without proper advance notice to its clients/investors.

II. Disbursal of Amounts

An intermediary shall be prompt in disbursing dividends, interests or any such accrual income received or collected by it on behalf of its clients/investors.

III. Disbursal of Information

- An intermediary shall ensure that adequate disclosures are made to the clients/investors in a comprehensible and timely manner so as to enable them to make a balanced and informed decision.
- An intermediary shall not make any misrepresentation and ensure that the information provided to the clients/investors is not misleading.
- An intermediary shall not make any exaggerated statement whether oral or written to the client/investor, either about its qualification or capability to render certain services or its achievements in regard to services rendered to other clients/investors.
- An intermediary shall not divulge to anybody, either orally or in writing, directly or indirectly, any confidential information about its clients/investors, which has come to its knowledge, without taking prior permission of its clients/investors except where such disclosures are required to be made in compliance with any law for the time being in force.

To understand more about the code of conduct for intermediaries, candidates are advised to read the SEBI (Intermediaries) Regulations and the AMFI code of conduct on AMFI website.[19]

18.5 SEBI (Prohibition of Insider Trading) Regulations, 2015

The SEBI (Prohibition of Insider Trading) Regulations, 2015 as amended from time to time has been put in place for the purpose of prohibiting insider trading.

"Insider" means any person who is:

i) a connected person; or

ii) in possession of or having access to unpublished price sensitive information;

Any dealing/trading done by an insider based on information which is not available in public domain, gives an undue advantage to insiders and affects market integrity. The Regulations mainly provide for who can be considered as insiders, what is prohibited for them and the systemic provisions/ fair conduct policy which need to be laid down and followed by listed company as well as intermediaries.

18.6 SEBI Investment Advisers Regulations, 2013

SEBI notified the SEBI (Investment Advisers) Regulation, 2013 with a view to regulate the activity of providing investment advisory services in various forms by independent financial advisors, distributors, banks, and other such entities.

[19] https://www.amfiindia.com/research-information/circulars-and-announcements/announcements/revised-code-conduct-of-inter-mf

18.6.1 Definitions

* “assets under advice” shall mean the aggregate net asset value of securities and investment products for which the investment adviser has rendered investment advice irrespective of whether the implementation services are provided by investment adviser or concluded by the client directly or through other service providers;

* “family of client” shall include individual client, dependent spouse, dependent children and dependent parents;

* “family of an individual investment adviser” shall include individual investment adviser, spouse, children and parents

* “financial planning” shall include analysis of clients’ current financial situation, identification of their financial goals, and developing and recommending financial strategies to realize such goals;

* “investment advice” means advice relating to investing in, purchasing, selling or otherwise dealing in securities or investment products, and advice on investment portfolio containing securities or investment products, whether written, oral or through any other means of communication for the benefit of the client and shall include financial planning:

Provided that investment advice given through newspaper, magazines, any electronic or broadcasting or telecommunications medium, which is widely available to the public shall not be considered as investment advice for the purpose of these regulations;

* “investment adviser” means any person, who for consideration, is engaged in the business of providing investment advice to clients or other persons or group of persons and includes any person who holds out himself as an investment adviser, by whatever name called;

* “non-individual” means a body corporate including a limited liability partnership and a partnership firm

* “persons associated with investment advice” shall mean any member, partner, officer, director or employee or any sales staff of such investment adviser including any person occupying a similar status or performing a similar function irrespective of the nature of association with the investment adviser who is engaged in providing investment advisory services to the clients of the investment adviser;.

* “principal officer” shall mean the managing director or designated director or managing partner or executive chairman of the board or equivalent management body who is responsible for the overall function of the business and operations of non-individual investment adviser.

18.6.2 Registration

No person shall act as an investment adviser or hold itself out as an investment adviser unless he has obtained a certificate of registration from SEBI under the SEBI (Investment Adviser) Regulations, 2013. The certificate of registration granted by SEBI shall be valid till it is suspended or cancelled by SEBI.

Consideration of application and eligibility criteria is given below:

For the purpose of the grant of certificate, SEBI shall take into account all matters which are relevant to the grant of certificate of registration and in particular the following, namely,

(a) whether the applicant is an individual or a non-individual;

(b) in case the applicant is an individual, he and all persons associated with investment advice are appropriately qualified and certified as specified in regulation 7 of SEBI Investment Adviser Regulations;

(c) in case the applicant is a body corporate, the principal officer and all persons associated with investment advice of the applicant are appropriately qualified and certified as specified in regulation 7 of SEBI Investment Adviser Regulations;

(d) in case the applicant is a firm or a limited liability partnership, the principal officer and all persons associated with investment advice of the applicant are appropriately qualified and certified as specified in regulation 7 of SEBI Investment Adviser Regulations;

(e) whether the applicant fulfills the networth requirements as specified in regulation 8 of SEBI Investment Adviser Regulations;

(f) whether the applicant, its partners, principal officer and persons associated with investment advice, if any, are fit and proper persons based on the criteria as specified in Schedule II of the Securities and Exchange Board of India (Intermediaries) Regulations, 2008;

(g) whether the applicant has the necessary infrastructure to effectively discharge the activities of an investment adviser;

(h) whether the applicant or any person directly or indirectly connected with the applicant has in the past been refused certificate by SEBI and if so, the grounds for such refusal;

(i) whether any disciplinary action has been taken by SEBI or any other regulatory authority against any person directly or indirectly connected to the applicant under the respective Act, rules or regulations made thereunder;

(j) In case a bank or an NBFC proposes to undertake investment advisory services, whether it has been permitted by Reserve Bank of India and the application is made through a subsidiary or separately identifiable department or division;

(k) In case any non-individual, other than a Bank or NBFC, which proposes to undertake investment advisory services, whether, the application is made through a separately identifiable department or division;

(l) In case an entity incorporated outside India undertakes to provide investment advisory services under these regulations, whether, it has set up a subsidiary in India and whether such subsidiary has made the application for registration;

(m) In case a foreign citizen proposes to undertake investment advisory services, whether the applicant has set up an office in India and proposes to undertake investment advisory services through such office.

18.6.3 Exemption from Registration

An investment adviser, as defined above is required to be registered under the SEBI (Investment Adviser) Regulations. However, certain categories of persons are exempt from the requirement of registration. These include:

* Any person who gives general comments in good faith in regard to trends in the financial or securities market or the economic situation where such comments do not specify any particular securities or investment product.

* Any insurance agent or insurance broker who offers investment advice solely in insurance products and is registered with Insurance Regulatory and Development Authority of India for such activity.

* Any pension advisor who offers investment advice solely on pension products and is registered with Pension Fund Regulatory and Development Authority for such activity.

* Any distributor of mutual funds, who is a member of a self-regulatory organisation recognised by the Board or is registered with an association of asset management companies of mutual funds, providing any investment advice to its clients incidental to its primary activity.

* Any advocate, solicitor or law firm, who provides investment advice to their clients, incidental to their legal practise.

* Any member of Institute of Chartered Accountants of India, Institute of Company Secretaries of India, Institute of Cost and Works Accountants of India, Actuarial Society of

India or any other professional body as may be specified by SEBI, who provides investment advice to their clients, incidental to his professional service.

Provided that such intermediaries shall comply with the general obligation(s) and responsibilities as specified in Chapter III of the Investment Adviser Regulations: Provided further that existing portfolio manager offering only investment advisory services may apply for registration under these regulations after expiry of his current certificate of registration as a portfolio manager.

* Any fund manager, by whatever name called of a mutual fund, alternative investment fund or any other intermediary or entity registered with SEBI.

* Any person who provides investment advice exclusively to clients based out of India: Provided that persons providing investment advice to Non-Resident Indian or Person of Indian Origin shall fall within the purview of SEBI (Investment Advisers) Regulation, 2013.

* Any principal officer, persons associated with advice and partner of an investment adviser which is registered under SEBI (Investment Advisers) Regulation, 2013 provided that such principal officer, persons associated with advice and partner shall comply with Regulation 7 'Qualification and certification requirement' of SEBI (Investment Advisers) Regulation, 2013.

* Any other person as may be specified by SEBI.

18.6.4 Qualification & Certification Requirements and Capital Requirement

The Regulations specify certain minimum qualifications for a person to be eligible to be known as an investment adviser.

An individual investment adviser or a principal officer of a non-individual investment adviser registered as an investment adviser under these regulations, shall have the following minimum qualification, at all times –

a) A professional qualification or post-graduate degree or post graduate diploma (minimum two years in duration) in finance, accountancy, business management, commerce, economics, capital market, banking, insurance or actuarial science from a university or an institution recognized by the Central Government or any State Government or a recognised foreign university or institution or association or a professional qualification by completing a Post Graduate Program in the Securities Market (Investment Advisory)from NISM of a duration not less than one year or a professional qualification by obtaining a CFA Charter from the CFA Institute;

(b) An experience of at least five years in activities relating to advice in financial products or securities or fund or asset or portfolio management;

c) Persons associated with investment advice shall meet the following minimum qualifications, at all times –

(i) a professional qualification as provided in clause (a) of sub-regulation (1) of regulation 7; and

(ii) an experience of at least two years in activities relating to advice in financial products or securities or fund or asset or portfolio management:

Provided that investment advisers registered under these regulations as on the date of commencement of these regulations shall ensure that the individual investment adviser or principal officer of a non-individual investment adviser registered under these regulations and persons associated with investment advice comply with such qualification and experience requirements within three years: Provided further that the requirements at clauses (a) and (b) shall not apply to such existing individual investment advisers as may be specified by the SEBI.

(2) An individual investment adviser or principal officer of a non-individual investment adviser, registered under Investment Advisers regulations and persons associated with investment advice shall have, at all times a certification on financial planning or fund or asset or portfolio management or investment advisory services-

(a)from NISM; or

(b)from any other organization or institution or any recognized stock exchange in India provided such certification is accredited by NISM:

Provided that fresh certification must be obtained before expiry of the validity of the existing certification to ensure continuity in compliance with certification requirements.

Provided further that fresh certification before expiry of the validity of the existing certification shall not be obtained through a CPE program.

18.6.5 Conditions of Certificate

The certificate granted under these regulations shall, inter alia, be subject to the following conditions:-

* the investment adviser shall abide by the provisions of the SEBI Act 1992 and these SEBI (Investment Adviser) Regulations, 2013;

* the investment adviser shall forthwith inform SEBI in writing, if any information or particulars previously submitted to SEBI are found to be false or misleading in any material particular or if there is any material change in the information already submitted;

* the investment adviser, not being an individual, shall include the words ‘investment adviser’ in its name:

Provided that if the investment advisory service is being provided by a separately identifiable department or division or a subsidiary, then such separately identifiable department or division or subsidiary shall include the words ‘investment adviser’ in its name;

* individuals registered as investment advisers shall use the term ‘investment adviser’ in all their correspondences with their clients.

* individuals registered as investment advisers whose number of clients exceed one hundred and fifty in total, shall apply for registration as non-individual investment adviser within such time as may be specified by SEBI.

18.6.6 Net worth

Investment advisers who are non-individuals shall have a net worth of not less than fifty lakh rupees.

For the purposes of this regulation, "networth" means the aggregate value of paid up share capital plus free reserves (excluding reserves created out of revaluation) reduced by the aggregate value of accumulated losses, deferred expenditure not written off, including miscellaneous expenses not written off, and networth requirement for other services offered by the advisers in accordance with the applicable rules and regulations.

Investment advisers who are individuals shall have net tangible assets of value not less than five lakh rupees:

However, existing investment advisers shall comply with the networth requirement within three years from the date of commencement of the SEBI (Investment Advisers) (Amendment) Regulations, 2020.

18.6.7 General Obligations

- An investment adviser shall act in a fiduciary capacity towards its clients and shall disclose all conflicts of interests as and when they arise.

- An investment adviser shall not receive any consideration by way of remuneration or compensation or in any other form from any person other than the client being advised, in respect of the underlying products or securities for which advice is provided.

- An investment adviser shall maintain an arms-length relationship between its activities as an investment adviser and other activities.

- An investment adviser which is also engaged in activities other than investment advisory services shall ensure that its investment advisory services are clearly segregated from all its other activities, in the manner as prescribed hereunder.

