CPFA

CERTIFIED PERSONAL FINANCIAL ADVISOR

FINANCIAL ADVISOR'S WORKBOOK

NiSM
NATIONAL INSTITUTE OF SECURITIES MARKETS
An Educational Initiative By SEBI

FPCIL

This Workbook has been jointly developed by the National Institute of Securities Markets (NISM) and Financial Planning Corporation (India) Pvt. Ltd (FPCIL) to assist candidates in preparing for the non-mandated Certified Personal Financial Advisor (CPFA) Examination.

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While the Certified Personal Financial Advisor (CPFA) Certification will be largely based on material in this workbook, NISM and FPCIL do not guarantee that all questions in the examination will be from material covered herein.

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In pursuance of the announcement made by the Finance Minister in his Budget Speech in February 2005, Securities and Exchange Board of India (SEBI) has established the National Institute of Securities Markets (NISM) in Mumbai.

SEBI, by establishing NISM, has articulated the desire expressed by the Indian Government to promote securities market education and research.

Towards accomplishing the desire of Government of India and vision of SEBI, NISM has launched an effort to deliver financial and securities education at various levels and across various segments in India and abroad. To implement its objectives, NISM has established six distinct schools to cater the educational needs of various constituencies such as investor, issuers, intermediaries, regulatory staff, policy makers, academia and future professionals of securities markets.

NISM brings out various publications on securities markets with a view to enhance knowledge levels of participants in the securities industry.

Financial Planning Corporation (India) Pvt. Ltd (FPCIL) was established by Financial Planning Standards Board India (FPSB India) along with BNP Paribas SA, SBI, and Tata AIG Life Insurance Co. Ltd, essentially to undertake education activities in the Financial Planning segment.

Globally, many leading financial service institutions are coming together to establish Financial Planning as a profession, and setting up standards in the discipline. FPSB India has been set up to achieve the same. The key objective for FPSB India to promote FPCIL has been to augment and enhance the scalability and quality of Financial Planning education across the financial advisory spectrum.

FPCIL shall continue various initiatives including knowledge workshops, seminars, and publications.

FPCIL aims to create new horizons based on collective and shared vision along with all the stakeholders. It shall aim to create new benchmarks for quality and performance in meeting its goals.

About the Certified Personal Financial Advisor

The examination seeks to create a common minimum knowledge benchmark for all persons involved in financial advisory including:

- Individual Financial Advisors
- Employees of organizations engaged in financial advisory services
- Employees of Asset Management Companies, Banks, Wealth Management companies especially persons engaged in financial advisory

The certification aims to enhance the quality of financial advisory and related services in the financial services industry. This examination is voluntary in nature.

Examination Objectives

On successful completion of the examination, the candidate should:

- Know the basics of financial advisory, steps in the advisory process, making and implementation of financial plan
- Understand how to evaluate different products, their suitability and how the recommendation of the same can impact investment risks, returns and strategies in a personal finance environment for investors and prospective investors in the market.
- Get oriented to the Income tax, Wealth tax and legalities of Estate planning in personal finance, and regulatory aspects underlying advisory.
- Get acquainted with financial planning as an approach to investing, insurance, retirement planning and an aid for advisors to develop long term relationships with their clients.

Assessment Structure

The examination consists of 60 questions each of 1 mark and 20 questions each of 2 marks, and should be completed in 2 hours. The questions will be of multiple choice type, each question having a set of four alternative choices. The passing score on the examination is 60%. There shall be no negative marking.

How to register and take the examination

For further information and Registration process for the examination please visit www.nism.ac.in

This examination is not a mandated examination under SEBI Regulations. It is purely voluntary in nature.

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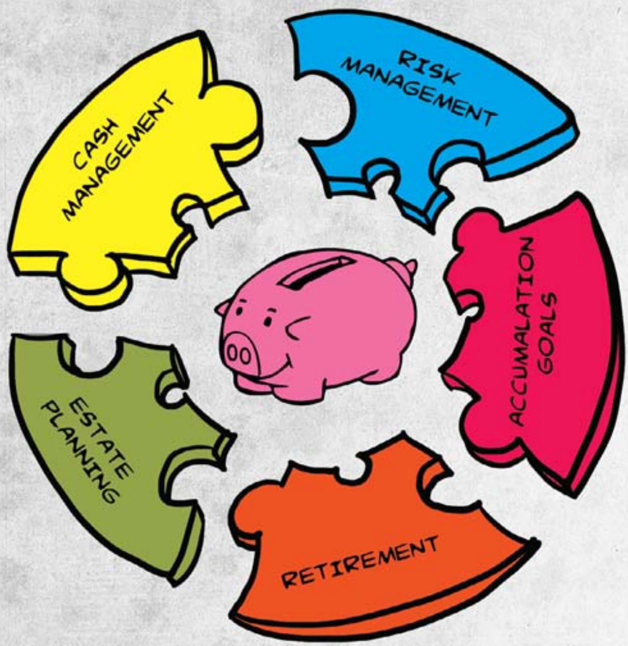

Unit 1: *Concept of Financial Planning*

Learning Goals

1.1 What is Financial Planning?

1.2 Need for Financial Advisory Services

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1.5 Understanding Client's Situation and Goals

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Introduction

Everybody earns money with an objective to fulfil one or many of one's life goals. People use money for purposes as simple as funding their daily household expenses to buying exotic luxuries for a better life. Money can be saved, accumulated and grown to fund various financial goals of a person; such as education, marriage, house purchase, retirement and even passing on as legacy to the next generation. So money earned is either used to fund some of the immediate expenses or some goal in distant future.

There are three ways of earning money: first, you earn a salary by rendering service to your employer; second, you earn a profit from your own business; and third, you invest and manage the surplus money and let it grow or give you an income.

When money earned is to fund one of the future goals, it needs to be invested in an optimum way to give maximum returns taking into consideration the individual's risk profile and time horizon of the goal and the taxation aspects related to personal finance.

In earlier days, managing money was not so difficult- high interest rates, assured return schemes, government sponsored retirement benefits, few financial products, a strong joint family system, a modest lifestyle and cost of living - all made it simple for a common man to manage his money without any external expertise. The economic and the personal finance landscape have changed drastically since the early 90's as the Indian Economy opened up and financial sector reforms were undertaken.

Considerable percentage of the Urban India now has a higher household income and disposable income. Interest rates on debt instruments have fallen from as high as 12% in the 90's to 7% - 8% today whereas inflation is also in the same range. The number of products and their complexity has increased considerably with no surety of returns. The manufacturers of financial products are generating a plethora of information on personal finance issues which need analysis from the viewpoint of risk, liquidity, and appropriateness apart from comparison within and across classes of such products. The cost of living and aspirations have gone up putting pressure on income, which has to generate the best return under the given circumstances. People have scarcity of time in managing their hard earned money. Moreover, the increasing complexity of financial products makes it imperative for an individual to seek experts' opinion in managing one's finances in a disciplined manner.

This is where Financial Planning as an approach to managing personal finances helps an individual to fulfil life's numerous goals with available resources. A qualified and professional financial advisor using the Financial Planning approach to offer solutions, products and services in a holistic manner to his/her clients can make a difference to their lives as well as earning an advisory fees for himself/herself.

This book will introduce the concept of Financial Planning and how to use it in Financial Advisory profession so that one can offer need-based solutions and products to his/her clients. This book will facilitate the transition from a product salesman into a trusted financial advisor.

1.1 What is Financial Planning?

A very commonly used definition of Financial Planning is "Financial Planning is the process of meeting one's life goals through the proper management of personal finances."
It's best to understand the above definition by breaking it up into three parts;

Financial Planning is a Process: Worldwide professional financial advisors follow a standard six-step process to deliver Financial Planning services consisting of:

1. Establishing and defining client relationship
2. Gathering client data, including goals
3. Analyzing and evaluating current situation and needs
4. Developing and presenting recommendations
5. Implementing the recommendations
6. Monitoring and reviewing the Financial Plan

Meeting one's Life Goals: Individuals and families have many goals in life to fulfil for which they will have to save, accumulate and grow their money. The most common life goals are:

1. Children's future including education and marriage
2. Buying a house
3. Comfortable Retirement

Other goals may include going on regular or one time vacations, purchasing a car/vehicle, corpus for starting own business and being debt-free (home loan, car loan), etc.

Management of Personal Finances: Financial Planning is all about managing finances of an individual or a family. It should not be mistaken for corporate finance although many of the concepts used in corporate finance are used in Financial Planning. While offering solutions to clients, the following aspects of personal finance should be analysed as a whole rather than seeing them in isolation:

1. Income
2. Expenses
3. Assets
4. Liabilities
5. Insurance
6. Taxation
7. Estate

1.2 Need for Financial Advisory Services

Factors driving the need for financial advisory services are many, including a strong economic growth experienced over the last two decades and rise in the income level of the people. The launch and availability of numerous life insurance products, mutual funds (MFs), and online stock broking is yet another factor for a common man to hire a Financial Planner who can guide him through the maze of products. Interest rates on the debt instruments have fallen over a period of time forcing the investor to seek other asset classes including equity in order to beat inflation. Therefore, most of the savings which were earlier parked in investments like fixed deposits, gold and real estate are finding alternate investment avenues for the twin purpose of generating appropriate returns and diversifying risk. In general, below are some of the common factors which have people to seek professional financial advisory services:

- ***Longer life span and lack of social security***
  People live longer now as compared to the earlier generations. Add to that the fact that most individuals have no retirement benefit when they retire from work. Few generations ago, someone would start earning by the time one reached the age of 20 years, work till the age of 58 years and live till around 65 years. In such a case, one earns for 38 years and lives off the retirement savings for the next 7 years. Fast forward to recent times, one starts working at 25 years of age after completing post graduation studies. Many are quitting their jobs earlier, but let us consider a retirement age of 60 years and life span of 80 years. That means, one works and earns for 35 years to support post retirement life of 20 years. The scales have really tilted.

Add to that the fact that earlier, in most jobs (including private sector), pension was a given thing. Now, in most jobs (including Government jobs), “no pension” is the norm.

If finances are not planned properly, the retirement years could be very challenging.

- ***Proliferation of numerous products***

  Life Insurance industry was opened to private players in the late 90’s. This led to proliferation of insurance products which are predominantly investment oriented. Though the Life Insurance Corporation of India (LIC) continues to dominate the life insurance industry business, new players have caught up considerably with their product innovation, aggressive marketing and new distribution channels. In the Mutual Fund industry, with over 35 Asset Management Companies (AMCs), the growth has been moderate to good with product innovations and increase in reach to a wide geography and class of investors. Many products and services have also been introduced by the banking industry which has contributed in the availability of choices for the financial consumer.

  There is also a reduced attractiveness of the traditional products, e.g. tax-free RBI relief bonds

- ***Complexity of products & services***

  Innovation can lead to either simplicity or complexity. In the financial services industry, however, the innovation has made the products increasingly complex. An investor today can participate in the equity markets simply by investing in a mutual fund scheme through a Systematic Investment Plan (SIP), but it is still a challenge for many in understanding how mutual funds actually work, and how market forces impact various products differently. An investor today can have both insurance and investment in a single product called ULIP (Unit Linked Insurance Policy), but appreciating his actual need for insurance and a return on investment as well as analysing various components and charges of a ULIP product is a detailed process. Investors need informed guidance on making a finance sense out of what is being offered to them as investment or insurance, in order to achieve their financial goals.

- ***Increasing income and savings levels***

  Indian Economy has been growing at a 6% - 9% rate of GDP growth driven mainly by domestic consumption. The educated and urban middle class has experienced increase in income levels. At the same time unlike our counterparts in many of the developed countries, Asians, and especially Indians believe in saving money. India has a considerable household savings ratio which is more than 25%. Here again investors need guidance to channelize their savings.

- ***Increasing level of borrowings***
  In today's financial markets there is an easy access to loans resulting in increased levels of borrowings by people. If not managed carefully this leads to a serious mismatch in earnings and repayment leading to problems in cash flow. Leveraging the low interest rates is a critical aspect which needs to be explained to the borrowers.

- ***Higher aspirations and goals***
  The days of building a house at retirement with accumulated savings and retirement benefits are over. With access to easy credit at a fair rate of interest and a capacity to repay that loan, given higher income levels, people want to buy house at a younger age. The lifestyle and aspirations have gone up significantly. People want to give the best education to their children, go on regular vacations, buy apartments in up-market localities and want to be financially independent in their post-retirement phase.

- ***Inflation***
  Many times, prices of household items rise at a slow pace and hence go unnoticed. In such a case, it is natural to ignore the impact of such increasing costs over one's life time. A well written financial plan will always consider the impact of inflation and have safeguards built in.

- ***Nuclear families***
  Joint families provided great safety net for most individuals as it shared the resources and difficulties. Now with growing urbanisation leading to nuclear families, these smaller families have a need to plan better. They can no longer depend on the support of the larger family since they might be geographically distant.

- ***Plethora of Information***
  Today, thanks to television, internet and press, there is profusion of public information on various personal finance topics to the investors and consumers. The media has made a huge impact in the availability of financial information and analysis on real time basis to consumers. Although this has helped many investors to take measured investment decisions, others are exposed to many new concepts and terms leaving them more confused than before. Also there is a dearth of availability of relevant information to the investor enabling him to take the right investment decisions. Since many of this information are disseminated in smaller bits,

the consumers/investors need expert financial planner who can put it all together and give need based advice.