- An investment adviser shall ensure that in case of any conflict of interest of the investment advisory activities with other activities, such conflict of interest shall be disclosed to the client.

- An investment adviser shall not divulge any confidential information about its client, which has come to its knowledge, without taking prior permission of its clients, except where such disclosures are required to be made in compliance with any law for the time being in force.

- An investment advisor shall not enter into transactions on its own account which is contrary to its advice given to clients for a period of fifteen days from the day of such advice.

  Provided that during the period of such fifteen days, if the investment adviser is of the opinion that the situation has changed, then it may enter into such a transaction on its own account after giving such revised assessment to the client at least 24 hours in advance of entering into such transaction.

- An investment advisor shall follow Know Your Client procedure as specified by SEBI from time to time.

- An investment adviser shall abide by Code of Conduct (detailed later in this Chapter)

- An investment adviser shall not act on its own account, knowingly to sell securities or investment products to or purchase securities or investment product from a client.

- In case of change in control of the investment adviser, prior approval from SEBI shall be taken.

- Investment advisers shall furnish to SEBI information and reports as may be specified by SEBI from time to time.

- It shall be the responsibility of the investment adviser to ensure compliance with the certification and qualification requirements as specified above at all times.

18.6.8 Fees

Investment Adviser shall be entitled to charge fees for providing investment advice from a client in the manner as specified by the SEBI.

18.6.9 Risk Profiling

The investment advice and asset allocation for an investor would have to be customized to the ability and willingness of the investor to assume risk. This is determined by a risk profiling exercise, which seeks to assess the attitude towards risk and possible loss in the portfolio and the willingness to pursue an investment plan, after understanding the underlying risks.

- **Information:** It is the responsibility of the investment adviser to ensure that he obtains from the client, such information as is necessary for the purpose of giving investment advice. This information includes age, investment objective, investment horizon, income details, existing assets and liabilities and risk appetite and liability/borrowing details. Information provided by clients and their risk assessment must be updated periodically.
- **Risk assessment:** There must be a process in place for assessing the risk that a client is willing and able to take. Risk profile of the client must be communicated to the client after risk assessment completed. Risk assessment includes the following aspects:
    1. Assessing a client's capacity for absorbing loss;
    2. Identifying whether client is unwilling or unable to accept the risk of loss of capital;
    3. Appropriately interpreting client responses to questions and not attributing inappropriate weight to certain answers.
- **Risk profiling tools:** The investment adviser may use various tools such as surveys, questionnaires, proprietary tools to generate risk appetite scores of clients. Where such tools are used for risk profiling, the investment adviser must ensure that the tools are fit for the purpose and any limitations have been identified and mitigated. Any questions or description in any questionnaires used to establish the risk a client is willing and able to take are fair, clear and not misleading, and should ensure that: (i) questionnaire is not vague or use double negatives or in a complex language that the client may not understand; (ii) questionnaire is not structured in a way that it contains leading questions.
- **Communication :** The risk profile of the client should be communicated to the client after risk assessment is done. Also, the information provided by clients and their risk assessment should be updated periodically.

18.6.10 Suitability

It is the responsibility of the Investment adviser to ensure the following:

- Investment advice and related investments are appropriate to the client's risk profile.
- The adviser has a documented process for selecting investments based on client's investment objectives and financial situation.

- The adviser must understand the nature and risks of products or assets selected for clients.
- The adviser must have a reasonable basis for believing that a recommendation or transaction entered into:
    a. meets the client's investment objectives;
    b. is such that the client is able to bear any related investment risks consistent with its investment objectives and risk tolerance;
    c. is such that the client has the necessary experience and knowledge to understand the risks involved in the transaction.
- When an advice or recommendation is given to a client to purchase a complex financial product, such a recommendation or advice must be based upon a reasonable assessment that the structure and risk reward profile of financial product is consistent with clients experience, knowledge, investment objectives, risk appetite and capacity for absorbing loss.

18.6.11 Disclosures to Clients

It is the responsibility of the Investment Adviser to make certain disclosures to a prospective client in order for the client to take an informed decision whether or not to avail its services. These disclosures include the following:

- An investment adviser shall disclose to a prospective client, all material information about itself including its business, disciplinary history, the terms and conditions on which it offers advisory services, affiliations with other intermediaries and such other information as is necessary to take an informed decision on whether or not to avail its services.
- An investment adviser shall disclose to the client its holding or position, if any, in the financial products or securities which are subject matter of advice.
- An investment adviser shall disclose to the client any actual or potential conflicts of interest arising from any connection to or association with any issuer of products/ securities, including any material information or facts that might compromise its objectivity or independence in the carrying on of investment advisory services.
- An investment adviser shall, while making an investment advice, make adequate disclosure to the client of all material facts relating to the key features of the products or securities, particularly, performance track record.
- An investment adviser shall draw the client's attention to the warnings, disclaimers in documents, advertising materials relating to an investment product which it is recommending to the client.

18.6.12 Record Maintenance

An investment adviser is required to maintain the following records in physical or electronic format for a minimum period of five years:

- Know Your Client records of the client;
- Risk profiling and risk assessment of the client;
- Suitability assessment of the advice being provided;
- Copies of agreements with clients, incorporating the terms and conditions as may be specified by the SEBI;
- Investment advice provided, whether written or oral;
- Rationale for arriving at investment advice, duly signed and dated;
- A register or record containing list of the clients, the date of advice, nature of the advice, products/securities in which advice was rendered and fee, if any charged for such advice.

All records shall be maintained either in physical or electronic form and preserved for a minimum period of five years:

Provided that where records are required to be duly signed and are maintained in electronic form, such records shall be digitally signed.

The adviser must conduct yearly audit in respect of compliance with regulatory requirements from a member of Institute of Chartered Accountants of India or Institute of Company Secretaries of India and submit a report of the same as may be specified by SEBI.

18.6.13 Appointment of compliance officer

An investment adviser which is a body corporate or a partnership firm shall appoint a compliance officer who shall be responsible for monitoring the compliance by the investment adviser in respect of the requirements of the Act, regulations, notifications, guidelines, instructions issued by SEBI.

18.6.14 Redressal of client grievances

- An investment adviser shall redress client grievances promptly.
- An investment adviser shall have adequate procedure for expeditious grievance redressal.
- Client grievances pertaining to financial products in which investments have been made based on investment advice, shall fall within the purview of the regulator of such financial product.
- Any dispute between the investment adviser and his client shall be submitted to a dispute resolution mechanism that includes mediation and/or conciliation and/or arbitration in accordance with the procedure specified by SEBI or through

Ombudsman authorized or appointed for the purpose by any regulatory authority, as applicable.

18.6.15 Client level segregation of advisory and distribution activities

An individual investment adviser shall not provide distribution services.

The family of an individual investment adviser shall not provide distribution services to the client advised by the individual investment adviser and no individual investment adviser shall provide advice to a client who is receiving distribution services from other family members.

A non-individual investment adviser shall have client level segregation at group level for investment advisory and distribution services.

Explanation. —

(i) The same client cannot be offered both advisory and distribution services within the group of the non-individual entity.

(ii) A client can either be an advisory client where no distributor consideration is received at the group level or distribution services client where no advisory fee is collected from the client at the group level.

(iii) 'Group' for this purpose shall mean an entity which is a holding, subsidiary, associate, subsidiary of a holding company to which it is also a subsidiary or an investing company or the venture of the company as per the provisions of Companies Act, 2013 for non-individual investment adviser which is a company under the said Act and in any other case, an entity which has a controlling interest or is subject to the controlling interest of a non-individual investment adviser.

Non-individual investment adviser shall maintain an arm's length relationship between its activities as investment adviser and distributor by providing advisory services through a separately identifiable department or division.

Compliance and monitoring process for client segregation at group or family level shall be in accordance with the guidelines specified by the SEBI.

18.6.16 Implementation of advice or execution

Investment adviser may provide implementation services to the advisory clients in securities market:

However, investment advisers shall ensure that no consideration including any commission or referral fees, whether embedded or indirect or otherwise, by whatever name called is received; directly or indirectly, at investment adviser's group or family level for the said service, as the case maybe. Investment adviser shall provide implementation services to its

advisory clients only through direct schemes/products in the securities market. Investment adviser or group or family of investment adviser shall not charge any implementation fees from the client.

The client shall not be under any obligation to avail implementation services offered by the investment adviser.

18.6.17 Code of Conduct for Investment Adviser

The SEBI (Investment Advisers) Regulations, 2013 has in the Third Schedule set out a code of conduct to be followed by all Investment Advisers at all times. The provisions of this code of conduct state as follows:

Honesty and fairness
An investment adviser shall act honestly, fairly and in the best interests of its clients and in the integrity of the market.

Diligence
An investment adviser shall act with due skill, care and diligence in the best interests of its clients and shall ensure that its advice is offered after thorough analysis and taking into account available alternatives.

Capabilities
An investment adviser shall have and employ effectively appropriate resources and procedures which are needed for the efficient performance of its business activities.

Information about clients
An investment adviser shall seek from its clients, information about their financial situation, investment experience and investment objectives relevant to the services to be provided and maintain confidentiality of such information.

Information to its clients
An investment adviser shall make adequate disclosures of relevant material information while dealing with its clients.

Fair and reasonable charges
An investment adviser advising a client may charge fees, subject to any ceiling as may be specified by SEBI. The investment adviser shall ensure that fees charged to the clients are fair and reasonable.

Conflicts of interest
An investment adviser shall try to avoid conflicts of interest as far as possible and when they cannot be avoided, it shall ensure that appropriate disclosures are made to the clients and that the clients are fairly treated.

Compliance

An investment adviser including its partners, principal officer and persons associated with investment advice shall comply with all regulatory requirements applicable to the conduct of its business activities so as to promote the best interests of clients and the integrity of the market.

Responsibility of senior management

The senior management of a body corporate which is registered as investment adviser shall bear primary responsibility for ensuring the maintenance of appropriate standards of conduct and adherence to proper procedures by the body corporate.

To strengthen the Conduct of the investment advisers, while providing investment advice and to protect the interest of investors seeking their advice, the IAs are required to comply with aspects such as restriction of free trial, proper risk profiling and consent of client on risk profiling, receiving fees through banking channels only and display of complaint status on investment adviser's website.[20]

18.6.18 Procedure for Action in Case of Default

An investment adviser who contravenes any of the provisions of the SEBI Act or any regulations or circulars issued thereunder; fails to furnish any information relating to its activity as an investment adviser as required by SEBI; furnishes any false or misleading information ; does not submit periodic returns or reports as required; does not co-operate in any enquiry, inspection or investigation conducted by SEBI; fails to resolve the complaints of investors or fails to give a satisfactory reply to SEBI in this behalf, shall be dealt with in the manner provided under the SEBI (Intermediaries) Regulations, 2008.

18.6.19 Penalty for default in case of investment adviser

Regulation 15EB of SEBI Act 1992, provides that if an investment adviser fails to comply with the regulations made by SEBI or directions issued by SEBI, such investment adviser shall be liable to penalty which shall not be less than Rs.1 lakh but which may extend to Rs. 1 lakh for each day during which such failure continues subject to a maximum of Rs.1 crore.

18.6.20 Administration of Investment Advisers[21]

SEBI has decided to recognize a wholly-owned subsidiary of the stock exchange (stock exchange subsidiary) to administer and supervise Investment Advisers (IAs) registered with SEBI.

[20] For details candidates are advised to read: https://www.sebi.gov.in/legal/circulars/dec-2019/measures-to-strengthen-the-conduct-of-investment-advisers-ia-_45490.html

[21] SEBI/HO/IMD/DF1/CIR/P/2020/148 dated August 6, 2020

Criteria for grant of recognition- The recognition of stock exchange subsidiary, in terms of the Regulation 14 of SEBI Investment Adviser Regulations, shall be based on the eligibility of the parent entity, i.e. the stock exchange, for which the following eligibility criteria is laid down:

Number of years of existence: Minimum 15 years

Stock exchanges having a minimum networth of INR 200 crores

Stock exchanges having nation-wide terminals

Investor grievance redressal mechanism including Arbitration

Capacity for investor service management gauged through reach of Investor Service Centers (ISCs)- Stock exchanges having ISCs in at least 20 cities

Responsibilities of subsidiary of a stock exchange- The subsidiary of a stock exchange shall have following responsibilities:

i. Supervision of IAs including both on-site and offsite

ii. Grievance redressal of clients and IAs

iii. Administrative action including issuing warning and referring to SEBI for enforcement action

iv. Monitoring activities of IAs by obtaining periodical reports

v. Submission of periodical reports to SEBI

vi. Maintenance of database of IAs

BSE Administration & Supervision Limited have been granted recognition for administration and supervision of Investment Advisers.