1.3 Scope of Financial Advisory Services

Financial Advisory in general has a very wide scope and encompasses all the areas of personal finance. Financial Planners can offer any one or all the services based on what the client needs and also based on what the planner is capable of offering in terms of his tie-ups with product manufacturers, education and regulatory framework. The scope can be bifurcated into pure advisory services and transaction based services as follows:

Advisory Services

• ***Insurance Planning***

Insurance Planning is determining the adequacy of insurance cover required by the client to cover the risk associated with one's life, medical emergencies and assets. While offering Insurance Planning services, a Financial Planner should address the following requirements of his clients:

- In case of pre-mature death of the bread-winner of the family, the family's income will stop or reduce to a great extent. In such a case, the family will have to depend on some money that can generate income to at least cover the expenses, commitments and liabilities for the rest of their life. How much would the amount required?
- How much of health insurance is required to protect a client and his/her dependents to meet with a medical emergency?
- Which type of accident policy and critical illness policy will suit the client?
- Is there a need to have insurance of household goods?
- Determine whether the client has adequate insurance or not. Also determine if the client is over-insured.
- What are the risks to the client's (or family's) income earning capacity?
- What are the risks of loss with respect to the assets owned by the family?

• ***Retirement Planning***

Retirement Planning is determining how much of corpus is required to fund the expenses during the retirement years and ways to build that corpus in the pre-retirement period. It also dwells upon the utilisation of the corpus accumulated during the retirement years. And while offering the service to a person who has already retired, a planner can offer investment advisory services to help client generate required income from the retirement corpus and also manage the investment portfolio. While offering Retirement Planning Services, a Financial Planner should address the following questions of his clients:

- What is the retirement corpus required to lead a similar lifestyle after retirement?
- How will inflation affect the sustainability of Retirement corpus in post-retirement years?
- What are the various options and what is their role in investments for retirement?
- Is there scope for early retirement, or retirement is postponed due to inadequate corpus?
- What additional investments should be made to build retirement corpus?

• ***Investment Planning***

Investment Planning* determines the optimum investment and asset allocation strategies based on the time horizon, risk profile and financial goals of the client. There is a wide range of investment options available today. A Financial Planner offering Investment Planning services should understand and analyze various asset classes as well as the products available under each asset class before recommending an investment strategy to the client for achieving financial goals. While offering Investment Planning Services, a Financial Planner should help answer the following questions pertaining to a client:

- What are the life goals? How can these be translated into financial goals?
- What is the client's risk profile?
- What is the time horizon available for investments?
- What should be the ideal Asset Allocation?
- Which asset allocation strategy should be followed?
- How to achieve diversification of investments?
- What is the investment objective – 'income', 'growth' or just capital protection?
- How much to invest either in a lump-sum or regularly to achieve the given goal?

(*For detailed discussion refer to Unit 5-Investment Strategies)

• ***Tax Planning & Estate Planning***

Tax Planning includes planning of income, expenses and investments in a tax efficient manner to gain maximum benefit of prevailing tax laws. The following questions pertaining to a client need to be answered:

- Is the client making optimum use of all available tax benefits?
- How to lower the tax liability? How to increase tax-adjusted returns on investments?
- What are the changes in tax laws that may affect cash flows, investments and savings?
- What is the effect of capital gains on investments?
- How to calculate tax liability for the previous year?
- How to avoid just the year-end tax saving and do strategic tax planning?
- Which investment option to choose amongst the various options available u/s 80C of the Income-tax Act, 1961?

- ***Comprehensive Financial Planning***

  Comprehensive Financial Planning is the act of planning for and prudently addressing life events. It addresses everything from buying a new car or home, to planning for a child's education, preparing for eventual retirement or creating a plan for your estate. But it goes well beyond these basic life events. It addresses the planning part of all major financial transaction which has a bearing on long-term finances, cash flows and asset creation. While the financial goals are met at different time periods, the associated liability and risk to life and assets are to be adequately covered with tax efficiency of financial transactions. A Financial Planner offering comprehensive Financial Planning should offer customized advice to help his/her clients meet their goals and objectives.

- ***Transaction based services:***

  While a Financial Advisor may charge a professional fee for the above mentioned advisory services, he/she may also opt to provide advisory as a complimentary service while earning a commission on the product sales that take place when the client implements the advice through him. Below are some of the transaction-based services a Financial Planner can offer:

- Life Insurance products
- General Insurance products
- Mutual Funds
- Stock broking
- Others:

  Other products that may be offered by a Financial Planner are:
  - Banking products – Loans & Deposits
  - Post Office Savings Schemes
  - Public issues of shares, debentures or other securities (popularly known as IPOs)
  - Corporate Deposits

1.4 Financial Planning Delivery Process

Financial Planners around the world practise the following six-step process while delivering their services. A Planner may adopt these steps to streamline the service delivery model for their advisory practice.

1. Establishing Client-Advisor Relationship
A Financial Planner should start off by explaining the scope of his/her services and ascertain the specific services the client may need. The responsibilities of both the Planner and the Client need to be defined with any situation of conflict of interest. Planner may also at this point discuss the remuneration structure and the professional fees.

2. Understanding Client's Situations & Goals
A Financial Planner should then help client define his/her financial goals and objectives, income and expenditure patterns, assets and liabilities and discuss, if relevant, client's past experience with managing money and investments.

3. Analyzing client Financial Advisory needs
A Financial Planner after collecting data and information should assess the current situation and make an analysis of Financial Planning needs. Depending on scope of services, this could include analyzing assets, liabilities, income, expenses, cash flow, current insurance coverage, salary structure, investments, tax strategies, etc.

4. Developing Recommendations and Strategy
Based on analysis and application of Financial Planning concepts, advisor should recommend goal oriented strategies and action plan. The client is then guided through the strategies to help him make informed decisions.

5. Offering the Right Products and Services
Planning without action is a futile exercise. In this process, the Planner guides client to implement the specific action points from Step 4, by suggesting the right financial products encompassing life insurance, general insurance, mutual funds, stock portfolio, deposits, etc.

6. Monitoring the Performance
The real success of the advice lies not just in making good recommendations but on achieving the desired outcomes by implementation of those recommendations. We live in a dynamic world with constant changes in economic environment, change of goals, launch of new financial instruments, etc. Therefore, the advice needs to be monitored, reviewed and aligned to these changes on an ongoing basis.

1.5 Understanding Client's Situation and Goals

Net Worth Statement (Assets & Liabilities)

What is Net Worth?

Net Worth is the financial position of the client at a point of time and is measured by his total assets less total liabilities. The statement of net worth (also known as the balance sheet) summarises a person's financial condition at a certain point of time, i.e. as on date. It represents what a person owns – the assets, against what he owes – the liabilities or debt, and what he is worth – his net worth.

One fundamental relationship that we need to understand is popularly known as accounting equation or accounting equation of the balance sheet. It states:

$$\boxed{\text{NET WORTH} = \text{ASSETS} - \text{LIABILITIES}}$$

What you own   What you owe

One can monitor the improvement in financial position by comparing the net worth statements at different points of time. Any major deterioration or increment indicates that steps must be taken to alter the overall financial plan.

ASSETS

Generally speaking, as per accounting terminology, assets mean economic resources, which could be tangible or intangible and which are capable of being owned or controlled to produce value or provide services.

In other words, assets represent ownership of value (economic) which can be converted into cash or cash equivalent. (Cash is also considered as an asset).

The asset classes pertaining to an individual may be broadly classified under the following heads:

1. ***Cash and cash equivalents*** — it is the most liquid asset, which includes currency, deposit accounts, and negotiable instruments (e.g., money orders, cheque, bank drafts).

2. ***Short-term investments*** — include investment options bought and held for sale or till maturity in the near future, i.e., from 3 months to a year. Such investments are done to make cash available in near future without taking risk of capital depletion while generating a small surplus on investment.

3. ***Long-term investments*** — such investments include investment options which are likely to generate a significant surplus over a medium to long horizon, ranging between 1 – 3 years and 3 – 10 years or even beyond. These investments are targeted to achieve a financial goal in future and can entail a risk which is commensurate with substantial gains expected from them. They are created either as long-term investments or for self-consumption such as a house. Such investments can be in land, housing unit, shop or other real estate property, plant or machinery, etc. Such fixed assets can be used for self or can be rented to generate income. The value of land though may appreciate substantially over long time; the establishment made thereon may depreciate over time due to wear and tear. Such investments usually make a fair part of an individual's Net Worth

Various Investment Asset Classes

There are two major asset classes: physical and financial. Physical assets are tangible which one can touch and feel and see. Financial assets are paper assets (in fact, these days, they are only in electronic form).

- ***Real Estate:***
  Real estate involves investing in a property either to generate regular rental income and/or for capital appreciation. It is one of the most illiquid assets and requires huge investment.

- ***Commodities:***
  As shown in the diagram, there are broadly three types of commodities, viz., metals, petroleum products and agricultural commodities. One can buy these commodities in physical form, which may involve storage related costs, risks and work. In India, there are a few commodity exchanges where derivative contracts on such commodities are traded, that allow

someone to either hedge the portfolio or speculate on the prices of such commodities.

While one can take exposure through derivatives in case of most commodities, gold is one option, which is considered as a form of investment by many since ages.

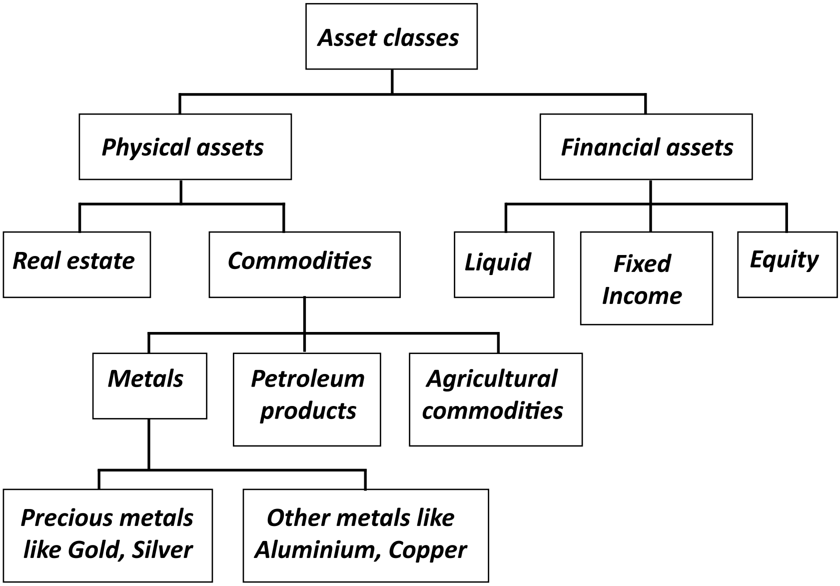
Gold is a highly sought after metal. It has the potential to beat inflation over a long period. It is a safe haven when things go havoc. As an investment, one can purchase it as coins, bars, jewellery, or through mutual funds known as gold ETFs (Exchange Traded Funds). Similarly Silver is also a very precious metal as it has many industrial usages as well as usages in handicrafts and is in short supply, explaining its worth.

- ***Liquid:***
  The main criteria being their "liquidity"- being able to cash them at any point in time without any erosion in principal value invested and without a significant transaction cost. Liquid assets are usually those which involve low risk and low returns.

  The most popular form of liquid investment is a short term bank deposit. There are options under mutual funds also known as liquid mutual funds or money market mutual funds.

- ***Debt:***
  Debt investments provide investors with regular income and are also known as fixed income instruments. They normally have a fixed rate of return and tenure, e.g. NABARD, PPF, Bonds, and Bank Fixed Deposits. There are, however, certain options which may not offer regular income and some options may not have a fixed tenure. In this category also, mutual funds are available.

- ***Equity:***
  Investing in the equity of a company means owning a part of the company through its equity shares. This is one of the most volatile investment class. E.g. Stock of a company, Units of an equity mutual fund scheme. Long term investments in equity schemes do have the capacity to generate returns which can beat inflation or even be higher than other asset classes.



Common Liabilities:

- ***Home Loan:***
  Buying a house usually entails a lot of money. Accumulating such large sums of money may take several years or even a couple of decades in some cases. The value of land and housing units may also rise substantially in the meantime, making the investment accumulated to fall short of the target. This apart, a person desiring to own a house may lose many years and may incur higher and unproductive costs of alternative accommodation. Taking a housing loan to finance a major part of value involved at an affordable cost is therefore desirable. This is because the loan is used to create a long-term asset which is most likely to appreciate in value larger than the cost of loan incurred during the period. One can then take a loan from a housing finance corporation or a bank and own the house. The repayment of borrowed amount is usually over a long period, 10 to 20 years, by way of Equated Monthly Instalment (EMI), each of which repays a part of principal after paying interest on the loan outstanding. The loans may be fixed or floating rates in nature. Subject to certain conditions there are benefits provided on home loans by the Income Tax Act, 1961.

- ***Auto Loan/Car Loan:***
  Such loans are taken against the purchase of a vehicle, motorbike or car. It is mostly a short term liability say 3-5 years. There are no tax sops on auto loans.

- ***Personal Loans:***
  Personal loan has the highest rate of interest as it is an unsecured loan. The rate may be as high as 18%-22% p.a.

- ***Credit Card Loans:***
  Credit card loans are those which come up while buying goods on credit cards, and the whole amount incurred is not paid at once and is rolled over. Cash can also be withdrawn on a credit card which starts incurring interest from the date of withdrawal apart from huge transaction costs. The cost of interest on credit card loans is generally higher than even on personal loans.

- ***Educational Loans:***
  These loans are available for education both within and outside the country. They can be paid off once the person finishes the course or starts earning after the completion. There can be tax deductions that can be claimed on the repayment of interest.

- ***Loans against securities / insurance policies / gold / fixed deposits:***
  People also opt for loans against their existing investments like securities, insurance policies, PPF, gold, fixed deposit etc. These loans are short term in nature enabling the borrower to meet their short term needs thereby providing better cash flows without diluting their investments.

- ***Overdraft facility:***
  Overdraft facility is availed by a person having current account in a bank over and above the available credit balance. The loan may be secured or unsecured in nature. This facility is generally used to meet very short term liabilities by the account holder. The drawings can be made to the extent of the sanctioned limit and interest is charged as per the prevailing rates and terms.

Making Sense of the Net worth Statement:

A Net Worth statement is a summary of the total assets and liabilities and gives a net positive/ negative figure of an individual's current financial position. It must be updated periodically (at least once a year).

See an example of a Net worth Statement on the next page.

Personal Assets	**(In Rs.)**
Self occupied house	50,00,000
Jewellery – personal effects	10,00,000
Liquid Assets	**5,00,000**
Savings Bank	2,00,000
Cash in Hand	50,000
Total Liquid Assets	**7,50,000**
Fixed Deposits	5,00,000
PPF (Public Provident Fund)	4,00,000
EPF (Employee Provident Fund)	6,00,000
Insurance Policy Surrender Value	45,00,000
Bonds/Debentures/CDs	20,00,000
Total Debt Assets	**80,00,000**
Direct Equity	40,00,000
Equity Mutual Funds	60,00,000
Total Equity Assets	**1,00,00,000**
Gold	**0**
Real Estate investments	**1,00,00,000**
Assets (Personal + Investments)	**3,47,50,000**
Liabilities (Outstanding)	**0**
Home Loan	20,00,000
Vehicle Loan	0
Personal Loan	0
Other Loans	0
Net Worth (Assets -Liabilities)	**3,27,50,000**

Another variant of Net Worth is Cash Net Worth, which does not take into account the value of the self-occupied housing unit.

Income and Expenditure Statement

An Income and Expenditure statement shows the incomes and expenses incurred for a particular time period. It displays the revenue and the expense incurred to earn that revenue. It highlights if the person has positive or negative cash flows.

Various Sources of Income

1. Salary income
2. Business/Professional Income
3. Rental Income
4. Investment Income

Types of Expenditures

1. Household expenses
2. Lifestyle expenses
3. Insurance Premiums
4. Loan EMIs
5. Others

Financial Ratios related to Net Worth

1. Liquidity Ratio:

Liquidity Ratio: Current Assets/ Current Liabilities

This indicates what percentage of assets are cash or can be converted into cash within a short period. This liquidity in a portfolio is a must in case of an emergency. A higher ratio however is detrimental since it implies that there is idle cash lying around and one may be missing investment opportunities. A lower ratio is also not good since it means most of the assets are locked up and hence, in an emergency one may have to rely on costly borrowing options, or liquidating long-term assets at significant losses.

Financial advisors may keep in mind that under emergency conditions, there is an option to borrow against long term assets in the portfolio, which can be pledged temporarily.

2. Savings Ratio:

Savings Ratio: Savings / Income

This ratio indicates what percentage of income is being saved. Higher the savings, higher will be the ratio.

3. Debt Equity Ratio:

This ratio indicates what percentage of the portfolio is in less risky debt based and liquid assets and what percentage is in risky and volatile assets. Generally, financial advisors try to maintain it in line with the investor's needs and risk taking capacity.

Life Goals & Financial Objectives

An individual works for almost 40 years on an average of his life to ensure his goals/ dreams are fulfilled. The dreams become goals once he puts numbers to them and years to them- these may be estimates; but these motivate him to save more and invest better to ensure he meets his goals, makes his dreams a reality. Some of the major and minor goals in an individual's life are listed below.

Major Goals in Life
- Children's Education
- Children's Marriage
- Buying a House
- Independent Retirement

Minor Goals in Life
- Home Renovation
- International Vacations
- Car Purchase
- Holiday Home
- Corpus for Start-up
- Family Gifting
- Other Big Purchases

Other Financial Goals
- Reducing Tax Outgo by Tax Planning
- Protection of Assets & Life
- Being Debt-free
- Charity work

1.6 Client's Investment Risk Profile

The concept of "risk" is nothing but a simple form of deviation of the actual outcome from the expected outcome. The more the deviation, the higher the risk, or variance

Following on from this investment concept, "aggressive" or "high risk" means that an investment can potentially achieve higher returns because of greater volatility. In contrast, "low risk" or "conservative" means that the investment will trade close to its historical average prices and will tend to be quite stable.

Risk Tolerance is about how much risk a person can take before the same can impact his decision.

Factors affecting Risk Profile

The following test and many others like it tend to concentrate on finding the investor's age, regularity and sustainability of income, family situation, current financial picture, and overall tendencies and investment disposition. Another important element in figuring out the investor's understanding, level of sophistication and experience with investing. These factors help formulate a customised investment strategy for the investor.

As a starting point, here is an example of some of the questions that may be asked to determine an investor's risk appetite (this is not exhaustive):

1. Indicate your age group
- Over 50
- 40-50
- Under 40

2. Indicate your monthly income group
- Below 40,000
- 40,000 – 60,000
- Over 60,000

3. In your opinion, how long are you willing to support your dependents?
- More than 10 years
- Up to 10 years
- Will not support

4. How do you see the security of your job or business over the next 5 years?
• Not good
• Satisfactory
• Very Good

5. Which description fits you best?
• Conservative, worry about money
• I like things to go according to my plans – I like to be in control
• Very comfortable in taking a calculated risk with money

6. How long are you planning to keep invested?
This will determine the duration of your investment. Typically, you should consider your goals to have the following durations:
• Short term – 1 to 3 years (before you need the use of your money)
• Medium term – 3 to 7 years
• Long term – over 7 years

7. What is your aim?
• Income
• Growth

8. Do you need quick access to your money?
• Yes
• No

1.7 Analyzing Client Needs

Contingency Funding

A contingency funding plan aims at keeping aside funds for emergencies. Normally, 4-6 months' expenses should be put aside so that they can be liquidated at a short notice. These can be divided between the bank account and some liquid funds.

Insurance Planning & Risk Management

• Life Insurance

Life Insurance is planning for a situation when the individual on whom the family is dependant for fulfilment of their goals is not alive. One's life should be insured according to need based approach or other approaches considering one's family's expenses and future goals. The individual would have contributed to the savings over years and this income can be protected by taking insurance on his/ her life. Being under insured or having no insurance might leave the family/ dependants in a dire situation. Each earning member of the family has economic value and such a member is an ASSET to the family. Hence he or she should be adequately insured to protect the economic value of the "asset." All liabilities, for example, home loans must be insured separately anyway.

In case of death, the family may incur two types of losses: financial loss and emotional loss. Whereas the latter happens in all cases, the former happens if an earning member of the family dies. Life insurance helps the family overcome this financial loss. The needs analysis involves estimating the financial loss the family is likely to incur. (For detailed discussion, please see topic 6.3 in Unit 6)

• Health Insurance

Health costs are rising and critical illness/ surgery might cost a fortune today. It might set an individual's plan awry. Some important goal may need to be postponed if a family member has to be hospitalised. Health insurance makes sure that this does not happen to you. The bills are taken care of by the insurer and you can continue with the plans/goals you set for your life.

How much health insurance cover to take is largely a function of an estimate of expenses that one may incur on certain treatments as well as certain incidental expenses on account of such medical condition.

• Insuring Physical Assets

Physical assets such as household goods, jewellery, vehicles, bullion etc must be insured for their current value against fire, theft, burglary, etc. These assets are valuable and hence must be insured for the value they can be replaced with today. In case of housing unit, however, a major portion of value is accounted for by the cost of land which appreciates substantially over time. The land cannot be destroyed by fire and some natural calamities such as earthquake and storm, but the construction thereon may get damaged considerably involving a huge cost for its restoration. Hence, housing unit should be insured to the extent of current construction cost, and not the cost of buying a house (inclusive of land), which would result in over-insurance, or historical cost of construction, which may result in under-insurance.

• Accident / Disability Insurance

These policies provide insurance cover if the insured is temporarily and partially disabled, permanently and partially disabled and also if totally and permanently disabled.

Most such products compensate the insured for the loss of income on account of disability. The financial advisor has to help the client in assessing the amount of cover to be taken.

Investment Need Analysis

• Utilizing Time Value of Money

Time value of money is the concept that teaches us that Rs. 100 in hand is better than Rs. 100 after 2 years, as the interest on this Rs.100 can be earned in 2 years, thereby making it more valuable. Hence, investing today is important and one should not let money remain idle for long.

• Estimating Future Value of Goals

When an individual is planning for future goals, it becomes important to plan for their future value rather than their current value. Inflation is a very big factor in this. The goal which may be fulfilled today by Rs. 5 lac may need Rs. 10 lac after 10 years due to inflation. If we plan for accumulating Rs. 5 lac, the goal will not be met adequately.

• Determining Investment Needs

Why does one need to invest? To meet a future need. A person sacrifices use of money today for a higher gratification at a later date. Identify the need/ goal and you can evaluate where the investment needs to be done.

• Lump-sum Investments & Regular Investments

As and when a person is in receipt of lump-sum monies, he should ensure he is investing it according to his requirements. Apart from this, there should be a regular investment being made to ensure he is disciplined in his saving habits.

Financial Cash Flows and Budgeting

• Budget

A budget is a list of planned expenses and revenues. One should ensure that there are also budgets for some items to splurge on and those that provides for some emergency situations.

• Cash Flows

A cash flow is a revenue stream usually arising from multiple entries of inflows and outflows, i.e. income and expenses.

• Keeping Cash Flows Positive:

It is important to have a positive cash flow at all points of time else it indicates you are using your investments to meet regular requirements, which should only happen during retirement; not otherwise.

1.8 Recommending Investment Strategy

Understanding Various Asset Classes

As seen earlier, there are various investment options having different features. A financial advisor's role is to suggest the appropriate investments based on the needs of the investor.

After analysing the needs of the investor as outlined in the previous paragraph, the advisor then recommends an investment strategy.

For example, if the investor needs to grow the value of investments over long period of time and to beat inflation, the advisor is likely to suggest investing a good amount in equity related avenues. If the investor needs to withdraw money from the investments within a very short period, liquid investment option is the ideal choice.

The investment plan recommends how much money should be invested in which options and how such allocation should be changed over a period of time. Such a strategy is commonly known as asset allocation.

Asset Allocation

Asset Allocation decision is the most important decision while designing the portfolio. In fact folio's long term return characteristics and risk level are determined by the asset allocation. The asset allocation depends on a lot of factors specific to an individual such as his age and risk profile, nature of goal – short-term or long-term, sensitivity of goal to be achieved, as well as certain external factors like stock market and interest rate scenario in the period to achieve a particular goal, etc. The other factors like scheme selection, etc. contribute, but to a much lesser effect. If you have your asset allocation right and stick to it, most of your problem is solved. For example, considering the returns from equity and debt classes over the last 5 years, if you had chosen entirely equity, you would have got 20.73% Compounded Annual Growth Rate (CAGR); however, if it were entirely debt, the return would be 6.67%. The difference is huge. So, even if you got the 10th best scheme in respective classes, you have gained to the extent of 15% to 18%, from investment in equity vis-a-vis debt. In return for the higher returns, the investment value fluctuated a lot more than the debt options. However, instead of entirely equity or entirely debt, a fair asset allocation needs to be determined for achieving a specific goal. Such allocation is decided based on how much return one needs to earn as well as the ability and willingness of an investor to withstand the fluctuations in the market price of investments. For short durations, equity is highly volatile and may even result in losing capital invested. On the other hand, over long periods, equity has the potential to beat inflation, whereas debt may provide less than inflation returns after taxes. That is why, a predominantly debt portfolio is recommended for near term goals, a balanced portfolio for medium term goals and a predominantly equity portfolio for long to very long-term goals.

Asset Allocation is also important because it is not possible to be invested in the best asset class at all times. Whereas the occasional rewards could be huge, the cost of a mistake could be very large.

All assets in your portfolio will not be impacted to a similar extent by the same factor. So, if the portfolio has a mix of unrelated assets, fluctuation in the value of one asset class tends to cancel that in another, thus reducing overall fluctuation in the portfolio's value. Advisors also insist on consistently sticking to the asset allocation, which requires periodic rebalancing. This means, if the value of one part of the portfolio rises faster than the other, the advisor recommends that the money be shifted to restore the original asset allocation. For example, let us assume that an investor started with 50% allocation each between equity and debt. After a year, equity market gave 50% appreciation, while debt moved up by 5%. In such a scenario, the balance is tilted in favour of equity. The advisor will now recommend that part of equity portfolio may be sold and the proceeds may be used to buy fixed income assets. Thus, there is an automatic profit booking when the equity prices rose very fast. In another scenario, if the equity prices rose less than debt prices or went down, the advisor would suggest selling some part of the debt portfolio and buy equity. Thus, equity is bought when the prices are low.

Asset Allocation Strategies

- ***Strategic Asset Allocation***

  This is a portfolio strategy that involves sticking to long-term asset allocation.
- ***Tactical Asset Allocation***

  An active portfolio management strategy that rebalances the percentage of assets held in various categories in order to take advantage of market pricing anomalies or strong market sectors.

  The major difference between the two is that strategic asset allocation ignores the anomalies in the stock or bond or other markets and focuses only on the investor's needs. The assumption here is that asset allocation ensures the plan would perform in a more predictable manner helping the investor reach the financial goals comfortably. Proponents of tactical asset allocation believe that the various markets keep offering opportunities than can be exploited to enhance the portfolio returns.

  It is for an advisor to decide which one to follow based on one's beliefs and abilities. If the advisor believes that there are inefficiencies in the market and also believes that one has to ability to exploit those, one may resort to tactical asset allocation. However, the believers of efficient markets usually stick to strategic asset allocation.

1.9 Implementing the Advice with Right Products

Products Available in Each Asset Class

No	*Liquid*	*Debt*	*Equity*	*Real Estate*	*Gold*
1	Cash in hand	Fixed deposits (> 1 year)	Shares	Property	Gold Coins, Bars, Jewellery
2	Savings bank	PPF	MF	REMF*	Gold ETF
3	Liquid Funds	EPF		REIT*	
4	Ultra Short term funds	Debt Mutual Funds			
5	Fixed deposits (<1 year)	Bonds / Debentures			
6		Company Deposits			
7		Post office schemes			

* REMF and REIT are not available in India at present.