18.6.21 IFSC

SEBI has issued SEBI (International Financial Services Centres) Guidelines, 2015 on March 27, 2015 for facilitating and regulating financial services relating to securities market in an IFSC set up under section 18(1) of Special Economic Zones Act, 2005. The IFSC Guidelines provide for a broad framework for operating of various intermediaries (including Investment Advisers) therein.

All provisions of the Investment Adviser Regulations, the guidelines and circulars issued thereunder, shall apply to Investment Advisers setting up/ operating in IFSC. Persons seeking registration under the Investment Adviser Regulations read with these Guidelines shall provide investment advisory services only to those persons referred in Clause 9 (3) of the IFSC Guidelines. Further, persons resident outside India and non-resident Indians seeking advice from IA in IFSC shall comply with the applicable guidelines issued by the relevant overseas regulator/ authority.

18.7 Prevention of Money-Laundering Act, 2002

Money laundering involves disguising financial assets so that they can be used without detection of the illegal activity that produced them. Through money laundering, the launderer transforms the monetary proceeds derived from criminal activity into funds with an apparently legal source.

The Prevention of Money-Laundering Act, 2002 (PMLA), is an act to prevent money-laundering and to provide for confiscation of property derived from, or involved in, money-laundering and for related matters.

Chapter II, Section 3 of the PMLA describes the offence of money-laundering:

"Whosoever directly or indirectly attempts to indulge or knowingly assists or knowingly is a party or is actually involved in any process or activity connected with the proceeds of crime including its concealment, possession, acquisition or use and projecting or claiming it as untainted property shall be guilty of offence of money-laundering."

(i) a person shall be guilty of offence of money-laundering if such person is found to have directly or indirectly attempted to indulge or knowingly assisted or knowingly is a party or is actually involved in one or more of the following processes or activities connected with proceeds of crime, namely (a) concealment; or (b) possession; or (c) acquisition; or (d) use; or (e)projecting as untainted property; or (f) claiming as untainted property, in any manner whatsoever.

(ii) the process or activity connected with proceeds of crime is a continuing activity and continues till such time a person is directly or indirectly enjoying the proceeds of crime by its concealment or possession or acquisition or use or projecting it as untainted property or claiming it as untainted property in any manner whatsoever.

Section 12 of PMLA stipulates that every reporting entity (i.e. a banking company, financial institution, intermediary or a person carrying on a designated business or profession) shall—

(a) maintain a record of all transactions, including information relating to transactions in such manner as to enable it to reconstruct individual transactions. The records shall be maintained for a period of five years from the date of transaction between a client and the reporting entity.

(b) furnish to the Director within such time as may be prescribed, information relating to such transactions, whether attempted or executed, the nature and value of which may be prescribed;[22]

(c) maintain record of documents evidencing identity of its clients and beneficial owners as well as account files and business correspondence relating to its clients. The records shall be maintained for a period of five years after the business relationship between a client and the reporting entity has ended or the account has been closed, whichever is later.

(d)Every information maintained, furnished or verified, save as otherwise provided under any law for the time being in force, shall be kept confidential.

The Central Government may, by notification, exempt any reporting entity or class of reporting entities from any obligation.

Section 12 AA of PMLA stipulates enhanced due diligence by reporting entities.

1. Every reporting entity shall, prior to the commencement of each specified transaction,—

(a) verify the identity of the clients undertaking such specified transaction by authentication under the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016 (18 of 2016) in such manner and subject to such conditions, as may be prescribed. Provided that where verification requires authentication of a person who is not entitled to obtain an Aadhaar number under the provisions of the said Act, verification to authenticate the identity of the client undertaking such specified transaction shall be carried out by such other process or mode, as may be prescribed.

(b) take additional steps to examine the ownership and financial position, including sources of funds of the client, in such manner as may be prescribed.

(c) take additional steps as may be prescribed to record the purpose behind conducting the specified transaction and the intended nature of the relationship between the transaction parties.

[22]means a Director or Additional Director or Joint Director, as the case may be, appointed under sub-section (1) of section 49 (Appointment and powers of authorities and other officers)

The information obtained while applying the enhanced due diligence measures shall be maintained for a period of five years from the date of transaction between a client and the reporting entity.

(2) Where the client fails to fulfil the above conditions, the reporting entity shall not allow the specified transaction to be carried out. Specified transaction means:

- any withdrawal or deposit in cash, exceeding such amount;
- any transaction in foreign exchange, exceeding such amount;
- any transaction in any high value imports or remittances;
- such other transaction or class of transactions, in the interest of revenue or where there is a high risk of money-laundering or terrorist financing, as may be prescribed.

(3) Where any specified transaction or series of specified transactions undertaken by a client is considered suspicious or likely to involve proceeds of crime, the reporting entity shall increase the future monitoring of the business relationship with the client, including greater scrutiny or transactions in such manner as may be prescribed.

SEBI Guidelines on Anti-Money Laundering

SEBI has laid down guidelines on Anti-Money Laundering (AML) Standards and Combating the Financing of Terrorism (CFT) /Obligations of Securities Market Intermediaries under the PMLA 2002 and Rules framed for all the intermediaries registered with SEBI.

These guidelines have been divided into two parts; the first part is an overview on the background and essential principles that concern combating Money Laundering (ML) and Terrorist Financing (TF). The second part provides a detailed account of the procedures and obligations to be followed by all registered intermediaries to ensure compliance with AML/CFT directives. These guidelines are also applicable for registered intermediaries 'branches and subsidiaries located abroad, especially, in countries which do not or insufficiently apply the FATF Recommendations, to the extent local laws and regulations permit. When local applicable laws and regulations prohibit implementation of these requirements, the same shall be brought to the notice of SEBI. The detailed guidelines can be referred to on SEBI website.[23]

SEBI has issued the KYC (Know Your Client) Registration Agency (KRA) Regulations, 2011 in exercise of the powers conferred under the SEBI Act. Under the said Regulations, a KYC Registration Agency (KRA) is a company formed and registered under the Companies Act and granted a certificate of registration under the KRA Regulations.

[23] https://www.sebi.gov.in/legal/master-circulars/feb-2023/guidelines-on-anti-money-laundering-aml-standards-and-combating-the-financing-of-terrorism-cft-obligations-of-securities-market-intermediaries-under-the-prevention-of-money-laundering-act-2002-a-_67833.html

''KYC'' means the procedure prescribed by the SEBI for identifying and verifying the Proof of Address, Proof of Identity and compliance with rules, regulations, guidelines and circulars issued by the SEBI or any other authority for Prevention of Money Laundering from time to time;

The KRA is required to obtain the KYC documents of the client from the intermediary; as prescribed by the SEBI and in terms of the rules, regulations, guidelines and circulars issued by SEBI or any other authority for Prevention of Money Laundering, from time to time.

Every individual who wishes to invest in securities markets has to be KYC compliant. An individual has to provide personal details such as name, address, financial status, occupation and other personal information in the prescribed KYC form. Along with the same, individual investors are required to produce proof of identity and proof of address, as prescribed, in the form. Non-individual investors are required to produce documents relating to its constitution/ registration to fulfil the KYC process.

18.8 Key provisions of various other acts, as applicable to investment advisory profession

18.8.1 Foreign Exchange Management Act (FEMA)

The Foreign Exchange Management Act (FEMA), 1999, is an act to consolidate and amend the law relating to foreign exchange, external trade and payments for promoting the orderly development and maintenance of foreign exchange market in India. FEMA extends to the whole of India and shall apply to all branches, offices and agencies outside India, owned or controlled by a person resident in India and also to any violation committed outside India by any person covered by FEMA.

Apart from dealing with the basic provisions relating to regulation and management of foreign exchange, the Act specifies the powers of the RBI and the Government to issue Regulations and Rules. It also has specific penalties for violations of the provisions.

Section 6 of FEMA specifies that capital account transactions (Balance sheet items) which are permissible and the limits upto which they are permitted. Specific regulations have been issued for capital account transactions by persons resident in India, outside India and for capital account transactions by persons resident outside India, in India.

Investment by a person resident in India in foreign securities, Maintenance of foreign currency accounts in India and outside India by a person resident in India, Remittance of capital assets of a person resident in India are regulated by RBI.

For persons resident outside India, specific regulations have been specified with respect to:

- Investment in India by a person resident outside India, that is to say:

(a) issue of security by a body corporate or an entity in India and investment therein by a person resident outside India; and

(b) investment by way of contribution by a person resident outside India to the capital of a firm or a proprietorship concern or an association of persons in India.

- Foreign Currency accounts in India of a person resident outside India
- Remittance outside India of capital assets in India of a person resident outside India

Some of the regulations are stated below in brief:

Foreign Exchange Management (Remittance of Assets) Regulations, 2016 in respect of remittance outside India by a person whether resident in India or not, of assets in India.

Foreign Investment in India is regulated in terms of clause (b) sub-section 3 of section 6 and section 47 of the Foreign Exchange Management Act, 1999 (FEMA) read with Foreign Exchange Management (Transfer or Issue of a Security by a Person resident Outside India) Regulations, 2017 issued vide Notification No. FEMA 20(R)/2017-RB dated November 7, 2017. The Regulation as well as Circulars and Notifications amending them are compiled in the Master Direction on Foreign Direct Investment issued by RBI.

Some relevant extracts are given below: 'Foreign Portfolio Investment' is any investment made by a person resident outside India in capital instruments where such investment is (a) less than 10 percent of the post issue paid-up equity capital on a fully diluted basis of a listed Indian company or (b) less than 10 percent of the paid up value of each series of capital instruments of a listed Indian company.

'Foreign Investment' is any investment made by a person resident outside India on a repatriable basis in capital instruments of an Indian company or to the capital of an LLP.

A person resident outside India may hold foreign investment either as Foreign Direct Investment or as Foreign Portfolio Investment in any particular Indian Company. Purchase/ sale of capital instruments of a listed Indian company on a recognised stock exchange in India by Foreign Portfolio Investors is permitted as per the directions laid down in Annex 2 of the above said Regulations.

18.8.2 Indian Contract Act

Indian Contract Act, 1872 is a branch of mercantile law in India and is the foundation for all contracts in trade and industry. It came into force in September 1872. It specifies the general principles for the contracts including the basic prerequisites for a contract to be lawful and the kinds of rights and liabilities that arise due to contracts. Apart from this, it deals with special kinds of contracts such as bailment, pledge, indemnity, guarantee and agency.

An investment adviser is required to enter into an agreement with the client at the outset. All his actions are bound by the terms of the contract entered into. The Indian Contract Act mostly deals with the general principles and rules governing contracts.

Indian Contract Act has defined contract in Section 2(h) as “an agreement enforceable by law”. Some of the essential elements of a contract are given below:

*An offer or proposal by one party and acceptance of that offer by another party resulting in an agreement.

* An intention to create legal relations or an intent to have legal consequences.

* Free consent of the parties to the contract.

* Contract is required to be lawful.

* Parties should be capable of entering into contract.

It is essential to understand the Indian Contract Act in detail before entering into any agreement.

18.8.3 Guardian and Wards Act

It was enacted by Parliament in 1890 to protect the minors and to secure their property.
The definition of the terms guardian, minor and wards is given below:

A minor is a person who according to the provisions of Indian Majority Act, 1875 has not attained the age of majority i.e. he is less than 18 years of age.

"Guardian" means a person having the care of the person of a minor or of his property or of both his person and property;.

"Ward" means a minor for whose person or property or both there is a guardian.

Section 7 states the power of the Court to make order as to guardianship where the Court is satisfied that it is for the welfare of a minor that an order should be made—

(a) appointing a guardian of his person or property, or both, or

(b) declaring a person to be such a guardian, the Court may make an order accordingly.