Creating and Implementing Action Plan

No.	Action to be taken	Purpose	Amount	Timeline
	Investment Planning			
1.	Start a Monthly SIP of Rs. 3,000 in Diversified MF/ ETF Portfolio			
2.	Start a Monthly SIP of Rs. 5,000 in Diversified Equity MF/ ETF Portfolio			
3.	Start a Monthly SIP of Rs. 5,000 in Balanced MF Portfolio			
4.	Invest Rs. 15, 000 in Diversified Equity MF/ETF Portfolio (Create a Systematic Transfer Plan)			
5.	Re-build your Equity Portfolio as recommended (ETFs suggested)			
	Insurance Planning			
1.	Buy Family Floater Mediclaim Policy	Health Insurance		
2.	Buy Critical Illness Policy	Critical Illness		
3.	Buy Personal Accident/ TTD Policy	Accident-Death/Disability Benefit/ TTD Policy		
4.	Buy term insurance plan to cover the life of the earning member	Life Insurance		

1.10 Monitoring & Reviewing Periodically

Reviewing the Plan Periodically

Why?

A periodic review helps understand where the individual is vis-a-vis where he should have been; what corrective measures need to be taken (if any); should there be change in asset allocation, re-do the plan in case the goals have changed. It helps in changing the course at an early stage rather than opt for corrective measures later.

When?
A periodic review of the financial plan can be done once every year, although the portfolio needs to be regularly monitored, preferably on a quarterly basis.

Situations Triggering Plan Reviews

Client Level Changes: When there are changes in the individual's life, his job changes/ increments/ loss, if any of his goals have been achieved; if there have been birth or death in his family, or change in the family size on account of marriage; it makes sense to re-look at the goals and re-set the plan.

Macro Level Changes: Whenever there are changes in the macro environment, the individual's plan may need to be relooked at. For example: if tax laws have changed, then the recommendations/ portfolio may need to change. One's plan must be re-looked at to ensure that one is taking advantage of the new regulations. In case inflation has been too high or too low, i.e. far from what the planner may have assumed, there may be a need to relook at the goals, their future values and the asset allocation required to achieve them. Some of the external factors which need to be considered for effecting changes in an individual's financial plan are:

- Inflation
- Interest rates
- Stock Markets
- Regulations
- New Products

Review Questions
Questions to assess your learning:

1. Which of the following is not a feature of personal Financial Planning?

a) Risk profiling of client
b) Defining a basic asset allocation for the client
c) Monitoring achievement of goals periodically
d) Churning investment portfolio often to achieve best returns

2. Which of the following is not directly linked to achieving a financial goal?

a) Cash Flow management
b) Taking a risk cover
c) Investment Management
d) Retirement Planning

3. Which of the following best defines Financial Planning process?

a) Managing finances while managing risks as well in meeting an individual's financial goals
b) Managing investments dynamically to achieve best returns
c) Managing finances with least risk so that financial goals do not suffer due to investment and market risks
d) Accumulating appropriate sums to achieve goals of life without resorting to borrowings

4. Following is the most important determinant for an investment plan to achieve the desired goal.

a) Choosing the best investment product
b) Choosing the asset class giving best returns
c) Choosing an asset allocation appropriate to one's situation
d) Managing investment portfolio through tactical asset allocation

5. Calculate the Net worth of Ramesh with the financial details as: House worth Rs. 50 lac, Housing loan outstanding Rs. 26 Lac, Mutual Fund investments Rs. 6 Lac, PPF Rs. 6.5 Lac, Cash and bank deposits Rs. 1.8 Lac, personal loan Rs. 1.3 Lac, Gold & jewellery Rs. 3.2 Lac.

a) Rs. 37.00 Lac
b) Rs. 40.20 Lac
c) Rs. 35.20 Lac
d) Rs. 33.70 Lac

Unit 2: *Managing Investment Risk*

Introduction

This unit deals with the definition of risk, types of risk and the different sources of risk. Total risk equals the sum of systematic and unsystematic risk. Measure of total risk is called standard deviation, measure of systematic risk is called beta and unsystematic risk is known as diversifiable risk. This unit also discusses the various sources of risk like interest rate risk, inflation risk, default risk, liquidity risk, call risk, re- investment risk, regulatory risk, political risk, tax risk, business risk and investment manager risk. How to measure risk? This is an important aspect to be understood and how important measures like variance, standard deviation, co variance, correlation coefficient and beta aid in the measurement of risk. Along with the calculation, their interpretation is also of great consequence in taking a financial decision. Understanding different products available in the market and their risk-return aspects are also discussed. We also need to understand the importance of asset allocation and diversification, different kind of diversification along with the benefits of hedging. This unit also covers how to manage the risks.

Learning Goals

2.1 ***Review*** Types of Risk – Market Risk (Systematic and Unsystematic), Reinvestment risk, Interest rate risk, Purchasing power risk, Liquidity risk, Political risk, Exchange rate risk, Inflation Risk, Tax Rate Risk, Investment Manager (Alpha)

- ***Define*** Risk and its types relevant to a client's situation
- ***State*** the management of the risks for client in different time horizons
- ***Explain*** the concept of alpha and Beta and their exposure methods

2.2 ***Indicate*** how to Measure Risk – Concepts and applications of Standard deviation, Beta including portfolio beta, Variance, Semi-variance and Covariance, Coefficient of Variation and correlation, Probability, Mean, Median and Mode

- ***Explain*** the importance of risk measurement
- ***Define*** Standard deviation, Beta including portfolio beta, Variance, Semi-variance and Covariance, Coefficient of Variation and correlation coefficient

2.3 ***Summarize*** - how to manage Risk – Diversification (Types, Product, Time, Diversifiable and un-diversifiable risk), Hedging

- ***Define*** diversification
- ***State*** Types of diversification
- ***State*** products to use to diversify e.g. ETF, Index Fund, etc.
- ***Critique*** on how much risk can be diversified and what is un-diversifiable risk
- ***Outline*** hedging for client's portfolio

2.1 Risk and Types of Risk

Risk

When we cross the road we intend to reach our destination but because we cross the road, there is a chance of meeting with an accident. In other words, there is a possibility of not reaching your destination- this deviation from desired outcome can be termed as risk. In most financial literature, the two terms – "Risk and Uncertainty" are used interchangeably. For most of the Investors, Risk means the uncertain future outcomes or it can be said, a future outcome that is different from expected outcome.

Sources of Risk

Sources of Risk can be like – Interest rate risk, Liquidity risk, Default Risk, Re-investment risk, Inflation risk, Exchange rate Risk, Political Risk, Regulatory Risk, Tax rate risk, Business Risk and Investment Manager Risk.

Risk can be classified in various types; broadly it can be classified in two types – Systematic risk (also known as Market Risk or non diversifiable risk) and Unsystematic Risk (also known as Specific Risk or diversifiable risk).

Total Risk = **Systematic Risk + Unsystematic Risk**

Measure of total risk is called standard deviation and measure of systematic risk is referred as Beta.

Systematic Risk

Systematic risk is a risk which impacts the entire market/universe. These risks are not diversifiable i.e. they cannot be avoided and are inherent in the investment. This risk is not under control of any investor and cannot be mitigated to a large extent, e.g. Change in Government policies, War in the country etc.

Unsystematic Risk or Diversifiable Risk

This is the risk that is unique to a firm or an industry. This risk is related to particular Investment and not related to overall market. The unsystematic risk can be reduced by diversifying the portfolio, i.e. spreading the investment of the portfolio across asset classes and across number of securities within a particular asset class. In a completely diversified portfolio, unsystematic risk is considered to be zero, e.g. Risk involved due to scam in particular company. The Satyam scam is classic case of unsystematic risk.

Sources of Risk

Interest rate Risk:

Interest rate risk is a risk caused by change in Interest rate. This risk is faced by investor when they invest in fixed rate coupon bonds.

- When interest rate rises for other similar bonds or in the economy, Bond price falls, Fixed Income Investor suffers Loss
- When Interest rate falls, Bond prices rise, Fixed Income Investor make Gains

Example: Today a new bond maturing in 10 year is issued at Rs. 100, coupon of 9% payable annually. If interest rate rises to 10% next year, bond price would fall, as the existing bonds become less attractive. Similarly, if interest rate had fallen during the same period, bond prices would have gone up.

How much will the price change? Well, in order to understand this, let us look at the structure of bonds. The bonds typically have an interest component paid periodically and the principal is repaid on maturity. Let us go back to the previous example. Assume that the bond has term of one year remaining when the interest rates in market go up and interest is payable at the end of the term. In such a case, the investor is likely to get a sum of Rs. 109 after one year by investing Rs. 100 now. As against that, now that rates for similar bonds have moved up, the investor has a choice to put the same Rs. 100 in a new bond and earn Rs. 110 (10% on the investment). The choice is obvious. In such a case, the price of existing bond will go down since the bond loses attractiveness. It will get adjusted in such a manner that now the investor gets 10% on the investment. In simple terms, the price of existing bond will come down to Rs. 99.09 so that now both the bonds are equally attractive.

- Old bonds: Investment of Rs. 99.09; maturity value of Rs. 109; return on investment = 10%
- New bonds: Investment of Rs. 100; maturity value of Rs. 110; return on investment = 10%

There is another important concept that we must remember. In the above example, let us change the term of the bond from 1 year to 5 years. Now, with the increase in interest rate, the existing bonds are less attractive for a longer period and hence the price would drop more.

Thus, the price change is more for long maturity bonds and less for short maturity bonds.

If the debt instrument is held till maturity, the investor gets the maturity amount as the same is part of the terms of the debt. Hence, an investor who holds the debt investments till maturity is not affected by the interest rate risk.

Re-investment Risk:

Re-investment risk is the risk that proceeds received in the form of interest and principal from fixed income securities may or may not be able to earn the same interest as the original interest rate.

- If Interest rate rises , Reinvestment risk reduces, or is eliminated
- If Interest rate falls, Re-investment risk increases

Example: Say a new bond maturing in 10 years is issued at Rs. 100, coupon of 9% payable annually. If interest rate falls to 8% after a year, the coupon received from the bond now needs to be re-invested at lower rate.

In personal finances, one also has to consider this risk when the maturity of a fixed income instrument is lower than the time horizon of the investor. Say, an investor needs money after 10 years for a particular goal and in the market, bonds with maximum 5 years maturity are available, the investor gets fixed return only for the first five years and not for the entire 10 years.

Default Risk

Default risk is defined as the risk that the issuer will fail to honour the terms of the obligation with respect to periodic payment of coupon and/or principal on maturity. We earlier saw that some debt instruments have periodic interest payments and a fixed maturity when the maturity amount is paid back to the investor. However, whether the payment will be received by the investor on schedule is a function of willingness and ability of the borrower – issuer of the debt instrument. Any failure on part of the issuer exposes the investor to a risk of loss.

The level of default risk can be assessed through credit rating. There are agencies that carry out a detailed analysis of the issuer's financial ability to honour the payments on time. Based on their analysis, they assign credit rating for various debt issuances.

- Higher Credit Rating, Low Default Risk
- Lower Credit Rating, Higher Default Risk

Example: XYZ, an NBFC, issued a 10% annual bond maturing in 1 year. The bond was rated "A" by credit rating agencies. After 1 year, the company faces severe credit crisis and is not able to pay interest payment and principal, the bond is classified as default and accordingly credit rating for the bond falls to D (i.e. default).

Credit rating agencies carry out this exercise and assign the rating to the best of their knowledge and availability of information. They do not guarantee anything. As mentioned in the example above, the rating can change during the life of the debt instrument. Rating agencies keep assessing the financials of the issuer company periodically. Although the rating is not a guarantee, it is a reasonably good indicator of the safety of the debt instrument. An investor can take an informed investment decision on the basis of credit rating.

Ratings are given in form of alphanumeric symbols. Generally, rating of BBB and below is considered as non-investment grade and above BBB is considered as investment grade. Rating is given for an instrument and not a firm. Two different instruments issued by the same firm can have different ratings.

Liquidity Risk

Liquidity risk is the risk that the investor may not be able to sell his investment when desired, or has to be sold below its intrinsic value/indicative value.

- Illiquid Security have Higher Bid and Ask Spread and hence Higher Liquidity Risk
- Liquid Security have Lower Bid and Ask Spread and hence Lower Liquidity Risk

(Bid is the price at which the buyer will buy the security and Ask is the price at which the seller will sell the security. The bid and ask price is never the same. The ask price is always a little higher than the bid price. This difference in bid and ask price is called Spread.) Higher spread means that a buyer is likely to pay higher than the last trade and the seller may get lower price than the previous trade.

Exchange Rate Risk

Exchange rate risk is incurred due to change in value of domestic currency relative to foreign country currency. Investor faces this risk, when investment is done in assets of different country.

- If foreign currency depreciates (falls in value) against domestic currency, the value of foreign asset goes down in terms of domestic currency.
- If foreign currency appreciates (increase in value) against domestic currency, the value of foreign asset goes up in terms of domestic currency

Example: US Citizen invest $1000 in Indian Bank fixed Deposit @10% for 1 year when exchange rate was Rs. 45 for US$1, after a year, rupee depreciates, and exchange rate is Rs. 50 per US$.

Return Calculation:

Invested Amount: US$ 1,000 * 45 = Rs. 45,000
Interest earned = 10% * 45,000 = Rs. 4,500
Value at the end = Rs. 49,500

If he repatriate the money back to US, he would receive = Rs. 49,500/50 = US$ 990
Profit/Loss = US$990 - US$1,000
Loss = US$10

So even after earning 10% return, US citizen made a loss in investment, because of currency depreciation.
If the rupee had appreciated, the US citizen would have made a gain of more than 10% on his investment.

Inflation Risk

Inflation risk is also known as purchasing power risk. It is a risk that arises from the decline in value of security's cash flows due to inflation, which is measured in terms of purchasing power.

- If inflation in the country is positive, purchasing power of the investor reduces.

Example: If Grocery bill is Rs. 100 today, the next year grocery bill could be Rs. 105 because of rise in prices. So to have same standard of living, investor would require Rs. 105 instead of Rs. 100 after 1 year. In such a case, the inflation is said to have been 5% for the year.

Inflation is cumulative and hence has a compounding effect over long periods. Someone planning for a lifetime should consider inflation as the biggest risk.

Assume that the inflation is 7% p.a. for the next 20 years. If the household expenses are Rs. 10,000 per month today, 20 years later, one would need almost Rs. 39,000 to maintain the same standard of living.

Regulatory Risk

Regulatory risk is a type of risk which arises due to change in regulation of a country which is beyond the control of Investor. Most often, in personal finances, this risk arises when there are changes in tax laws. Example: Imposition of Education Cess; Imposition of Security Transaction Tax, etc.

Investment Manager (Alpha) Risk:

The return of a portfolio is dependent on the fund manager's skills to take correct decisions and in turn translate the portfolio return in capital gain over the period. Alpha is a measure of excess return over a benchmark and is positive when portfolio outperforms a benchmark and negative when portfolio underperforms the benchmark. Since the portfolio can underperform the benchmark, investor is exposed to risk and is known as investment manager risk or alpha risk.

Business Risk

Business risk is a risk involved with continued operation of the company. This risk is the risk which can impact the business activity and arises due to change in input prices of raw material, emergence of substitute product, new competition in the business, and change in inventory/business cycle etc.

Event Risk

Event risk is a risk which arises from happening of an event which is dramatic and unexpected. Example: Natural Disaster

2.2 Measurement of Risk

Measurement of Risk:

The best known measures of risk are Variance, Standard Deviation and Beta. Along with this there are other measures like semi-variance, co-variance, coefficient of variance and correlation, coefficient of determination.

Variance:

It is a measure of variance of possible rates of return of the investment from the expected rate of return. It is the degree to which the return on an investment varies unpredictably.

Formula for calculating variance of a single security:

$$\text{Variance } (\sigma^2) = \sum_{i=1}^{n} (\text{Probability}) \times \begin{pmatrix} \text{Possible} & - & \text{Expected} \\ \text{Return} & & \text{Return} \end{pmatrix}^2$$

$$= \sum_{i=1}^{n} (P_i)\left[R_i - E(R_i)\right]^2$$

The higher the variance for an expected rate of return, the greater the dispersion of expected returns and the greater the uncertainty, or risk, of the investment.

Standard Deviation:

It is the square root of Variance and also a measure of total risk.

$$\text{Standard Deviation} = \sqrt{\sum_{i=1}^{n} P_i \left[R_i - E(R_i) \right]^2}$$

The following example will explain how variance and standard deviation are calculated in respect of a single security:

Probability	Return expected
0.3	12%
0.4	14%
0.3	10%

Expected return in respect of the above scenario is: (0.3*12+0.4*14+0.3*10) = 3.6+5.6+3 = 12.2%

Standard deviation is calculated as follows:

Probability	**Return**	**Return - Expected return***	**(Return-expected return) squared**	**Probability*(Return-expected return) squared**
0.3	12%	-0.2	0.04	0.012
0.4	14%	1.8	3.24	1.296
0.3	10%	-2.2	4.84	1.452

*as calculated in the previous table

Variance = (0.012+1.296+1.452) = 2.76

Standard deviation = square root of variance = square root of 2.76 = ***1.661***

As standard deviation is a measure of total risk this should be as low as possible. It shows how much variation there is from the average (mean). A low SD indicates that the data points tend to be very close to the mean whereas a high SD indicates that the data is spread out over a large range of values.

Beta: Beta is a measure of systematic or market risk which is non diversifiable. Beta can be calculated in many ways; the commonly used formulae's are:

i. Beta (β) = Cov (i, m) / σ m²

$$\text{Beta}(\beta) = \frac{\text{Cov}(i, m)}{\sigma m^2}$$

Where Cov (i, m) is the covariance between security 'i' and market m and σm is standard deviation of the market

ii. Beta (β) = r (i, m) * σ_i / σ_m

$$\text{Beta}(\beta) = \frac{r(i, m) * \sigma_i}{\sigma_m}$$

Where r (i, m) is the correlation between security 'i' and the market m, σ i is the standard deviation of the security and σ m is the standard deviation of the market.

iii. Beta of a portfolio = Σ (W_n * β_n)

Where W_n is weight of n number of securities and β_n is the Beta of n number of securities

Measurement of risk in two securities situation:

Covariance is an absolute measure of the extent to which two sets of numbers move together over time, that is, how often they move up or down together. It is a measure of the degree to which two variables, such as rates of return for investment assets, move together over time relative to their individual mean returns.

Covariance between i and j is defined as:

$$\text{Cov}_{ij} = \frac{\Sigma(i - \bar{i})(j - \bar{j})}{n}$$

Example:

Observation	I	J	i-ī	j-j̄	(i-ī) * (j-j̄)
1	3	8	-4	-4	16
2	6	10	-1	-2	2
3	8	14	1	2	2
4	5	12	-2	0	0
5	9	13	2	1	2
6	11	15	4	3	12
∑	42	72			34
Mean	7	12			
Covij	=34 / 6 = 5.67				

As mentioned earlier, covariance indicates the extent to which two sets of numbers move together. It is an absolute number and hence has to be seen in relative terms. The above example shows the covariance between two sets of numbers I and J is 5.67. How does one interpret this number? That is where one uses the correlation of coefficient.

Correlation coefficient is a standardized measure of the relationship between two variables that ranges from –1.00 to +1.00. To obtain a relative measure of a given relationship, we use the correlation coefficient (rij), which is a measure of the relationship:

$$r_{ij} = \frac{\text{COV}_{ij}}{\sigma_i \sigma_j}$$

Where

$$\sigma_i = \sqrt{\frac{\Sigma(i - \bar{i})^2}{N}}$$

If the two series move completely together, then the covariance would equal σiσj and

The correlation coefficient would equal one in this case, and we would say the two series are perfectly correlated.

Correlation: The magnitude of the covariance depends on the magnitude of the individual securities' standard deviations and the relationship between their co movements. The covariance is an absolute measure and is measured in return units squared.

Covariance can be standardized by dividing the product of the standard deviations of the two securities being compared. This standardized measure of co-movement is called correlation and is computed as:

$$\rho_{1,2} = \frac{\text{Cov}_{1,2}}{\sigma_1 \sigma_2}$$

$$\text{or } \text{Cov}_{1,2} = \rho_{1,2}\sigma_1\sigma_2$$

The term $\rho_{1,2}$ is called the correlation coefficient between the returns of securities 1 and 2. The correlation coefficient has no units. It is a pure measure of the co-movement of the two securities' returns and is bounded by -1 and +1.

Interpretation of correlation coefficient

- A correlation coefficient of +1 means that returns always change proportionally in the same direction. They are perfectly positively correlated.

- A correlation coefficient of -1 means that returns always move proportionally in the opposite direction. They are perfectly negatively correlated.

- A correlation coefficient of 0 means that there is no linear relationship between the two securities' returns. i.e., they are uncorrelated. One way to interpret a correlation (or covariance) of zero is that, in any period, knowing the actual value of one variable tells you nothing about the other.

Example: ***Computing Correlation***

Covariance between the stocks is 0.0510. The Standard Deviation for stocks 1 & 2 are 0.2041 and 0.2944 respectively. Calculate the Correlation between the two stocks.

Solution:

Correlation = 0.0510 / (0.2041 x 0.2944) = 0.8488

The returns from the two stocks are positively correlated, meaning they tend to move in the same direction at the same time

The significance of Correlation

As the correlation between the two assets decreases, the benefits of diversification increase. That's because, as the correlation decreases, there is less of a tendency for stock returns to move together. The separate movements of each stock serve to reduce the volatility of the portfolio to a level that is less than that of its individual components.

2.3 How to Manage Risk

Broadly risk can be categorized as – Systematic and Unsystematic. The Unsystematic risk can be managed whereas Systematic risk cannot be managed. Risk can be managed in two ways:

i. Diversification
ii. Hedging

Diversification: Before credit cards came in vogue, when you travelled you put some money in your wallet some in your suitcase and some in the hand bag. The idea being in case you lost your wallet you still had some money to return to your destination.

Types of Diversification
In investment parlance diversification can be across

i. Horizontal Diversification: Horizontal diversification means diversifying investment across different securities within same asset class. E.g.: Investing in 5 different equity oriented Mutual Funds, Investing Equity portfolio in 10 different stocks.
ii. Vertical Diversification: Vertical diversification means diversifying asset across asset classes. E.g.: Investing in Equities, Bonds, Real estate, etc.
iii. Geographical Diversification: Geographical diversification means diversifying across borders. Global Assets (investment) have low co-relation with domestic Investments and adding global securities in domestic portfolio increase risk adjusted return of the portfolio.

Hedging:
Hedging is investment strategy where investment is made in order to reduce the risk of adverse price movement in an asset, by taking an off-setting position in related security such as an option on underlying asset or a short sale of index etc. In simple ways hedging can be called as Insurance. Investors can hedge their portfolio with the use of various derivative contracts known as Futures, Option and Swaps.

Example: Suppose an Investor is very sceptical about the market in near term and he believes that market would fall in a month's time. But he also does not want to sell his stock position because of tax implication. In this case, investor can hedge his portfolio by going short in Index for near month of similar value as per his overall portfolio.

Summary of Formulae Used

1. Total Risk: Systematic Risk + Unsystematic Risk

2. Variance

$$\text{Variance } (\sigma^2) = \sum_{i=1}^{n} (\text{Probability}) \times \left(\begin{matrix} \text{Possible} \\ \text{Return} \end{matrix} - \begin{matrix} \text{Expected} \\ \text{Return} \end{matrix} \right)^2$$

$$= \sum_{i=1}^{n} (P_i)\left[R_i - E(R_i)\right]^2$$

3. Standard Deviation

$$\text{Standard Deviation} = \sqrt{\sum_{i=1}^{n} P_i\left[R_i - E(R_i)\right]^2}$$

4. Beta (β) = Cov (i, m)

σ m ^ 2

5. Beta (β) = r (i, m) * σ i

σ m

6. Beta of a portfolio = Σ (W_n * β_n)

7. Covariance

$$\text{Cov}_{ij} = \frac{\Sigma(i - \bar{i})(j - \bar{j})}{n}$$

8. Correlation

$$r_{ij} = \frac{COV_{ij}}{\sigma_i \sigma_j}$$

9. Correlation and covariance

$$\rho_{1,2} = \frac{Cov_{1,2}}{\sigma_1 \sigma_2}$$

$$\text{or } Cov_{1,2} = \rho_{1,2}\sigma_1\sigma_2$$

Review Questions

Questions to assess your learning:

1. Ajay has invested only in PPF A/c. which matures in 2014. For his short term goals, what kind of risk does he face?

a) Investment Risk
b) Liquidity Risk
c) Regulatory Risk
d) Default Risk

2. Anita is a conservative investor and puts her money only in Fixed Deposits which she rolls over every year. In a falling interest rate scenario, which risk can be of most concern to her?

a) Re-investment Risk
b) Default Risk
c) Inflation Risk
d) Taxation Risk

3. Standard Deviation of a security in a given period measures________.

a) The deviation of returns from the security from their mean value in the period

b) The range between lowest and highest return given by the security in the period

c) The deviation of return on security from market return in the period

d) The extent of lower return on security than the market in the period

4. For a portfolio of two securities to achieve diversification, the _________.

a) Correlation between the securities needs to be positive

b) Correlation between the securities needs to be zero

c) Correlation between the securities needs to be negative

d) Correlation coefficient between the securities needs to be 0.5

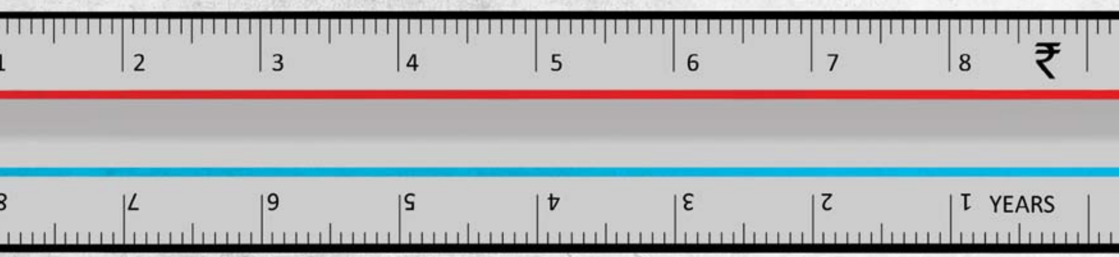
5. The co-variance between two securities is 42.53, while their individual standard deviations are 13.98 and 3.35, respectively. Calculate the correlation coefficient (r) of these securities.

a) 0.02

b) 0.82

c) 1.10

d) 0.91



Unit 3: *Measuring Investment Returns*

Learning Goals

3.1. Relationship between risk and return, Ability to take risk and willingness to take risk, optimal portfolio allocation
3.2. Time Value of Money
3.3. Annuities and its types, EMI, compounding
3.4. Net Present Value, Real and Nominal rates, Compounding, Time Weighted Return vis-a-vis Money Weighted Return, Real(Inflation Adjusted) Rate of Return Vs. Nominal Return, Holding Period Return, CAGR & IRR
3.5. Mutual Fund Performance, Benchmark and Peer performance
3.6. Total returns, Risk-adjusted returns, Sharpe ratio, Treynor Ratio, Jensen's Alpha
3.7. Discuss Capital Gains, Types i.e. STCG and LTCG and taxation

Introduction

This unit is about different types of returns, measuring returns, and define the relationship returns share with risk. This unit helps us grasp the connotation of ability & willingness to take risk and optimal asset allocation.