An order under this section shall imply the removal of any guardian who has not been appointed by will or other instrument or appointed or declared by the Court.

Where a guardian has been appointed by will or other instrument or appointed or declared by the Court, an order under this section appointing or declaring another person to be

guardian in his stead shall not be made until the powers of the guardian appointed or declared as aforesaid have ceased under the provisions of this Act.

Section 8 specifies the persons entitled to apply for order. An order shall not be made as per Section 7 above except on the application of—

(a) the person desirous of being, or claiming to be, the guardian of the minor, or

(b) any relative or friend of the minor, or

(c) the Collector of the district or other local area within which the minor ordinarily resides or in which he has property, or

(d) the Collector having authority with respect to the class to which the minor belongs.

Court having jurisdiction to entertain application, the form of application and the procedure on admission of application and related matters thereto are specifically stated which is required to be read in detail by an Investment Adviser before giving advice in matters related to minors.

18.8.4 Negotiable Instruments Act, 1881

Negotiable Instruments Act, 1881 defines and amends the law relating to promissory notes, bills of exchange and cheques. The purpose of the Act was to regulate transactions relating to day-to-day commerce and the means of making payment. The customs followed earlier relating to an instrument in oriental language i.e. Hundi is not affected by this Act.

Section 4 of the Act states: “Promissory note” is an instrument in writing (not being a bank-note or a currency-note) containing an unconditional undertaking, signed by the maker, to pay a certain sum of money only to, or to the order of, a certain person, or to the bearer of the instrument.

Section 5 defines bill of exchange: A “bill of exchange” is an instrument in writing containing an unconditional order, signed by the maker, directing a certain person to pay a certain sum of money only to, or to the order of, a certain person or to the bearer of the instrument.

Section 6 defines the term cheque: A “cheque” is a bill of exchange drawn on a specified banker and not expressed to be payable otherwise than on demand and it includes the electronic image of a truncated cheque and a cheque in the electronic form.

Section 13 defines the term Negotiable Instrument: (1) A “negotiable instrument” means a promissory note, bill of exchange or cheque payable either to order or to bearer.

A promissory note, bill of exchange or cheque is payable to order which is expressed to be so payable or which is expressed to be payable to a particular person, and does not contain words prohibiting transfer or indicating an intention that it shall not be transferable.

A promissory note, bill of exchange or cheque is payable to bearer which is expressed to be so payable or on which the only or last indorsement is an indorsement in blank.

Where a promissory note, bill of exchange or cheque, either originally or by endorsement, is expressed to be payable to the order of a specified person, and not to him or his order, it is nevertheless payable to him or his order at his option.

A negotiable instrument may be made payable to two or more payees jointly, or it may be made payable in the alternative to one of two, or one or some of several payees.

The Act has given a detailed description on the capacity of the parties to notes, bills of exchange and cheques as well as the liability of the parties concerned. The methodology for negotiation, presentment of instruments, payment of amount and interest thereon and specifications with respect to discharge from liability on these instruments is also stated. Procedure to be adopted on dishonour of instruments and modes for crossing cheques is stated in detail. Related international law is dealt with in Chapter XVI of this Act. Penalties for dishonour of cheque and other penalties are dealt with in detail in Chapter XVII.

18.8.5 Insolvency and Bankruptcy Code, 2016

The objective of the Insolvency and Bankruptcy Code is to consolidate and amend the laws relating to reorganization and insolvency resolution of corporate persons, partnership firms and individuals in a time bound manner. The Insolvency and Bankruptcy Code, 2016 consolidates the existing framework by creating a single law for insolvency and bankruptcy. The Code applies to companies, partnerships, limited liability partnerships, individuals and any other body which the central government may specify.

The provisions of this Code shall apply to—

(a) any company incorporated under the Companies Act, 2013 (18 of 2013) or under any previous company law;

(b) any other company governed by any special Act for the time being in force, except in so far as the said provisions are inconsistent with the provisions of such special Act;

(c) any Limited Liability Partnership incorporated under the Limited Liability Partnership Act, 2008 (6 of 2009);

(d) such other body incorporated under any law for the time being in force, as the Central Government may, by notification, specify in this behalf;

(e) personal guarantors to corporate debtors;

(f) partnership firms and proprietorship firms; and

(g) individuals, other than persons referred to in clause (e).

in relation to their insolvency, liquidation, voluntary liquidation or bankruptcy, as the case may be.

The term bankruptcy is defined in Section 79(4) as under:

"bankrupt" means –

(a) a debtor who has been adjudged as bankrupt by a bankruptcy order under section 126;

(b) each of the partners of a firm, where a bankruptcy order under section 126 has been made against a firm; or

(c) any person adjudged as an undischarged insolvent;

IBC is organised into five parts. Part I is the Preliminary sections. Part II deals with insolvency resolution and liquidation for corporate persons, Part III lays down procedure for insolvency resolution and bankruptcy for individuals and partnership firms. Part IV of the Code states the provisions for regulation of Insolvency Professionals, Agencies and Information Utilities and Part V relate to provisions for miscellaneous matters.

18.8.6 FATCA and CRS[24]

The Foreign Account Tax Compliance Act (FATCA) is part of the US Tax Regulations brought in by the US government to prevent tax evasion by US Nationals and is enacted through the Internal Revenue Service of the US. The primary goal of FATCA is obtaining information about US persons from other countries other than USA. In India, the Income Tax Act was amended in 2014 to enable financial institutions and other intermediaries to report to Central Board of Direct Taxes (CBDT) with respect to US persons. All Indian and NRI investors are required to file a FATCA self-declaration.

Common Reporting Standards (CRS) is a part of the effort of Government of India for exchange of information between countries for prevention of tax evasion.

Reporting Financial Institution needs to review their financial accounts by applying due diligence procedures to identify whether any of the financial account is a Reportable Account.

[24]https://www.incometaxindia.gov.in/news/guidance-note-on-fatca-and-crs-may-2016.pdf

If any account is identified as a reportable account, then the Reporting Financial Institution shall report the relevant information in Form 61B in respect of the identified reportable account. The reporting obligation applies to entities which may be legal persons or legal arrangements, such as a corporation, a trust, or a partnership etc. To determine whether an entity has a potential reporting obligation in India, it must be determined whether the entity is a Reporting Financial Institution (RFI). RFI are required to maintain and report certain information in respect of each "Reportable Account". RFI is defined in Rule 114F(7) to mean:- (a) a financial institution which is resident in India, but excludes any branch of such institution that is located outside India; and (b) any branch of a financial institution (other than a non-reporting financial institution) which is not resident in India, if that branch is located in India.

The definition of Financial Institution in the Rule 114F(3) classifies FIs in four different categories, namely,

- Custodial Institutions,
- Depository Institutions,
- Investment Entities and
- Specified Insurance Companies

Explanation (c) to Rule 114F(3) defines two types of investment entities:

A. Entity's primary business consists of one or more of the following activities for or on behalf of a customer, namely:-

trading in money market instruments (cheques, bills, certificates of deposit, derivatives, etc.); foreign exchange; exchange, interest rate and index instruments; transferable securities; or commodity futures trading; or individual and collective portfolio management; or otherwise investing, administering, or managing financial assets or money on behalf of other persons; and the gross income from such business activities has to be equal or more than 50% of the gross income over a three year period.

B. Entity's primary income is from business of investing, reinvesting, or trading in financial assets and such entity managed by another entity that is a depository institution, a custodial institution, an investment entity or a specified insurance company and also the gross income of the entity from such business activities is more than 50% of the entities gross income over a three year period.

Non-Banking Finance Companies (NBFCs) will be either depository institution or investment entity as per its activities. NBFC which accepts deposit in the course of a banking business or a similar business as mentioned in the definition of depository institution will be considered as Depository Institution and will report accordingly. An NBFC which is working as investment entity, will report accordingly.

For more details, it is advisable to refer to the relevant sections of the Income Tax Act and the guidance note on FATCA and CRS issued by the Income Tax Department of India.

18.9 Violation of Regulations by Registered Investment Advisers and their consequences—Some Case Studies

The main principles to be followed by an Investment Adviser as brought out from various cases are given below:

CASE:1 REGISTRATION FOR INVESTMENT ADVISERS

SEBI received a complaint on June 19, 2016 alleging that an Investment Adviser is providing trading tips and investment advice and was soliciting clients under various plans.

On investigation, it was revealed that the entity and its partners were, prima-facie, engaged in providing investment advisory services to investors on payment of fees that fall under the definition of "investment adviser" as defined by Regulation 2(1)(m) of the IA Regulations.

The entity on its website has declared that it provides investment advice in Indian equities and derivatives to individual investors, HNIs, brokers, corporate players and performs research on stocks from short term, midterm to long term investment horizon, declaring itself to be an Investment Adviser and Research Analyst.

The entity and its partners, admittedly do not possess a certificate of registration to carry on the activities as an investment adviser.

MAJOR TAKEAWAYS/ LEARNINGS:

Thus, to ensure that no investor is defrauded, it is imperative that any person carrying out investment advisory activities has to necessarily obtain registration from SEBI and conduct his activities in accordance with the provisions of SEBI Investment Adviser Regulations. An unregistered Investment Adviser, can put investors at great risk by misleading them.

Further, in case of default by Investment Adviser in meeting of its obligation to investors, the normal remedies available to investors while dealing with SEBI registered intermediary such as invoking the grievance redressal mechanism, referring the matters to appropriate forums such as arbitration etc. are not available in this case which can put investors at peril.

CASE 2: FALSE CREDENTIALS OF REGISTRATIONS

SEBI received a complaint against an entity for carrying out Investment Advisory services without obtaining Certificate of Registration from SEBI. The entity is pursuing the following modus operandi:

Marketing executives of the firm calls prospective investors for registration as free trial clients. Also, some clients register for free trials after pursuing its website.

This indicates that the entity is actively engaged in soliciting members of general public for registering with it for investment advice.

Though at the time for registration for free trial it is advised by the representative that if the client/investor finds the free trial satisfactory then he/she can register with the entity as a regular client choosing any of the services mentioned on the website. However, the representatives actively pursue the prospective clients to get themselves registered as regular clients.

In case of free trials, the entity sends SMS to the clients/investors, giving tips for 2-3 days and subsequently as per the service opted by the client.

The activities such as giving trading tips, stock specific recommendations, etc. to the investors on payment of fees indicate that the entity is engaged in providing investment advisory services.

The complaint received by SEBI claims that the Noticee had promised a lucrative return to the complainant by investing his money in the securities market over a short period of time (4 months) for a large fee.

On investigation, SEBI found that the documents viz. the experience certificate submitted by the proprietor of the Investment Advisory firm at the time of registration was not genuine/forged/fabricated. The Noticee, by submitting false documents has obtained registration from SEBI as an IA and has prima facie violated his conditions of certificate and the ensuing provisions of Regulation 13 (a) of IA Regulations. SEBI has restrained the Noticee from the securities market as well as cancelled his certificate of registration. Promise of exorbitant return on a meagre investment will be viewed as violation since a registered intermediary is required to take utmost precaution to protect the interests of investors.

CHAPTER 19: ETHICAL ISSUES

LEARNING OBJECTIVES:

After studying this chapter, you should understand about:

- Ethics and ethical restraint
- Importance of ethical conduct in business
- Ethical Issues in Providing Financial Advice
- Ethical dilemma
- Fiduciary responsibility of investment advisers
- Do's and Don'ts for investors issued by SEBI
- Learn about addressing annual audit observations

19.1 Ethical issues

Investment Advisers have to give advice to their clients on matters that are related to their finances. The goals of the client and the manner in which they will be achieved are a very important part of their lives. In matters related to money it is vital that there is ethical behaviour of the highest standard. This is essential to build the necessary trust and confidence not only for the investment adviser but also for the entire advisory and financial services industry.

Ethics can be defined as several moral principles that decide and influence a person's behaviour. It is thus an area that deals with what is good for society and individuals. The term is derived from the Greek word ethos which means custom, habit or character.

Ethics is also defined as a set of moral principles or rules of conduct that provide guidance for our behaviour when it affects others. Widely acknowledged fundamental ethical principles include honesty, fairness, diligence, care and respect for others.

There are several actions that people take in their day to day lives. This includes those related to money and financial activities. Doing things that are within the ambit of the law is one thing as this ensures that there is nothing illegal being done. But ethics goes one step beyond that as it brings into play what is right or wrong behaviour. It arises out of the basic values and character that a person has. Ethics are often the result of a lifetime of beliefs and values.

On the other hand there might be an Investment Adviser who might not provide any after sales service to her clients even though this is essential and needs to be looked at carefully. This clearly goes against the ethical principles that are required to be followed. Excuses might

be given for avoiding such work or it could be shifted to someone else but this is a clear violation of ethical principles.

Ethical restraint is an act by one individual to prevent certain action by another. This can be legally justifiable when what is sought to be prevented is some illegal act. Investment advisers have an important role to play because they are advising their clients on various aspects related to the handling of the client's money. It is their duty to ensure that the right advice is given to their clients so that all the required laws and regulations are followed. The Investment adviser cannot turn a blind eye and say that they did not know what the client was doing if they had knowledge of the facts.

Some people equate ethical behaviour with legal behaviour. Laws and regulations often attempt to guide people toward ethical behaviour, but they do not cover all unethical behaviour. Ethical principles go beyond that which is legally sufficient and encompass what is the "right" thing to do. Regulators also often lack adequate resources to enforce the laws and hence ethical principles become even more important.

19.2 Importance of ethical conduct of business

There are various reasons for business to be in existence which include the purpose of making profits and money for its various stakeholders. At the same time there is a need to go beyond this purpose and look at the bigger picture because this is what determines the values of a certain society and the country in which it operates. Business has to be done ethically with the right principles so that there is a moral support backing its actions. Investment advisers are in a unique position because their business needs the highest form of ethical conduct to earn the respect of the society at large.

The Investment adviser deals with the issue of giving advice of matters related to money and hence if they are conducting business in a manner that puts the interest of the client above everything else (Client First principle) they are on the correct ethical path. This has to be seen in actions over a period of time which will enable the clients and people to have confidence that the investment adviser can be trusted. This trust is at the center of all the activities of an investment adviser because it can take years to build trust but just a few moments to lose it all.

There has to be a feeling among clients and people at large that business is being done fairly and that this is not at the expense of others. This allows for the coexistence of the business with other activities. Investment advisers have to ensure that their ethical standards put the interest of the client above their self-interest i.e. there is no conflict of interest. If there is a feeling that the investment adviser is looking out only for their own specific needs and interest then it would be very difficult for them to gain the confidence of the people. This is one of the most crucial factors in an advisory business that has to be developed over a period of time.

The investment adviser can proactively look at the needs of the clients and how they can benefit from the existing situation, and this would be another factor that would benefit them in the long run. It should not be that the client has to keep asking for things which they would find useful, but if the Investment adviser proactively suggests things that the client needs to do then this becomes a big positive factor.

Money is a very important component in the efforts for a large number of people and the way this is handled is very critical. For many people talking about money and its details is like the final line of confidence because this is not done with everyone. The Investment adviser needs to be able to enter this inner level of confidence. If they are not doing business the ethical way then this is not likely to happen. The end result could be that the adviser is not able to get the required information to be able to give the best advice, because there is some element of mistrust present with the client.

The kind of clients that are attracted by the Investment adviser is also determined by the manner in which they do business. An adviser who behaves ethically will develop a good reputation in the community. Those who are willing to bend some rules for their benefit will get clients who might demand unethical things. For example, passing back of commission is prohibited but unethical advisers are likely to get clients who demand such payments because they know the adviser might do this. This can even lead to legal problems if the action is against some provision of the law. It is therefore important that ethics remain at the top of the action point for the adviser.

Business has a special place in society where people look up to business leaders for inspiration and this has to be maintained. It can only happen when the business is done with ethical principles. The investment adviser can attain a high level of respect and confidence of people in society at large only when they are conducting their activities in an ethical way. This will involve giving up short cuts and quick benefits for staying true to their principles. If someone is willing to trust you with his money matters, then he is expecting you to be the custodian of that money and that is a lot of responsibility for anyone.

Finally, it is vital that business is held up for the right kind of role model and investment advisers need to strive to be that role model. This will happen only when business is done in an ethical way. If these principles are not followed then the entire situation can come crashing down, which would not only wipe out years of hard work but it could also make regaining it next to impossible.

19.3 Ethical issues for an Investment Adviser

The main role of a financial intermediary is channelizing the domestic savings into various investment vehicles available. On the one hand the intermediary helps the issuer in mobilizing resources for development/implementation of projects or investment in the capital market

while on the other hand he helps the investor obtain a reasonable return on his investment. In the Indian financial market, there are many products with complexities which the common man/the small investor may not understand. It is the financial intermediary who should take the most suitable product to the retail investor that would serve the needs of the investor best and help in fulfilling his financial goals. The intermediary plays a key role in the successful achievement of financial goals of many Indian families.

The financial intermediary should realize that he would be very successful if he focuses on his clients and the clients' needs rather than on his own needs. It would be useful for the intermediary to keep in mind this following very famous quotation of Zig Ziglar, the world renowned corporate motivator: ***"****You can have everything in life you want; if you will just help other people get what they want".*

The intermediary many times works on targets and goes about selling financial products aggressively to achieve the targets within a time frame. While doing this sometimes the suitability of the product to the investor is lost sight of. The investor should be at centre of the activity and his interest should be uppermost in the minds of the advisors. It is important for the advisor/intermediary to nurture and take care of the financial well-being of his clients to reap long term benefits.

The main problems/investor grievance areas in the advisory business can be highlighted as under:

1. Advisor's lack of focus on understanding client specific situations or needs so as to provide appropriate advice. Sometimes, client's wishes and needs may differ. Risk profiling is a must in such cases.
2. Advisors' lack of understanding of the financial product which he is selling especially the risks involved and suitability for the client. This is addressed by explaining the product features, and making sure that the client has understood it, before making an investment.
3. Advisors' lack of information about overall market and other available financial products enabling him to have relative valuation and understanding on pros and cons of the product universe. This too can be handled by educating the client or pointing the client to relevant sources of knowledge.
4. Adopting wrong practices like frequent switching from one product to another to increase earnings from commissions i.e. churning. It is for this reason that SEBI has mandated that advisors can't distribute; but the problem could be prevalent in other channels.
5. Not educating/informing the investor about risks; uncertainties about financial products that are sold, while highlighting only the good features of the product. This is largely about misrepresentation and not showing the risks to the clients.
6. Poor after sales service or deviating from what was promised earlier.

19.4 Ethical Dilemma

An ethical dilemma is a situation where there is a problem and a person has to take a decision between two alternatives, neither of which is superior. The option that is chosen would reflect the manner in which the ethical dilemma is resolved, and will also have implications in terms of the signal that this sends out. A series of such signals will re-enforce the client's perception of the investment advisor's ethical standards.

An ethical dilemma arises in virtually every field and profession in life. It is up to the person who has to make the decision, to decide according to their moral beliefs and principles. This is especially true when it comes to an investment adviser because they will have several of such dilemmas in the course of their work.

For example, there might be a need for an adviser to earn some income so when a client comes to them, they would be willing to serve the client. It could be that the client does not require a particular service, but does not know about it. In such a situation, the options before the investment adviser are (a) make the client go through the process and earn some money or (b) tell the client that they need not do all the things suggested because it is not necessary for them. This is a type of ethical dilemma, because option (a) will give the investment advisor revenue, but option (b) is ethically correct.

There can be different categories of ethical dilemmas. A pure ethical dilemma could be one where there might be two alternatives and both of them could be against some ethical principle. So, no matter what choice is made there is going to be some violation of ethics.

An example for an Investment Adviser could be a situation wherein they want to increase their business. In such a situation the adviser can sign up a lot of clients, with the chance or a high probability that they would not be able to serve them in the manner that is required or desired. The other choice would be to go slowly and build up a client list over a longer period, but this could make their business unsustainable and unable to survive.

Another situation of an ethical dilemma arising would be when there is a clash between personal values and professional values. This can be a very difficult situation as it would need to be resolved in a manner that takes care of these values and does not cause a huge disconnect.

For example, there might be a personal value of an individual that they believe in only term insurance policies for clients to meet their life cover needs. Term insurance provides for a payout only on death and the premium on such policies is low. They might be in employment where the need would be to promote other types of insurance policies because they earn more income for the organization. Other types of insurance policies like Unit Linked Insurance

Plans (ULIP) or whole life policies have a higher premium which leads to a higher commission for the entity selling this. In such a situation they would need to tackle this ethical dilemma.

There are different ways in which these kinds of dilemmas can be tackled.

Deeper analysis of the entire matter is often one of the best ways to resolve the dilemma. On a detailed analysis it often becomes clear that what seems to be a dilemma is actually a clear case, where a specific course of action is the correct way to go ahead. This will end the problem for the investment adviser as the route forward becomes clear for them to continue with their efforts.

The other way to tackle such a dilemma is to have specific principles that would help resolving the entire matter. It could be something like taking a step that does the highest amount of good for all those involved. The other approach could be doing something that does the least amount of damage. Either of the approaches might be the way to find a solution.

A distributor could be pushing a mutual fund when this has consistently been an underperformer. It could be that a higher commission on the product is driving the recommendation but the Investment Adviser has to evaluate the fund properly and if this does not seem suitable for a client then it has to be avoided. Many times, relationship managers also push aggressive products like unit linked insurance plans or equity mutual funds to older people even when this is not suitable. These too have to be evaluated based on the need and situation of the client and avoided when not needed.

There can also be an effort to reconsider the entire problem in a different way. This could well give rise to different solutions that might not have been thought of before. This could be the breakthrough that helps solve the dilemma.

19.5 Fiduciary responsibility of Investment Advisers

Investment Advisers are fiduciaries, which means that they have to act in the best interest of their clients. This is the central part of the entire fiduciary responsibility of the Investment Advisers. There are chances that several conflicts of interest may arise during the course of their work but the fiduciary responsibility is to rise above all this and ensure that the client is always put at the forefront of any step that has been taken.

The investment adviser is a person that acts on behalf of another person to manage their financial assets. This means that there has to be a principle of utmost good faith (*uberrimae fidei* principle in Latin*)* and trust that needs to be followed. There cannot be profit made at the cost of the client and this has to be followed at all times. What this means is that the adviser must not take unfair advantage of the clients trust. This is at the heart of the fiduciary duty to their clients.

There are several obligations that would be required to be fulfilled by the Investment Adviser when they are dealing with their clients.

Full Disclosure of all the facts has to be made to the client. There cannot be any omission of details. This not only covers not giving wrong information but it means that the correct information should have been disclosed. Not disclosing the facts might lead to the client being misled and this has to be avoided. Such a disclosure is absolutely essential when there is a conflict of interest. Disclosures should also be done when there can be a perception of conflict of interest, so that trust and faith is maintained at all times.

There has to be suitable advice that is given to the client. The exact requirements of each individual client will vary and the investment adviser has to give advice that would be right in a specific situation for a specific person. This will require the proper study of the necessary conditions that are relevant for a particular client.

In addition, there has to be a reasonable basis or objective basis for the recommendation. The manner in which the recommendation is formed by the investment adviser becomes important. It should not be based on factors that benefit the adviser. This is essential for the client to get the advice that they require for the purpose of meeting their financial goals. There also needs to be proper execution of the work that is assigned to the investment adviser which has to be take place without any conflict of interest.

19.6 Do's and Don'ts for investors issued by SEBI

Do's for Investors issued by SEBI

1. Always deal with SEBI registered Investment Advisers.
2. Check for SEBI registration number. Please refer to the list of all SEBI registered Investment Advisers.
3. Ensure that the Investment Adviser has a valid registration certificate.
4. Pay only advisory fees to your Investment Adviser. Make payments of advisory fees through banking channels only and maintain duly signed receipts mentioning the details of your payments.
5. Always ask for your risk profiling before accepting investment advice. Insist that Investment Adviser provides advisory strictly on the basis of your risk profiling and takes into account available investment alternatives.
6. Ask all relevant questions and clear your doubts with your Investment Adviser before acting on advice.
7. Assess the risk–return profile of the investment as well as the liquidity and safety aspects before making investments.
8. Insist on getting the terms and conditions in writing duly signed and stamped. Read these terms and conditions carefully particularly regarding advisory fees, advisory plans, category of recommendations etc. before dealing with any Investment Adviser.