We also take you through the basics of finance in the form of time value of money concept, which also covers present value and its relevance in financial planning, annuities, type of annuities like fixed, floating, and inflation linked annuities. Then we also cover amortization and loan repayment schedules along with pay-back period, Equated Monthly Instalments (EMI), interest and principal portion.

In topic three we cover nominal returns, real returns i.e. returns adjusted for inflation, time weighted rate of return and rupee weighted rate of return and the difference in their implication along with holding period return. Also discuss the impact of tax on returns (post- tax returns) and importance of Net Present Value (NPV) over Internal Rate of Return (IRR) and learn how to calculate Compounded Annual Growth Rate (CAGR). Next we measure mutual fund performance and analyze dividend, growth, and dividend re-investment plans. Understand the relevance of benchmark and peer performance. We also cover the concept of total return and risk adjusted return, which include Sharpe, Treynor and Jensen measures. Towards the end capital gains, definition of Short Term Capital Gain (STCG) and Long Term Capital Gain (LTCG), its calculation and tax aspects are covered with example.

3.1 Risk and Return

Webster's dictionary defines risk as "exposure to danger or hazard". In financial lingua 'risk' is deviation from mean or expected return. Risk can be best described as 'deviation from the desired outcome' which can be no return or low return or even high return.

Threats bring a veiled opportunity so, if looked in another way it is more often than not that the threat of high risk has the potential to bring an opportunity for high returns. If equity comes with higher returns then higher risk is inevitable. Someone looking for higher return must take higher risk and one who wants to avoid risk must expect lower returns.

An important point to note here is that risk does not mean only negative returns but also includes lower and higher than expected returns. When we invest in Reserve Bank of India (RBI) bond we know we are going to earn 8% taxable return and as the borrower is the government our returns are assured. So here we have low risk low return.

On the other hand, if we invest in equity market there is a high probability that we may earn higher than what these bonds can earn, at the same time there is an equally high probability of incurring large loss.

Ability to take risk and willingness to take risk

How much risk should one take is a function of the ability and willingness to take risks. At the same time, the advisor must consider the investor's need to take risks.

1. Ability to take risk	:	Financial capacity to take risk
2. Willingness to take risk	:	Attitude towards risk
3. Need to take risk	:	If financial goals are fulfilled and there is adequate capital, there is no need to take risk. On the other hand, some one with limited resources may need to take higher risks

Based on these factors and risk profiling of a client an investor can be broadly classified as:
1. Aggressive investor
2. Conservative investor
3. Moderate investor

It is very important for an advisor to understand the risk profile for arriving at the optimal asset allocation. Such optimal portfolio allocation is also known as Strategic Asset Allocation.

We must always remember that one may have the ability but not the will and other times one may have the will but not the ability to take risk say for example we may come across a successful business owner or a High Net worth Individual (HNI) who has the ability but is absolutely averse to stock market investing or junior level executive / pensioner who does not mind going with equity even though he doesn't have the ability to take risks of equity investment.

Optimal Asset Allocation

Asset allocation means forming a strategy to decide how your client wealth should be divided amongst various investment classes such as stocks, bonds, real estate, commodities & cash .This forms the core of any financial planning process and is done before the investment process. Asset allocation is the single biggest factor in determining the performance of our portfolios. Asset allocation gives answers for how much exposure one must ideally take for different asset classes like equity, debt, real estate, commodities and cash. This advice is based after understanding investors risk appetite based on factors like age, income, dependants, investment period and as discussed earlier his ability and willingness to take risk.

An asset allocation which is in line with an investor's life stage, wealth stage, risk appetite and goals is an optimal asset allocation.

Given Rs. 100 to invest each one of you will have a different model portfolio i.e. some of you may want to invest 60% in equity, while some may go for 80% or some would opt for none of it. The point to be understood is that each individual has his own Strategic Asset Allocation.

Let us understand this better with an example:

Mr. Mony has Rs. 100 to invest and his Strategic Asset Allocation is Rs 70 in equity and Rs 30 in debt meaning anytime he has money to invest Mr. Mony will invest 70% in equity and 30% in debt. Let us see a scenario where his asset allocation actually deviates from Strategic Asset Allocation.

Scenario: In case the equity prices take a plunge, Mr. Mony may have either a bearish or bullish view about the future prices. Based on that view, he may change his portfolio allocation to say 90% equity and 10% debt (bullish) or say 50% equity and 50% debt (bearish). Now either of the strategy is a deviation from SAA or model portfolio but this is because of current market volatility. This deviation from Strategic Asset Allocation is called Tactical Asset Allocation. The investor later may move back to the strategic asset allocation or change it according to a revised view.

It is always a debate whether strategic asset allocation or tactical asset allocation is better. The advisor is required to decide which one to follow based on one's belief and abilities. One may believe that Strategic Asset Allocation the best strategy to achieve the investors financial goals considering all factors like time to goal, value of the financial goal (adjusted for inflation), the investor's current and future resources, life stage, wealth stage, dependants, risk appetite, etc. On the other hand, one may believe that tactical asset allocation is a better idea as there is a possibility to exploit various opportunities available and that one has the ability to identify and exploit those.

3.2 Time Value of Money

Concept of time value and its computation

If I were to give you two options
1. Pay you Rs. 100 today or
2. Pay you Rs. 100 after a month

Which one you choose?

We should choose the first, as if one invests Rs. 100 today it will generate a positive return most of the time. Waiting for a month will delay this opportunity. This concept of money being valuable today is referred to as time value of money.

The notion that money has time value is one of the basic concepts of finance. Most financial decisions at the business level and individual level involve exchanging money now with the money in future. The Time value of money is based on the premise that an investor prefers to receive a payment of a fixed amount of money today, rather than the same amount in the future, all else being equal. In other words, the present value of Rs. 100 of money is greater than the present value of the right to receive the same amount of money at time 't' in the future. This is because this amount could be deposited in an interest yielding instrument like savings account or bond etc from now to time t and yield interest. As most financial decisions affect the cash flows over a long period of time, the explicit recognition of the time value of money becomes important for rational and optimal decisions. The main preference to receive Rs. 100 today rather than a time in future are:

- Preference for consumption today
- Premium for inflation
- Premium for credit risk
- Possibility of risk free returns

In order to overcome this time preference, the individuals or firms must be suitably rewarded. This reward is known by the various names like interest, cost of capital, required rate of return or cost of financing. An explicit consideration of interest rate helps the individual or a firm to translate different amounts offered at different time periods to their equivalent value at present. An understanding of mathematics of interest is therefore important to understand most financial transactions for an individual and corporate which involve cash flows over a period of time.

In any time value situation, the following parameters are important:
i. 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 cash flows.
ii. Rate of interest
iii. Time Period
iv. Frequency of cash flows, which may or may not be fixed.

In most time value situations we have to solve for one of the above parameters.

Relevance of Present Value in Financial Planning

Present Value (PV) is a very important concept in Financial Planning as PV is the best way to evaluate an investment proposition understanding that money received in future is not as valuable as money in hand today. Let us understand this best by an example. My friend shared information about an investment plan she had invested, which would give her 12% returns as her agent had canvassed. She said "I invested only Rs. 150000 and after 20 years I'll receive Rs. 800000". Investment propositions like these sound good but let us check the reality. We can easily check that by applying the PV formula or FC 200V (financial calculator) or Microsoft Excel.

PV formula is

PV= FV/ (1+r) ^n

= (800000)/ ((1.12) ^20) = **82933.41**

FC 200V

Set= End
N=20
I= 12
PV= Solve = **82933.41**
PMT=0
FV=800000

Use of Microsoft Excel
On the sheet click on the cell you want to calculate
Enter'=', type 'PV ('and the system will prompt the formula.
=PV (rate, nper, pmt, fv, type)
Key in the variants
=PV (12%, 20, 0, 800000, 0)
Press enter and you get 82933.41

Now, let us understand how this PV calculation affects the investment decision. The present value of an investment which will mature to Rs. 8, 00,000 at the end of 20 years at an annual return of 12% is Rs. 82,933. Obviously, the investment made by my friend yields much less than 12%. Even if the interest rate is assumed to be 9%, the PV that we get is Rs. 1, 42,744.71. Thus, we can conclude that this investment makes sense only if your required rate of return is less than 9% (8.73% to be precise).

3.3 Annuities, Types and EMI

The meaning of the word Annuity is pension, or allowance or income. In financial parlance it's an income received in every period. Say if you were to invest in Senior Citizen Saving Scheme (SCSS), an investment of Rs. 100,000 will fetch you a quarterly annuity of Rs. 2,250.

Fixed Annuity or Floating Annuity

Annuities can be of two types
1. Fixed Annuity
2. Floating Annuity

Fixed Annuity means that you will receive fixed returns, say at 9% p.a. on your investment for a predetermined term assured for the next 5 years, as in Senior Citizen Saving Scheme.

Floating annuity on the other hand can be benchmarked to inflation or index returns or any other return as specified in the indenture agreement at the time of buying. In Fixed Annuity your return remains fixed and in floating it will change in line with the chosen benchmark.

Inflation Linked Annuity

Say you have bought an 8% annuity for Rs. 100,000 linked to inflation rates for the next 5 years in that case our payout is not a fixed amount of Rs. 8,000 every year but 8,000 *(1+r) and the r is reset every year based on the prevailing inflation rates.

So say your inflation rate at the end of every year for the next five years is
EOY 1 – 2%
EOY 2 – 5%
EOY 3 – 5%
EOY 4 – 4%
EOY 5 – 6%

So the annuity one receives at the End of each year is as follows

EOY 1 = 8000*1.02 = 8160
EOY 2 = 8160*1.05 = 8568
EOY 3 = 8568*1.05 = 8996
EOY 4 = 8996*1.04 = 9356
EOY 5 = 9356*1.06 = 9918

Loan Repayment Schedule

Year	Principal b/f	EMI	EMI-int	EMI- prin	Bal Principal
1	1000000	277,410	120000	157,410	842,590
2	842,590	277,410	101111	176,299	666,291
3	666,291	277,410	79955	197,455	468,837
4	468,837	277,410	56260	221,149	247,687
5	247,687	277,410	29722	247,687	0

Given above is a loan amortization schedule for a loan of Rs. 1,000,000 and period of 5 years and the EMI to be paid yearly at 12% rate of interest. This schedule is an ideal representation of equated monthly (yearly in this case) installments.

Let us understand how this schedule is drawn:
Loan amount: Rs. 1,000,000
Interest rate: 12%
Period: 5 years
Frequency: once in a year payment (for simplicity purpose otherwise it is 12 times in a year)

Draw a table for amortization as illustrated above, i.e. columns for Year, Principal b/f, EMI, EMI- int, EMI- prin and Balance Principal respectively

Then, calculate EMI by either using FC 200V or Excel

FC200V
Set End
N= 5
I= 12%
PV= 1000000
PMT= SOLVE = $\boxed{277410}$
FV= 0
In Excel

PMT (rate, nper, PV, fv, type)

PMT (12%, 5, 1000000, 0, 0) = $\boxed{277410}$

Once PMT is calculated copy the same for the entire cell in PMT, EMI column for all 5 years.
Then, we go on to calculate EMI interest by multiplying Principal b/f value by 12% (rate of interest) and we get $\boxed{120000}$ (10,00,000*12% for year 1) drag the formula into the remaining columns for 5 years

Next, we calculate EMI principal by deducting from EMI, EMI interest i.e. 277410-120000 = $\boxed{157410}$ drag the formula into the remaining columns.

Now for Balance Principal deduct from Principal b/f, EMI Principal i.e. = 1000000-157410= $\boxed{842590}$
Drag the formula into the remaining columns

And last just copy Balance Principal into the next Principal b/f column i.e. for year 2 and drag the formula into the remaining columns and we get the last cell of the matrix as Zero.

Payback period, EMI, interest portion and principal portion

Payback period demonstrates the time period required to get the total initial investment back from an investment vehicle through cash flows.
Payback period = Initial investment amount ÷ Cash flow per year

Payback period calculation:

Mr. Mony invests Rs. 1,200,000 in a housing project and expects a rent of Rs. 60,000 per year
Payback period= 1,200,000/60,000=20 years
Implying Mr. Mony will receive his initial investment back in 20 years.

Some points to note

1. Payback period is easy to calculate
2. Shorter the payback period, lesser the risk
3. Payback period ignores time value of money
4. Payback period does not take into account cash flows after payback period

Impact of Compounding

Compound interest arises when interest is added to the Principal. The opportunity to reinvest the interest and so earn interest on interest is known as compounding. Compounding is referred to as the eighth wonder of the world and rightly so if we understand the impact of this calculation which all of us were taught in our 5th grade.

The formula of Compounding is FV = PV (1+r/100) ^n
Where:
FV= Future Value
PV= Present Value
r = rate of return for each compounding period
n = number of compounding periods

Let us take for example the retirement plan of Mr & Mrs Mony, both aged 30. Now Mr Mony believes in living today and saving tomorrow & Mrs Mony believes in saving and living today.

The retirement plan of Mr & Mrs Mony:

Mr Mony plans to invest Rs. 100,000 at age of 45 for 15 years (i.e. he will withdraw the money at the age of 60) and expecting a return of about 12% and on the other hand Mrs Mony invests Rs. 100,000 today at age 30 for 30 years (i.e. she will withdraw the money at the age of 60) with a similar return expectation.