9. Be vigilant in your transactions.
10. Approach the appropriate authorities for redressal of your doubts / grievances. Inform SEBI about Investment Advisers offering assured or guaranteed returns.

Don'ts for Investors

1. Do not deal with unregistered entities.
2. Don't fall for stock tips offered under the pretext of investment advice.
3. Do not give your money for investment to the Investment Adviser.
4. Don't fall for the promise of indicative or exorbitant or assured returns by the Investment Advisers. Don't let greed overcome rational investment decisions.
5. Don't get carried away by luring advertisements or market rumours.
6. Avoid doing transactions only on the basis of phone calls or messages from any Investment Adviser or its representatives.
7. Don't take decisions just because of repeated messages and calls by Investment Advisers.
8. Do not fall prey to limited period discount or other incentive, gifts, etc. offered by Investment Adviser.
9. Don't rush into making investments that do not match your risk taking appetite and investment goals.

19.7 Learn about addressing annual audit observations

Compliance audit is required to be conducted by investment advisers on yearly basis. This is to be conducted by a Practising Chartered Accountant. An advisor should disclose to clients if there are any material audit observations.

19.8 Global Best Practices

Globally various regulators as well as other associations put a premium on ethical behaviour by their members and those that they supervise. Across the world there are several different guidelines, that are in force but some of them have several common features too. Here is a look at a few of these practices.

19.8.1 Securities and Exchange Commission US

The Securities and Exchange Commission (SEC) in the US requires a registered adviser to disclose to clients and prospective clients information about a financial condition that would impair the ability of the adviser to meet contractual commitments to clients and even certain disciplinary events of the adviser within the past 10 years that are materially important. The SEC requires each adviser to adopt and implement written policies for this regard. These should identify conflicts and other compliance factors creating risk and then address these risks.

Code of Ethics: All advisers registered with the SEC must adopt and enforce a written code of ethics reflecting the adviser's fiduciary duties to its clients. At a minimum, the adviser's code of ethics must:

a. Standards of Conduct. Set forth a minimum standard of conduct for all supervised persons;

b. Compliance with Federal Securities Laws. Require supervised persons to comply with federal securities laws;

c. Personal Securities Transactions. Require each of an adviser's access persons to report his securities holdings at the time that the person becomes an access person and at least once annually thereafter and to make a report at least once quarterly of all personal securities transactions in reportable securities to the adviser's Chief Compliance Officer (CCO) or other designated person;

d.Pre-approval of Certain Securities Transactions. Require the CCO or other designated persons to pre-approve investments by the access persons in IPOs or limited offerings;

e. Reporting Violations. Require all supervised persons to promptly report any violations of the code to the adviser's CCO or other designated person;

f. Distribution and Acknowledgment. Require the adviser to provide each supervised person with a copy of the code, and any amendments, and to obtain a written acknowledgment from each supervised person of his receipt of a copy of the code; and

g. Recordkeeping. Require the adviser to keep copies of the code, records of violations of the code and of any actions taken against violators of the code, and copies of each supervised person's acknowledgement of receipt of a copy of the code.

19.8.2 Australian Guidelines

In Australia there is a need for adviser to act with competence, honesty, integrity and fairness. The penalties for violating these conditions is strict and this includes bans and disqualification from acting as an adviser. The conditions that are present need to satisfy the 'best interest standard'. They consist of the following.

Section 961B of the Corporations Act 2001[25] (as amended) lists the steps an adviser must take to satisfy the 'best interests' standard. In brief, these are:

* To identify the client's financial situation, objectives and needs.

[25]http://www5.austlii.edu.au/au/legis/cth/consol_act/ca2001172/s961b.html

* To identify the subject matter of the advice sought by the client (whether explicitly or implicitly).

* To identify the client's relevant circumstances – the objectives, financial situation and needs that would reasonably be considered as relevant to advice sought on that subject matter.

* To ensure this information is complete and correct; enquiries should be made if gaps or inconsistencies are apparent.

* When considering the advice sought, whether it would be reasonable to consider recommending a financial product; if it is deemed relevant, they should only recommend a product after thoroughly investigating the most appropriate products relevant to the client's circumstances.

* When advising the client, the financial adviser must base all judgements on the client's relevant circumstances.

* Take any other step that, at the time the advice is provided, would reasonably be regarded as being in the best interests of the client, given the client's relevant circumstances.

CHAPTER 20: GRIEVANCE REDRESS MECHANISM

LEARNING OBJECTIVES:

After studying this chapter, you should understand about:

- Salient Features of Consumer Protection Act
- Investor Grievance Redressal Mechanism
- Key elements of a robust grievance recording and redress system
- Discuss Grievance redress system required with the Investment Adviser
- Redressal in Capital Market
- Grievance redressal in Banking
- Grievance redressal in Insurance
- Redress in pension sector
- Securities Appellate Tribunal
- Other Redressal Fora

20.1 Consumer Protection Act

Consumer Protection Act, 1986 has been enacted to provide for better protection of the interests of consumers and for that purpose to make provision for the establishment of consumer councils and other authorities for the settlement of consumer's disputes and for matters connected therewith.

Consumer means any person who

(a) buys any goods for a consideration which has been paid or promised or partly paid and partly promised, or under any system of deferred payment and includes any user of such goods other than the person who buys such goods for consideration paid or promised or partly paid or partly promised, or under any system of deferred payment when such use is made with the approval of such person, but does not include a person who obtains such goods for resale or for any commercial purpose; or

(b) hires or avails of any services for a consideration which has been paid or promised or partly paid and partly promised, or under any system of deferred payment and includes any beneficiary of such services other than the person who hires or avails of the services for consideration paid or promised, or partly paid and partly promised, or under any system of deferred payment, when such services are availed of with the approval of the first mentioned person but does not include a person who avails of such services for any commercial purpose.

20.2 Investor Grievance Redressal Mechanism

Investors deal with different product and service providers when they conduct transactions related to their financial life. Regulations provide various mechanisms for the investors to address any grievance they may have with respect to their dealings. This may be to do with the accuracy and extent of information or advice related to a product or service, fees or expenses or penalty charged in any form or name, or a situation when a request for a service related to a financial product was delayed or even unattended. The first line of action for the investor is to approach the product or service provider concerned to get the grievance resolved. If it is not resolved to the investor's satisfaction, they can approach the regulator of the respective industry.

20.3 Grievance Redress System

A robust grievance recording and redress system ensures that the investor is able to get their problems addressed in a timely manner. Some of the features of a robust system cover the following:

Source of receipt of complaint

Complaints have to arise from relevant issues that are covered under the acts or regulations related to an investor like SEBI Act, Securities Contract Regulation Act, Depositories Act and rules and regulation made there under and relevant provisions of Companies Act, 2013. This ensures that the right complaints are addressed.

Date and time of receipt of complaint

The complaint has to be received within a specific time period mentioned in the relevant acts. This ensures that the system is not clogged with old complaints which might be difficult to dispose off. A balance has to be maintained in terms of the time period for which complaints will be entertained.

Nature of complaint

The complaint has to be relevant so these have to fall into the definition of being a complaint. This is necessary so that frivolous complaints can be eliminated and the relevant ones are given the required importance.

Whether it could be resolved internally or to be escalated to an external entity

A robust system will have a clear path that a complaint has to follow. Normally the first port of landing for the complaint is the internal system of the entity against whom the complaint is made and it is then escalated to an outside agency. This ensures that there is a chance given for the complaint to be addressed at the source.

Status of resolution/action taken

The investor should be able to see the progress made on the complaint. This is seen through the action taken report (ATR) or if this is resolved then that should be intimated. This increases the confidence of the investor that there is action being taken on their complaint.

Time taken for resolution (or ageing report)

The complaint has to be resolved in a specific time period so that there is closure of complaint filed by the investor. If the complaint keeps dragging on for an indefinite period then it erodes the confidence in the entire system.

Escalation mechanism

There needs to be a mechanism whereby those who are not satisfied with the manner in which the complaint was handled can escalate it. This will ensure that an independent party is able to look at the facts and then decide on the complaint.

20.4 Grievance Redress System of an Investment Adviser

SEBI has mandated setting up of grievance redressal system for investment advisers.[26]

Offices of all Investment Advisers are required to display the details of the Compliance officer of the intermediary and CEO/Partner and Proprietor's details such as name, address, email and phone number. If the client is not satisfied with the response of the intermediary, the client can lodge his/her grievances with SEBI through SCORES system which is discussed later.

20.5 Grievance Redress System in Capital Market

An investor/client is first required to take up the grievance with the market particiant by lodging a complaint directly with the concerned market participant. If the grievance is not redressed satisfactorily, the investor/client, may in accordance with the SCORES guidelines escalate the same through the SCORES Portal in accordance with the process laid out therein. After exhausting all available options for resolution of the grievance, if the investor/client is still not satisfied with the outcome, then dispute online resolution through the ODR (online dispute resolution) portal can be initiated.

Alternatively, the investor/client can initiate dispute online dispute resolution through the ODR Portal if the grievance lodged with the concerned market participant was not satisfactorily resolved or at any stage of the subsequent escalations. The concerned market participant may also initiate dispute resolution through the ODR portal after given due notice (as stipulated) to the investor/client for resolution of the dispute which has not been satisfactorily resolved between them.

[26]Circular no. CIR/MIRSD/3/2014 dated August 28, 2014

The dispute resolution through the ODR portal can be initiated within the applicable law of limitation (reckoned from the date when the issue arose/occurred that has resulted in the complaint/date of the last transaction or the date of disputed transaction, whichever is later).

SCORES

SCORES is the online investor redressal mechanism set up by SEBI to deal with the complaints of investors related to all products and entities regulate by it. This includes complaints against companies who have made share issues in which the investor has invested in the primary or secondary markets, or against investment companies such as mutual funds, providers of portfolio management schemes, venture capital funds and others. SCORES can also be used to register a complaint against intermediaries who facilitate investing in the product or securities, and servicing such investments such as brokers, merchant bankers, depositories and depository participants, registrars to the issue and transfer agents, distributors and financial advisors.

The following complaints are not addressed in SCORES:

- Complaints that are incomplete or not specific
- Allegations without supporting documents
- Offering suggestions or seeking guidance/explanation
- Seeking explanation for non-trading of shares or illiquidity of shares
- Not satisfied with trading price of the shares of the companies
- Non-listing of shares of private offer
- Disputes arising out of private agreement with companies/intermediaries

Further, SEBI does not deal with the following complaints:

- Complaints against unlisted/delisted/wound up/liquidated/sick companies.
- Complaints that are sub-judice (relating to cases which are under consideration by court of law, quasi-judicial proceedings etc.)
- Complaints falling under the purview of other regulatory bodies.

SEBI examines the complaint to confirm that it falls within its purview. It then forwards the complaint to the concerned entity. The entity is required to respond with an Action Taken

Report (ATR) within the stipulated time. Investor can check the status of the complaint online.

These are alternate dispute redressal mechanisms to ensure easy, quick and inexpensive resolution of problems. The investor has the option to approach the relevant court. The law of limitation, which sets a time limit for different types of complaints, needs to be considered. The judicial (court) process will need to be initiated within the time limit provided in the law of limitation.

20.6 Grievance Redress System in Banking

Customer complaints are part of every business entity. This is more so in the case of banking since it is a service- oriented industry. The purpose of a grievance redressal system is to ensure that customer grievances are minimized and there is a prompt redressal of customer complaints and grievances.

20.6.1 Grievance redress system with individual banks

Reserve Bank of India has set up the Banking Codes and Standards Board of India (BCSBI) as an independent autonomous watchdog to ensure that customers get fair treatment in their dealings with Banks. The BCSBI has published the "Code of Banks' Commitments to Customers "which sets minimum standards of banking practice and benchmarks in customer service for banks to follow.

Most banks are members of the BCSBI and have thus voluntarily adopted the Code as their Fair Practice Code in dealings with their customers.

Each bank has a customer redressal department that handles issues that customers have against the bank. Customers can file complaints with this department. If customer is not satisfied with the response, he can approach banking ombudsmen, appointed by Reserve Bank of India in various locations across the country.

20.6.2 Integrated Ombudsman Scheme

The Banking Ombudsman is a person appointed by the RBI to address the complaints of banking customers related to the services offered by banks. They also hear complaints related to credit cards issued by banks and Non-banking Finance Companies (NBFCs).

The Integrated Ombudsman Scheme serves as the redressal forum for a complaint against the services of a bank for receipt and payment of funds to and from the holder's account. Disputes related to interest charged or credited, penalty or fees charged, disputes related to ATM cards, debit cards and credit cards, issues of refusing a loan without valid reasons and others may also be referred to the ombudsman.

If the grievance has been directly addressed to the concerned bank but the individual has not received a satisfactory resolution within one month, then they can approach the Banking Ombudsman.

The complaint can be filed online or through an email to the integrated Ombudsman or physically at the office.[27] The details, including name and address of the Ombudsman concerned, will be available with every bank branch.

If the complaint is valid the ombudsman will attempt a settlement with the concerned bank. If a settlement does not happen within one month, then the ombudsman will pass an award after giving both sides a chance to state their case.

20.6.3 Process regarding escalation of grievance

The process as stated above is to first approach the respective banks wherein there is typically a three tier complaint resolution system – Branch Manager, Zonal Manager and GM-Customer Service. In case the complainants are not fully satisfied with the redressal/ disposal of complaints, they may approach the concerned Integrated Ombudsman for settlement of their grievances through mediation and passing of awards in a time frame. The grievances received in the Department online or by post/manually are processed and forwarded through CPGRAMS (Centralized Public Grievance Redress and Monitoring System) to concerned organizations for resolution/disposal, monitored and periodically reviewed. The Portal is accessible at www.pgportal.gov.in.

20.7 Grievance Redressal in Insurance

20.7.1 Grievance redress system with individual insurance companies

A complainant would first approach the grievance redressal mechanism of the insurance company.

Grievance or Complaint is defined as any communication that expresses dissatisfaction about an action or lack of action about the standard of service/deficiency of service of an insurance company and/or any intermediary or asks for remedial action.[28]

20.7.2 Role and functioning of Insurance Ombudsmen

In case the complaint is not resolved within the stipulated time by (as stated by the regulator) of its receipt or it is unattended or the customer is unhappy with the insurance company or intermediary associated thereto, the complainant can approach the Insurance Ombudsman. An Insurance Ombudsman is a person appointed by Government of India under the Redressal

[27] https://cms.rbi.org.in/cms/indexpage.html#eng

[28] Para 1 of the Guidelines for Grievance Redressal by Insurance Companies dated July 27, 2010

of Public Grievance Rules, 1998. The grounds under which a complaint can be made to Insurance Ombudsman are:

* Any partial or total repudiation of claims by an insurance company

* Any dispute about premium paid or payable in terms of the policy

* Any dispute on the legal construction of the policies as far as it relates to claims

* Delay in settlement of claims

* Non-issue of any insurance document after payment of premium

The Ombudsman takes up a complaint for settlement through mediation if both the complainant and insurance company, by mutual agreement, request for the same in writing. In such a case, the Ombudsman, within one month of receipt of complaint, will make a recommendation which s/he thinks is fair based on the circumstances of the case. This recommendation is sent to the complainant and insurance company. If the complainant accepts the recommendation in full and final settlement of his grievance within the stipulated time, the same is communicated to the insurance company. If the settlement by recommendation does not work, the Ombudsman will dispose the complaint by passing a speaking Award within 3 months from receipt of complaint. The complainant is required to convey his acceptance of the award in full and final settlement within one month to the Insurance company.

20.7.3 Process regarding escalation of grievance

If the grievance is not addressed satisfactorily then it can be escalated to IRDAI through the IGMS. IRDAI also offers the facility of online registration of policy holders' complaints through its Integrated Grievance Management System (IGMS) in its website. The status of the complaints can also be tracked online. Once a complaint is registered through the IGMS it is forwarded to the concerned insurer. If the complaint is made other than through the IGMS, the same will be forwarded to the insurer for resolution.

If the complainant is not satisfied with the resolution provided by the insurer, they can approach the Insurance Ombudsman for relief. The name and address of the ombudsman will be available with the servicing branch for the policy. The ombudsman will pass an award within one month after considering both sides of the case and giving an opportunity to the insurance company to settle the issue.

If the insurance buyer is not happy with the decision of the ombudsman, then the normal judicial process through courts as well as under the Consumer Protection Act, 1986 is available.

20.8 Redress in Pension Sector

Pension Schemes issued by mutual funds are regulated by SEBI and redressal systems specified by SEBI viz. SCORES system is required to be followed.

Pension schemes issued by insurance companies are regulated by IRDAI and hence, IRDAI grievance redressal system will be required to be followed.

Redressal with respect to National Pension System (NPS)

NSDL e-Governance Infrastructure Limited is the Central Recordkeeping Agency (CRA) appointed by Pension Fund Regulatory and Development Authority (PFRDA) for the National Pension System (NPS). "Grievances or complaint" includes any communication that expresses dissatisfaction, in respect of the conduct or any act of omission or commission or deficiency of service on the part of, an intermediary or an entity or a person governed by the provisions of the Act and in the nature of seeking a remedial action but do not include the following;

(i) complaints that are incomplete or not specific in nature;

(ii) communications in the nature of offering suggestions;

(iii) communications seeking guidance or explanation;

(iv) complaints which are beyond the powers and functions of the PFRDA or beyond the provisions of the PFRDA Act and the rules and regulations framed thereunder;

(v) any disputes between intermediaries; and

(vi) complaints that are subjudice (cases which are under consideration by court of law or quasi-judicial body) except matters within the exclusive domain of the PFRDA under the provisions of the Act. A subscriber to the National Pension System (NPS) can raise a grievance with the Central Recordkeeping Agency (CRA) on their website.

Resolution mechanism for grievances is through a call centre or through a written communication.

Grievance Redressal Officer

The operations pertaining to NPS are handled only through the Head Office of NSDL e-Gov, i.e. at Mumbai. Accordingly, a Grievance Redressal Officer (GRO) is appointed.

Escalation of grievances to NPS Trust

If the complainant is not satisfied with the redressal of his grievances or if it has not been resolved by CRA by the end of thirty days of the filing of the complaint, s/he may escalate the

grievance to the NPS Trust in accordance with the provisions of PFRDA's Redressal of Subscriber Grievance Regulations, 2015:

(1) Any subscriber whose grievance has not been resolved within thirty days from the date of receipt of the grievance by any intermediary, or who is not satisfied with the resolution provided by the intermediary under the National Pension System (other than NPS Trust) shall register a grievance with the NPS Trust, against the intermediary. The NPS Trust shall follow up the grievance with the intermediary for redressal of the subscriber grievance. The NPS Trust shall call for the resolution of the subscriber grievance and respond to the subscriber within thirty days from the date of receipt of the grievance, about the resolution of the grievances.

(2) The subscriber whose grievance has not been resolved by the intermediary within thirty days from the date of submission of the grievance to the NPS Trust, or who is not satisfied with the resolution provided by the NPS Trust shall prefer an appeal to the Ombudsman against the concerned intermediary or entity.

20.9 Securities Appellate Tribunal

The Securities Appellate Tribunal (SAT) according to Section 15U of the SEBI Act is not bound by the procedure laid down by the Code of Civil Procedure, but shall be guided by the principles of natural justice and shall have the powers to regulate their own procedures. The tribunal for the purpose of discharging its functions under this Act shall have the same powers as are vested in a civil court under the code of civil procedure while trying a suit in respect of the following matters such as summoning and enforcing the attendance of any person and examining him on oath; requiring the discovery and production of documents; receiving evidence on affidavits; issuing commissions for the examination of witnesses or documents; reviewing its decisions; dismissing an application for default or deciding its ex-parte; setting aside any order of dismissal of any application for default or any order passed by it ex-parte.

Any proceeding before the SAT shall be deemed to be a judicial proceeding within the meaning of provisions as given under the Indian Penal Code.

Section 15T of the SEBI Act gives the right to "Appeal to the SAT". It states that any person aggrieved by an order (i) of the SEBI Board (ii) Made by an adjudicating officer appointed under SEBI Act; or (iii) Made by the IRDAI or the PFRDA may prefer an appeal to the SAT having jurisdiction in this matter. Every appeal should be filed within a period of 45 days from the date on which a copy of the order made by SEBI or the Adjudicating Officer or IRDAI or the PFRDA is received by him in a specified form along with the fee as prescribed.

Any person aggrieved by any decision or order of the Securities Appellate Tribunal may file an appeal to the Supreme Court within 60 days from the date of communication of the decisions or order of the SAT to him.

20.10 Other Redressal Fora

A complaint relating to the non-repayment of deposits or payment of interest by an NBFC should be registered with the National Company Law Tribunal (NCLT) or the Consumer forum. The complaint has to be in the prescribed form as specified under the National Company Law Tribunal Rules for the area under which the company's registered office is situated.

If the complaint relates to non-repayment of deposits by companies or complaints relating to bonds and debentures issued by unlisted companies, then the complaint can be filed with the Ministry of Company Affairs on its website.

Module 6 Sample Questions

1. The process of transmission of shares involves

a. Changing of the address
b. **Transfer of shares on death of the original holder**
c. Conversion to joint holdings
d. Changing of non resident status

2. A non individual Investment Adviser should have a net worth of Rs _____

a. 5 lakhs
b. 10 lakhs
c. 25 lakhs
d. 50 lakhs

3. An individual Investment adviser cannot offer a client both advisory and _____ services

a. **Distribution**
b. Fund advisory
c. Retirement planning

4.An Investment Adviser has to preserve records for a minimum period of _____

a. 2 years
b. 5 years
c. 1 year
d. 3 years

5. The Investment adviser has to put whose interest at the forefront while giving advice

a. His own interest
b. His team
c. The client
d. The product provider

6. When it comes to ethics, this involves just following the legal requirements of business. In this context, which of the following statement(s) is correct?

a. Legal requirements are the final benchmark for what is ethical
b. There are complex legal requirements and hence these should not be missed
c. Ethics is more than just legal requirements and deals with morals and values too
d. Business has several laws so each of them need to be followed

7. An investment adviser is getting commission from selling a particular product. When dealing with a client he must:

a. **Disclose this fact to the client**
b. Disclose it only if the client asks
c. Can omit the fact as this is not important
d. This is income from some other stream so it can be ignored

8. In an ethical dilemma there are options before the investment adviser and _____.

a. All of them are proper to be chosen
b. Any of them would be suitable
c. There are no implications of choosing any one
d. **All the options are such that they would lead to some ethical violation**

9.Integrated Grievance Management System is for solving complaints related to _____

a. Pension
b. Mutual funds
c. **Insurance**
d. Stocks

10.The first level of complaint against a bank has to be filed with the _____

a. Integrated Ombudsman
b. High Court
c. RBI
d. **The bank itself**

Practice Cases with Solutions:

1. X wants to make the right choices on making financial commitments to make the best use of her income and savings. She (X) pays an EMI of Rs.23,000 on an outstanding home loan of Rs.10 lakhs with 5 years to go. She has an offer to switch to a new housing loan company that is offering a rate of 7.25%. X has a conveyance allowance of Rs.7500 per month and she is looking to buy a vehicle that fits into that budget. She has seen a vehicle that costs Rs.4 lakhs and found financing for 80% of the cost at an interest rate of 12%.The term will be 5 years. One of the insurance policies held by X is maturing and she has to decide between taking the sum assured of Rs.10 lakhs as cash or a monthly payment of Rs.10,000 over 10 years. Take inflation at 6%.

i) Should X consider the home loan switch to the new provider?

a. No, since the new loan will mean higher interest payments in the initial years
b. Yes, since it reduces the outstanding loan amount quicker
c. Yes, since the interest rate on the new loan offer is lower
d. No, since the interest rate on the new loan is higher

[Hint: Use the Rate function to calculate the interest rate on the existing home loan. That works out to 13%.]

ii) Can she afford the car she has evaluated?

a. Yes, she will be able to pay the EMI on the loan
b. No, the EMI will be higher than the conveyance allowance
c. She will be able to pay the EMI only if the term of the loan goes up.
d. She will be able to pay the EMI only in the first year. Subsequently, the EMI will be higher than the allowance

[Hint: Use the PMT function to calculate EMI. EMI<7500, therefore she can afford it.]

iii) Should X take the Rs.10 lakhs as cash or opt for the periodic payment?

a. Take the cash down
b. Take the monthly payout
c. Both options have the same financial implications
d. The correct option will depend upon the investment return B will earn on the cash down option

[Hint: Compare PV of cash down with PV of monthly payout. Rs.10,00,000 (PV of cashdown) is higher than Rs. 9,00,734 (PV of monthly payout). The inflation rate of 6% is used to discount the future cashflows to present value]

2. X is in his early 30's and considering a shift to self-employment. he is confident of doing well but realizes there may be disruption to income in the initial stages. He wants to evaluate his finances before he takes the call to branch out on his own. He also wants to help his father create a corpus for managing their health needs. They need a guaranteed payout of Rs.7500 each month to meet their expense on medicines.