Remember Mrs Mony's investment amount is same, return is same. But the period of investment is double.
Now let us calculate the retirement corpus of Mr Mony.

FV = PV (1+r/100) ^n
= 100000(1.12) ^15
= $\boxed{547357}$

Let us now calculate the same for Mrs. Mony.

FV= PV (1+r/100) ^n
= 100000 (1.12) ^30
= 29, 95, 992

This is almost six times Mr Mony's corpus!
Moral of the story is your investment horizon makes a big impact on your corpus and you thought that only the rate of return matters.

Let us also see the impact all other things remaining the same if we only change the periodicity of investments and different investment amounts. Mr Mony plans to invest Rs. 100,000 every year from age 45 to 60 and Mrs Mony invests Rs. 30,000 from today till age 60.

Remember Mrs Mony is investing 30% of Mr Mony's investment amount per period of investment; period is double and the rate of return is the same. Over the investment period, Mr. Mony would have invested a sum of Rs. 15 lacs, whereas Mrs., Mony would have invested Rs. 9 lacs.

Here we use Future Value of Annuity formula

FV of Ordinary Annuity = FVA =pmt [{[(1+r) ^n]-1}/r]
= 100,000* {(1.12^15)-1}/.12
= 3,727,971

Or we can also use EXCEL

Go to a worksheet type in a cell '=FV ('& we are prompted **FV (rate, nper, pmt, PV, type)**
Key in the respective numbers i.e. =FV (12%, 15,-100000, 0, 0) → Enter and we get
= 3,727,971

And Mrs Mony's corpus is
FV of Ordinary Annuity = FVA=pmt [{[(1+r) ^n]-1}/r]
= 30,000*{(1.12^30)-1}/.12
= 7,239,980

Even after investing only Rs. 9,00,000 against her husband's investment of Rs. 15,00,000 and only by starting earlier, Mrs Mony has clearly benefitted from the power of compounding.

Holding Period Return

You invest Rs. 10 and you receive Rs. 12. How do you calculate returns?
It is {(EV+C-BV)/BV} *100

Where EV is End Value, C is cash flow & BV is the initial investment amount
= {(12-10)/10} *100
= 20%

Note: Holding period returns takes interim cash flows during the period of investment along with the initial investment i.e. the principal into account

3.4 Net Present Value (NPV)

Net Present Value is the return of an investment based on a discount rate and a series of future payment (negative values) and income (positive value).

Net present value is found by subtracting the required initial investment from the present value of the expected cash flows:

NET PRESENT VALUE (NPV): Present value of cash flows minus initial investment.
NPV = PV – required investment

In the example in prior sections, we found PV as Rs. 82,933.41 for the investment amount of Rs. 150,000

Thus, the NPV= 82933.41- 150000 = Rs. -67,066.59

In other words your PV of investment is worth less than its required investment and therefore a negative NPV.

The net present value rule states that advisors increase investors' wealth by accepting all investment proposals that are worth more than they cost. Therefore, they should accept all investments with a positive net present value.

Real vis-a-vis Nominal Return

Nominal rate of return: Rate at which money invested grows. Real rate of return: Rate at which the purchasing power of an investment increases.

If my bank FD is earning a nominal return of 8% and the inflation rate is 4% then the real rate of return is:

= [(1+ r) / (1+P)-1]*100
Where r = Nominal return rate
P= Inflation rate
= [(1.08/1.04)-1] *100
=3.86%
This real return is also called ***Inflation adjusted return.***

Effective vis – a vis Nominal Return

- The nominal interest rate is the periodic interest rate times the number of periods per year; for example, a nominal annual interest rate of 12% based on monthly compounding means a 1% interest rate per month (compounded). A nominal rate without the compounding frequency is not fully defined.
- Let us generalize this on an annual time span, taking 'per annum' rate of interest. Let us divide the period of one year in 'p' sub-periods and let the nominal rate of interest over one-year period be 'i(p)' per annum. In effect i(p) is the nominal rate of interest per annum payable (or reinvested) 'p' times over the year. In such a case, an investment of C for a period of length '1/p' will produce a return of C x i(p)/p. Thus, 'i(p)/p' is the effective rate of interest over the sub-period '1/p'.
- Thus, a 12% p.a. nominal rate of interest compounded monthly (denoted as i(12)) will have an effective rate of interest of i(12)/12, i.e. 12%/12= 1% per month;
- If i denotes the annual effective rate of interest, i(p) the nominal rate of interest per annum compounded p times in a year, the relationship between a nominal rate of interest i(p) and effective rate of interest i is :
  $1 + i = (1+ i^{(p)}/p)^p$
- A nominal of 12% p.a. compounded quarterly will have an equivalent annual effective rate of interest of
  $i = ((1+(0.12/4))^4) – 1$
  $= ((1.03)^4) – 1 = 1.125509 – 1 = 0.125509$ or 12.55%

- Reworking the formula
  $1 + i = (1+ i^{(p)}/p)^p$, we get $i^{(p)}/p = (1 + i)^{(1/p)} - 1$
  For example for 12% p.a. compounded rate of interest, we may find effective interest rate over month, we get $i^{(12)}/12 = (1.12)^{(1/12)} - 1$
  $= 1.009489 - 1 = 0.009489$ or 0.95%.

We may note that this monthly effective rate of interest is less than 1%.

Our returns are subjected not only to inflation but also the tax burden therefore to calculate Real returns both these factors are to be considered religiously by Financial Planners.

Let us assume your investment is giving a return of 15% and the inflation rate is 4% and the tax rate applicable for that investment is 30%; in that case our real return is calculated in two steps

1) Tax Adjusted returns
TR = NR * (1-tax rate)
Where TR is the tax adjusted return and NR the nominal return
TR = 15% *.7= 10.5%

2) Inflation Adjusted return
RR = [(1+ r) / (1+P)-1]*100
=[(1.105/1.04)-1] *100
=6.25%

So we have learnt that even though the nominal return is 15% our return in hand is just 6.25% after inflation & tax.

Time Weighted Rate of Return and Rupee Weighted Rate of Return

Time weighted rate of return (TWRR) is also called geometric mean (GM) and it assigns equal weights to the results achieved in each time period and does not account for cash flows pattern. GM is considered a superior measure of returns as compared with rupee weighted rate of return also referred as internal rate of return (IRR). Geometric mean and Compounded Annualized Growth Rate (CAGR) imply one and the same. On the other hand internal rate of return IRR is the discount rate at which the investment's NPV equals zero. It is the net yield from an investment which is also useful in measuring the total experience of the investment, reflecting investment performance as well as cash flows. GM or CAGR on the other hand gives year on year return numbers.
Let's understand the same with an investment:

Investment details	Period 0	EOY 1	EOY 2	EOY 3
Rate of return	10%	20%	30%	
Stock/ fund XYZ				
1. Initial investment	10000	11000	13200	17160
2. Cash flows -	-	-	(17160)	
3. Actual Investment	10000	11000	13200	-
4. EOY value	11000	13200	17160	-
Stock /fund ABC				
1. Initial investment	10000	11000	4800	6240
2. Cash flows -	(7000)	-	(6240)	
3. Actual investment	10000	4000	4800	-
4. EOY value	11000	4800	6240	-

In XYZ fund Rs. 10,000 invested for three years grows to Rs. 17,160 and has zero cash flows.

IRR= NPV= FV/ (1+r) ^3
10000= 17160/ (1+r) ^3 = 19.72%

In ABC fund investment of Rs. 10,000 yields a cash flow of Rs. 7,000 and Rs. 6,240 respectively at the end of year 1 and year 3.
IRR= 10000= (7000/1+r) + (0/ (1+r) ^2 + (6240/ (1+r) ^3
=16.2%

Or we can also solve in EXCEL
CF0 -10000
CF1 7000
CF2 0
CF3 6240

(CF* is the cash flow, positive or negative at point of time *)
In the next cell type = ***IRR***(' and the system will prompt IRR (values, guess) in values select CF0 to CF3 numbers and press Enter and you get the results.

IRR assumes that cash flows are reinvested at the internal rate. Calculating IRR is the process of applying a discount rate that equals the PV of future cash flows to Zero.

Some points to note

1. NPV is an absolute number
2. IRR is expressed in % terms
3. NPV calculates additional wealth
4. IRR reflects investment performance as well as cash flows
5. Use of IRR facilitates comparison
6. NPV and IRR both are discounted cash flow models
7. Since NPV is a direct measure of increase in wealth, NPV is preferred over IRR in case of conflict in mutually exclusive investments (where we have to select only one investment). In case of a scenario like: A's NPV is high & B's IRR is high, always go with the higher NPV option.

Instruments with tax free interest income and taxable interest income

To understand this aspect best let's understand the difference in returns from Public Provident Fund (PPF) and a Bond. Interest income from PPF is exempt from tax. On the other hand interest income of bonds is taxable. Both instruments yield 8% nominal returns.
For PPF the nominal return is equal to the tax adjusted returns, i.e. 8% and for bonds the tax adjusted return works out to 8% * (1-tax rate)
= 8%* (1-.3) = 5.6% (assuming one is in the highest tax bracket of 30%)

The point that needs to be borne in mind is we have to look at all the aspects of an investment especially tax implication while choosing from alternate investment options.

3.5 Mutual Fund Performance

Evaluate / Measure Mutual Fund Performance

Let us first understand the need to measure or evaluate mutual fund performance. You as an advisor have to decide which fund should be purchased amongst a host of funds available to choose from. One fund may have given the highest return last quarter while the other may have given the highest dividends or another one may have given consistent returns over a long period or another one may have the lowest beta. So to make the most appropriate choice it is very essential we understand the performance measures and their implications.

Analyze Dividend, Growth & Dividend Reinvestment Plan

Dividend and growth are the two common options provided by mutual funds to the investors. Under the dividend option again, investors are allowed to choose between payout and re-investment.

Dividend option: Under the dividend option some part of the fund's income is paid back to the investors in the form of dividends. Kindly note that the amount distributed to the investors comes out of the fund's NAV. If the NAV of a scheme is Rs 100 per unit and if the fund declares Rs 8 per unit dividend, the ex-dividend NAV of the scheme will settle at Rs 92. So, dividend is just one way of taking out your profits from the investment.
Dividend re-investment: Returns under growth and re-investment options are almost the same. Under dividend re-investment option, once the dividend is declared, the fund house buys additional units of the scheme on the ex-dividend date at the prevailing NAV and adds it to your investment. The number of units held in the scheme will increase.
Under the growth option, based on the appreciation in the stocks held in the portfolio, the NAV itself will increase.
At the time of redemption, the value of your portfolio will be the same, whether you opted for re-investment or growth.
Benchmark and peer performance

Benchmarks are used to determine relative performance of portfolios and securities. They are particularly useful in evaluating mutual funds and fund managers.

For any ranking or rating the standards have to be in place. Say if we have to measure how a diversified equity mutual fund has performed in the past year the best way is to check the funds return vis-a-vis Sensex or Nifty returns depending on the composition of the fund. So these and similar indices are the benchmark for measuring performance. Performance against benchmark (Relative performance) is also a very important concept in investment analysis. Your fund has given 25% returns may not mean that the fund has done very well if the overall market has given 40% returns over the same period. This means, your fund has underperformed the benchmark index. It is also important to compare the fund's performance within the peer group. However, care must be taken to select funds with similar mandates while doing the comparison.

At times benchmark is not available for some mutual funds whose mandate is different than the market in general, e.g. International opportunities fund where some portion of assets is invested in international stocks. In this case, you cannot compare the mutual fund performance against a local index (Sensex or Nifty). So either you need to create your own composite benchmark or compare the mutual fund performance with peer performance. It is mandatory for funds to show their performance against some benchmark and also (in case of equity funds) against popular indices as per SEBI guidelines.

3.6 Total Return and Risk Adjusted Return

Total Return

Total return is made of capital appreciation and cash flows. Say you buy a house for Rs. 10 lacs and earn a rent of Rs. 1 lac per annum and after 10 years you can sell it for Rs. 35 lacs.

Total return = EV- BV/ BV *100
Where EV is End Value, BV is Begin Value
EV= 35(selling price) + 10 (rent of 10 years- cash flows)
BV= 10 (buying price)
= ((35+ 10)-10/ 10)*100
= (35/10)*100
= 350%

Another similar example could be of a Stock which has just paid dividend and you are selling it post that.

Risk adjusted returns

We have already looked at the measures of risk, i.e. Standard deviation and Beta, Now, let us also understand returns after taking risks, i.e. returns per unit of risk.

When total risk is adjusted and returns are projected, it is called Sharpe Ratio, i.e. excess return per unit of total risk. When market risk is adjusted and returns are projected, we call it Treynor Ratio, i.e. excess return per unit of market risk. For Risk measures, lower the better; and for risk adjusted returns, higher the better.

Sharpe ratio

Also known as Reward to Variability ratio it indicates the excess return per unit of risk associated with the excess return as derived from Capital Market Line in Capital Asset Pricing (CAPM)[1] model. The higher the Sharpe Ratio, better the performance.

Sharpe Ratio (S) = (r (Portfolio return) – rf (Risk free rate)) / (standard deviation of the portfolio or σ)

This ratio measures the effectiveness of a manager in diversifying the total risk i.e. standard deviation. This measure is apt if one is evaluating the total portfolio of an investor or a fund, in which case the Sharpe ratio of the portfolio can be compared with that of the market.