Monthly Income		
Salary	1,40,000	
Monthly Expenses		
Loan repayment	65,000	
Living expenses	50,000	
	1,15,000	
	Assets	**Liabilities**
Cash in bank	1,20,000	
fixed deposit maturing in 18 months	75,000	
Open ended Equity mutual fund	2,00,000	
self-occupied property and loan outstanding	75,00,000	55**00000**
PF Balance	8,00,000	
	86,95,000	

i) X expects income to be uncertain. Are his finances in a position to support this?

a. No, since liquid assets to networth ratio is low at 1.69
b. No, since liquid assets to networth ratio is low at 1.04
c. No, since liquid assets to networth ratio is low at 3.43
d. Yes, since liquid assets to networth ratio is adequate at 6.08

[Hint: Liquid assets to monthly expenses indicate the ability to manage even if income is affected. 3-6 months atleast should be available. In this case it is just enough to meet one month expense.]

ii) X is confident that he has done well with his finances. He has bought a house on loan and has investments in mutual funds. What is the evaluation you would do of his financial performance so far?

a. **Savings to Income ratio at less than 1 is not good but can be attributed to the home loan and its repayment. X has to ensure that the ratio improves consistently over time.**
b. Savings to Income ratio at 5.17 is good but can be improved over time by reducing debt and investing more
c. Savings to Income ratio at 62.11 is very good particularly given his age. X has to consistently save at this rate to secure his future
d. Savings to Income ratio at 2.82 is not good but can be improved over time by reducing debt and investing more

[Hint: Savings to income ratio is calculated as total accumulated savings, excluding self -occupied house/annual income.]

iii) What is the corpus that is required to generate the income of Rs.7500 per month for his parents if the yield being offered is 6%?

a. Rs.500000
b. Rs.1000000
c. Rs.1500000
d. Cannot be estimated

[Hint: Annuity formula is income required/yield

Note: It is considered that the money required by the parents is for perpetuity.]

3. D is in her mid-40s and been managing her finances on her own. She has always found it difficult to meet her goals even though she saves and invests. Her primary investments are in equity mutual funds. She is now getting ready to fund her son's college education in a year. This is a snapshot of her finances.

Income		
Salary	2,20,000	
Expenses		
loan repayment	90,000	
Essential living	65,000	
Discretionary expenses	30,000	
	1,85,000	
Travel expenses incurred every 2 years	2,00,000	8,333.33
	Assets	**Liabilities**
Cash in bank	80,000	
Equity mutual funds	50,00,000	20,00,000
Bank fixed deposits maturing in 18 months	15,00,000	5,00,000
Liquid funds	3,00,000	
Gold	10,00,000	4,00,000
Provident Fund	18,00,000	
self-occupied property and loan outstanding	70,00,000	37,50,000
Car and loan outstanding	2,50,000	2,00,000
Personal loan		5,00,000
	1,69,30,000	73,50,000

(i) D is considering taking loans where necessary, if her corpus falls short of the goals that she has to meet in the next 5 years. What will be your advice to her?

a. She should avoid loans since her leverage ratio is high at 43%
b. She should consider loans to fund her goals since the debt to income ratio at 41% is low
c. She should not consider loans since her debt to income ratio at 2 times is excessive
d. She should consider loans to fund her goals since the leverage ratio is low at 4 times

[Hint: Leverage ratio is calculated as total liabilities/total assets. Higher the leverage the more risky it is.]

(ii) D is not sure that her life goals like retirement will be met within her planned timeline. She however believes that she is managing her income and expenses reasonably well. What is the advice that you would give as her investment adviser?

a. Liquidity ratio, currently at 11%, can be increased to fund goals
b. Expense ratio, currently at 88%, should be reduced to save and invest more for goals
c. Leverage ratio, currently at 43%, can be increased to fund goals
d. All of the above

iii) Which of the following factors may hinder D's ability to fund her child's education goal in a year's time?

a. The liquid assets to Networth ratio is low at 3.9% and D may find it difficult to realize the funds required given the short time available to pay for the goal.
b. Leverage ratio, currently at 43%, is high and this may prevent D from finding the funds for the goal
c. The expense ratio at 88% is high and implies that D may not be in a position to meet education expenses at this stage
d. The discretionary expenses to total expense ratio at 40% is high and this will affect her ability to meet essential expenses

[Hint: Liquid assets here is cash and liquid funds-Rs.380000. Networth is (16930000-7350000). A low ratio will indicate lower ability to find the funds required to meet the goal]

4. J is servicing a 15 year home loan for Rs.30,00,000 at a rate of 7.5% on which he pays an EMI of Rs.27,810. He is planning taxes for the new year and he would like to have an idea of the principal and interest component of the EMI. Calculate the same for the 61st period.

a. The principal component in the EMI is Rs.13167.39 and interest component is Rs.14642.98

b. The principal component in the EMI is Rs.9424.63 and interest component is Rs.18385.75
c. The principal component in the EMI is Rs.13905.19 and interest component is Rs.13905.19
d. The principal component in the EMI is Rs.15212.62 and interest component is Rs.12597.75

5. L is doing an annual review of her equity portfolio and want to make some decisions on stock holdings in it.

i. L has seen a run-up in prices in the stocks in his portfolio. He wants to add more of stocks that have good growth prospects but wants to avoid over valued stocks. Which of the following would best suit his preference?

a. Stocks where PE ratio is >1
b. Stocks whose PE ratio is > than PE ratio of market index
c. Stock whose PEG ratio less than 1
d. Stock whose PEG ratio greater than 1 and PE ratio is less than 1

[Hint: PEG ratio less than 1 implies market has not incorporated the growth prospects into the stock price fully.]

ii. L wants to add dividends earned as a part of her retirement income portfolio. In a situation of rising prices what is she likely to observe in this regard?

a. Dividend payout is likely to be higher
b. Dividend yield is likely to be lower
c. Dividend payout is likely to be lower
d. Dividend yield is likely to be higher

[Hint: Dividend yield is likely to be lower. The formula is Dividend per share/Market price per share. Since the denominator goes up, the yield comes down.]

iii. Which of the following should L see as an indicator to consider buying the shares she wants to accumulate?

a. Stock is trading just above 30 day moving average
b. Stock price is near the top of a rising trend
c. Stock trading well below 200 day moving average
d. Stock is trading at the start of a declining trend

[Hint: The other options are not indicators to buy.]

6. M is seeking some help on understanding her fixed income portfolio.

i. M wants to break a 5 year bank deposit on which she earns 7% interest and buy a 8% corporate bond with a term to maturity of 5 years trading at a price of Rs.107. Should she consider it? Take settlement date as 30th November 2022, maturity date as 30th November 2027 and redemption price as Rs.100
   a. Yes, since she will earn an yield of 8% on the bond as compared to 7% on the fixed deposit
   b. No, since the yield on the bond will be only 6.3% while the fixed deposit gives her 7% interest
   c. Yes, since the bond is available at Rs.107 which is at a premium to redemption value of the bond at Rs.100
   d. No, since corporate bonds can only be subscribed in the IPO and cannot be bought in the secondary markets

ii. The yield applicable on the bond M goes up to 7.5%. What is the impact on the price of the bond? The bond pays coupon annually.Take settlement date as 30th November, 2022.

   a. The price of the bond goes down to Rs.103
   b. The price of the bond goes up to Rs.106
   c. The price of the bond goes up to Rs.107
   d. The price of the bond goes down to Rs.102

7. K is accumulating funds to meet the goal of putting down a downpayment for a house in 2 years , childrens education in 7 years and retirement in 20 years. She finds that she may fall short of the goal value for the house downpayment but does not have extra savings to assign to the goal and she does not want to divert funds from other goals to this goal.

i. Which of the following is the appropriate way for K to invest and manage the goal to accumulate funds for the downpayment for the house?

a. K should invest in debt funds holding portfolios with low duration and postpone the goal till the funds are accumulated
b. K should invest in high duration debt funds to earn better return and at the same time have the low volatility of debt investments
c. K should invest in equity actively managed equity funds to earn better returns than the index to get her to the goal value quickly
d. K should invest in index funds to combine the stability if index investing with the higher returns from equity that will get to her goal value in the prescribed time

[Hint: The term to goal is too short for K to take risk for higher returns. Therefore, goal postponement is an option to consider.]

ii. K wants to send her daughter to the US to pursue her education. Which of the following is the most suitable investment choice for this goal?

a. Arbitrage fund
b. International fund
c. Target maturity funds
d. Any of these

[The other two funds are unsuitable since they are typically lower return debt funds.]

iii. Which of the following is the most suitable for the retirement goal?

a. Capital Protection Fund
b. Arbitrage fund
c. Flexicap fund
d. Short-duration fund

[The debt funds are not suitable for a long-term goal in the accumulation phase]

8. T is creating a corpus for her child's education and wants to make an annual investment for the goal when she gets her bonus. The goal value is Rs.7,50,000 and she needs it 5 years hence. She had made an investment of Rs.1,00,000 five years back in an equity fund for this goal and it is now worth Rs.1,80,000. She wants to make additional annual investment in the same scheme and expects the returns to be what she earned so far in the fund. What is the annual contribution that T will have to make to get to her goal given the current level? Select the closest option.

a. Rs.50183
b. Rs.66427
c. Rs.74386
d. Rs.81719

[Hint: Rs.1 lakh invested for 5 years is now worth Rs.180000. Use Rate function to calculate rate of return. Use PMT function. Rate as calculated above. The current value of investments, Rs.180000, will be taken as the PV]

9. C has a monthly debt repayment obligation of Rs.30,000 on Rs.25 lakhs of loans taken with outstanding loans of Rs.18,00,000. C is seeking help to manage his debt which has started affecting his ability to save for his goals. His monthly income is Rs.75,000.

i. He has to decide on closing out a credit card debt on which there is an interest cost of 2.5% per month. What is the annual cost of debt?

a. 34 percent
b. 30 percent
c. 2.5 percent

d. 18 percent

[Hint: ((1+monthlyrate)^12)-1]

ii. What is the debt servicing ratio given C's financial situation?

a. 14.4 percent
b. 20 percent
c. 4 percent
d. 40 percent

[Hint: Monthly debt servicing obligation/Monthly income]

10. F has a steady income and manages his expenses well to save for his goals. He has a moderate risk appetite and wants to identify the most suitable mutual fund products to meet his different needs and goals.

i. F wants to create an emergency fund that will take care of 3 months of expenses. Which of the following funds is MOST suitable for this?

a. Ultra-short duration fund, since it has low volatility
b. Short-duration fund, since it will give better returns with safety of debt
c. Target maturity funds, since they have no interest rate risk
d. Long-term gilt funds , since they give good returns with no credit risk

[Hint: Best suited for emergency fund]

ii. Given F's risk profile, which of the following fund categories is best suited for saving for retirement goal 20 years away?

a. Sector funds
b. Arbitrage funds
c. Multi-cap fund
d. Mid-cap funds

[Hint: Best suited for risk profile.]

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This workbook has been developed to assist candidates in preparing for the National Institute of Securities Markets (NISM) Level 1 Certification Examination for Investment Advisers. NISM-Series-X-A: Investment Adviser (Level 1) Certification Examination along with the NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination seeks to create a common minimum knowledge benchmark for individual investment adviser, principal officer of a non-individual investment adviser and all persons associated with investment advice.

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