[1] CAPM is used to determine a theoretically appropriate required rate of return of an asset, if that asset is to be added to an already well-diversified portfolio, given that asset's non-diversifiable risk. The model takes into account the asset's sensitivity to non-diversifiable risk (also known as systematic risk or market risk), often represented by the quantity beta (β) in the financial industry, as well as the expected return of the market and the expected return of a theoretical risk-free asset.(source: www.wikipedia.org).
The general idea behind CAPM is that investors need to be compensated in two ways: time value of money and risk. The time value of money is represented by the risk-free (rf) rate in the formula and compensates the investors for placing money in any investment over a period of time. The other half of the formula represents risk and calculates the amount of compensation the investor needs for taking on additional risk. This is calculated by taking a risk measure (beta) that compares the returns of the asset to the market over a period of time and to the market premium (Rm-rf). (Source: www.investopedia.com)

Treynor ratio

This measure indicates the excess return per unit of risk associated with the excess return. However, here systematic risk is used instead of total risk. Higher the Treynor Ratio, better the performance

Treynor = (r (Portfolio return) – rf (Risk free rate)) / portfolio beta (β)
Ratio (S)

If a portfolio is fully diversified, then beta becomes the relevant measure of risk and the performance of a fund manager may be evaluated against the expected return based on the Securities Market Line (SML), which uses beta to calculate the expected return. The SML is a useful tool in determining whether an asset being considered for a portfolio offers a reasonable expected return for risk.

Jensen Ratio or Jensen's Alpha

Jensen ratio is also called Alpha denoted as α, also called portfolio alpha, measures the fund manager's performance. Jensen measures the average return of the portfolio over and above that predicted by the Capital Asset Pricing Model (CAPM), given the portfolio's beta and the average market returns.

In other words a positive alpha means the fund manager has done his job of identifying sectors/stocks with high prospect of premium return. Negative alpha means the performance of the fund manager is below the benchmark. The calculation of Jensen is as follows:

Jensen Ratio (S) = R (actual portfolio return) – SML (expected return)

Returns are the actual portfolio return and SML is the expected return according to CAPM.

SML= Rf+ β (Rm- Rf)

Where Rf is risk free return (generally rate of T-Bill is considered), β is portfolio beta and Rm is market return.

For portfolio ABC the following data is given
Return= 12.8%
Treasury Bills= 4%
Standard Deviation= 3%
Beta= 0.8

(SML) = 4+0.8(12.8-4) = 4+7.04 = 11.04

Sharpe ratio for ABC portfolio= (12.8-4)/3= 2.93

Treynor ratio for ABC portfolio= (12.8-4)/0.8= 11

Jensen ratio for ABC portfolio = 12.8-11.04 =1.76

3.7 Capital Gains

There are two types of returns from any investment vehicle:

1. Cash Flow: In the form of interest or dividend.
2. Capital Gains : Capital appreciation on selling off the investment

You buy scrip A for Rs. 1,000 you hold it for a couple of years and sell it for say Rs. 1,200. This Rs. 200 is the capital appreciation or capital gain.

Concept of capital asset and transfer

Capital asset means property of any kind held by the assesse, whether or not connected with his business or profession, but does not include: (i) any stock in trade (ii) personal effects (iii) agricultural land.

Capital gains occur at transfer of capital asset. If the asset is not transferred, say you buy the stock at Rs. 1,000 and hold it and the current market price is Rs. 1,200 then there is no case for capital gains as the asset is still not transferred or if there is any transaction which is not regarded as transfer, say you are gifted Rs. 1,000 shares of ABC company by your father, there will not be any capital gain.

Types of Capital Gains and Taxation

1. Short Term Capital Gains (STCG)
2. Long Term Capital Gains (LTCG)

STCG arises when a capital asset is transferred within 36 months of buying the asset; however there is an exceptional limit of STCG of transfer within 12 months for securities listed on the exchange, mutual fund units and zero coupon bonds.
LTCG arises when transfer of capital asset exceeds the holding period limit for STCG i.e. more than 36 months/ 12 months as the case may be.

Types of asset	STCG Tax	LTCG Tax
Capital Asset/MF other than equity oriented MF	Marginal tax rate	10% without indexation / 20% with indexation which ever is lower
Stocks* / Equity oriented MF	15%	Nil

(* Where STT has been collected)

Equity oriented mutual funds have been defined in the Income Tax Act,1961 as those funds which have invested at least 65% of their total corpus in shares of Indian companies.

Marginal rate of tax implies if your applicable tax slab is 20% then your STCG will be taxed at 20% and if you fall under the maximum slab of 30% your STCG will be taxed at 30%.

Indexation Benefit

It is a very well known fact that the prices of goods and services we consume keep moving up over the years. This implies that the value of rupee has eroded or the purchasing power has decreased. This general increase in price level is called inflation. The price inflation is measured by the annualized percentage change in the general price index, normally CPI (Consumer Price Index) is used but in India reference point is the WPI (Wholesale Price Index). The Central Board of Direct Taxes (CBDT) calculates Cost Inflation Index (CII) and declares it every year.

While calculating capital gains the plain way is to deduct cost price from selling price. Let us understand this through an example:

You bought some shares and paid Rs. 8,000 for the same. Three years later, you sold the same at Rs. 18,000. In this case, the capital gain would Rs. 18,000- Rs. 8,000= Rs. 10,000.

However, the purchasing power has not remained the same over these years. Therefore there is this need to index the cost based on cost inflation index. Indexation is this process of adjusting the cost price by using the CII.

Calculation of STCG and LTCG

To understand the calculation for STCG and LTCG let us go through this example:
Say Mr Mony bought two investments: a house for Rs. 15 lacs and stocks worth Rs. 1 lac in 2004 March and sells the stocks in 2005 January for Rs. 2 lacs and the house in 2008 March for Rs.60 lacs.

Stocks: The holding period for stocks is 10 months therefore capital gains will be of short term nature and will be taxed @ 10% the then prevailing tax rates for STCG (current 15%)
Selling Price= 200000 Buying Price = 100000
Capital Gains = SP- BP= 200000-100000
Capital Gains =100000
And Tax thereon = 10% of Capital Gains i.e. 10% * 100000= Rs. 10000/-

If the stocks were sold through stock exchange anytime after March 2005; i.e. one year after purchase date, then the resulting gains would be deemed

Long Term Capital Gains. There is no tax on LTCG in respect of listed shares. And if the stocks are sold, let's assume at the same rate in 2009 March then the tax rate is Nil as the holding period is more than 12 months therefore the capital gains are long term in nature so tax free in case of securities

House: The house is bought in March 2004 for Rs. 1,500,000 and sold in April 2008 for Rs. 6,000,000. The holding period is for more than 36 months; so qualifies for long term capital gains; now the treatment for gains on capital asset as for tax aspect is 10% without indexation and or 20% with indexation whichever is lower.

(CII* for various Financial Years are 2002-03: 447; 2003-04: 463; 2007-08: 551; 2008-09: 582)

	(Amount in Rs.)
Without Indexation tax	
Selling price	6,000,000
Less transaction cost	xxx
Less cost of acquisition	1,500,000
Less transaction cost	xxx
Capital Gains	4,500,000
10% tax thereon	450,000
With Indexation tax	
Selling price	6,000,000
Less transaction cost	xxx
Less indexed cost of acquisition (1500000x582/463)	1,885,529 ^
Capital Gains	4,114,471
20% tax thereon	822,894

* Cost Inflation Index

^ Cost of acquisition X cost inflation index in the year of selling the land / cost inflation index in the year of purchase

In this case without indexation tax is lower but we often come across cases where tax after indexation works out lower.

Capital loss: provision to prevent misuse

The Income Tax Act allows set off of losses against gains made. For capital gains the rule is short term capital losses can be set off against long term and short term capital gains and long term losses can be set off against long term capital gains only. In case of mutual funds, the NAV of the scheme drops at least to the extent of dividend. This allowed investors to take tax-free dividend while booking loss to the extent of the NAV drop and adjust the same against some capital gains. In order to disallow misuse of this rule there are caveat for investment in shares and mutual funds which is:

- If shares are bought within three months of record date of dividends and sold within three months after record date then loss to the extent of dividend is ignored.

- If mutual fund units are bought within three months before the record date of dividend or bonus and sold within nine months after record date then loss to the extent of such dividend is ignored and loss on such original units ex-bonus is ignored and taken as cost of bonus units.

Summary of formulae used

- PV formula is PV= FV/ (1+r) ^n; In Excel =PV (rate, nper, pmt, fv, type)
- PV of ordinary annuity (PVA) = PMT * 1-(1+i)^-n/i
- In Excel = PMT (RATE, NPER, PV, FV, Type)
- Payback period = Initial investment amount/value ÷ Cash flow per year
- The formula of Compounding is FV = PV (1+r/100) ^n
- HPR=(EV-BV/BV) *100
- Inflation adjusted returns = [(1+ r) / (1+P)}-1]*100, where r is nominal return and P is inflation rate
- Tax Adjusted returns TR = NR * (1-tax rate), where TR: tax adjusted return and NR: nominal return
- IRR= NPV= FV/ (1+r) ^3
- Total return = (EV - BV)/ BV *100
- Sharpe Ratio (S) = (r (Portfolio return) – rf (Risk free rate)) / portfolio volatility (v)
- Treynor Ratio (S) = (r (Portfolio return) – rf (Risk free rate)) / portfolio beta (b)
- Jensen Ratio (S) = R (actual portfolio return) – SML (expected return)
- SML= Rf+ β (Rm- Rf), where Rf is risk free return, β is portfolio beta and Rm is market return.

Summary

- Definition of risk ‘exposure to danger or hazard’. Risk and return share a strong positive correlation.
- In the process of risk profiling it is imperative to understand risk tolerance which is to be understood in the light of Ability- financial strength and Capacity- willingness to take risk.

- Optimal Asset allocation is based on detailed analysis of investors risk appetite based on factors like age, income, dependants, investment period, values and beliefs and as discussed earlier his ability and willingness to take risk to arrive at exposure one must ideally take for different asset classes like equity, debt and cash.
- Time value of money is based on the premise that an investor prefers to receive a payment of a fixed amount of money today, rather than an equal amount in the future, all else being equal.
- Strategic asset allocation or optimal portfolio imply that the chosen allocation to different asset classes is the best combination to achieve the investors financial goals considering all factors like life stage, wealth stage, dependants risk appetite, values and beliefs and when SAA is tweaked at times basis the current market conditions is called Tactical Asset Allocation.
- Annuities are of two types Fixed Annuity and Floating Annuity.
- Payback period demonstrates the time period required to get the total initial investment back from an investment vehicle through cash flows. An investment project is acceptable is its Payback period is shorter than equal to the cut off period.
- The net present value rule states that advisors increase investors wealth by accepting all investment proposals that are worth more than they cost. Therefore, they should accept all projects with a positive net present value.
- IRR is the discount rate at which the investment's NPV equals zero, CAGR on the other hand gives year on year return numbers. CAGR is considered superior measure of returns as compared with rupee weighted rate of return also referred as internal rate of return (IRR).
- Sharpe ratio also known as Reward to Variability ratio indicates the excess return per unit of risk associated with the excess return as derived from CML in CAPM model.
- Treynor ratio measures the excess return per unit of risk associated with the excess return.
- Jensen measures the average return of the portfolio over and above that predicted by the CAPM

Review Questions

Questions to assess your learning:

1. By investing Rs. 1 Lac in a security today, the maturity proceeds after 10 years will be Rs. 2.80 Lac. What return is expected from the security over the period of investment?

a. 6.05% p.a.
b. 0.84% p.a.
c. 18% p.a.
d. 9.49% p.a.

2. Rajan wishes to obtain a return of 10% p.a. over a period of 8 years from a security. What investment should he make in the security to get Rs. 2 Lac over this period?

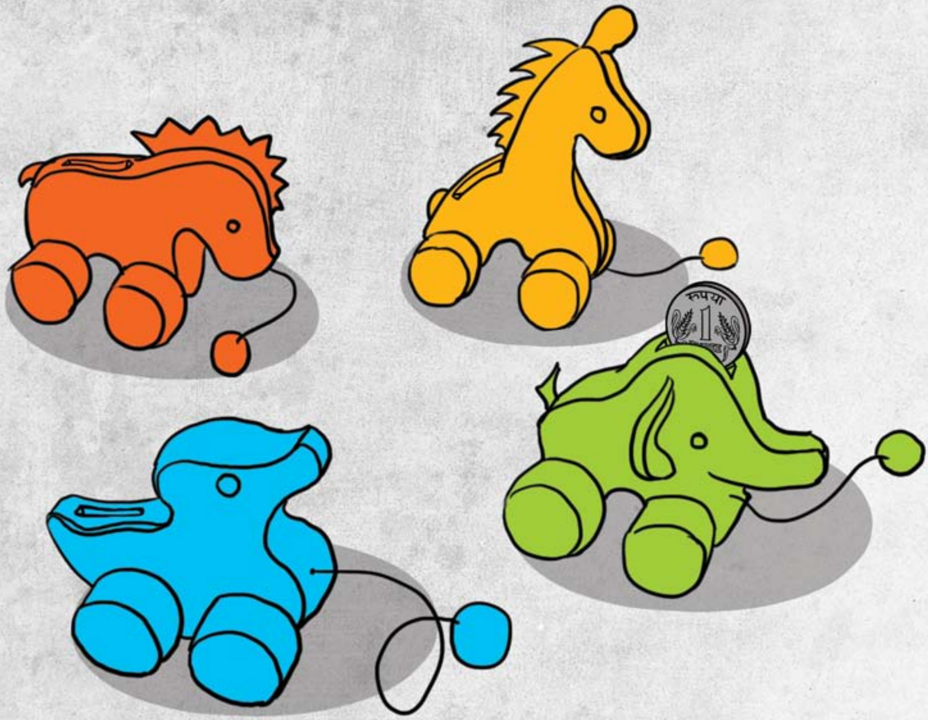
a) Rs. 93,300
b) Rs. 1,00,600
c) Rs. 85,800
d) Rs. 1,03,100

3. A bank charges 8.5% p.a. interest on loan on a monthly reducing balance basis. What is the yearly effective rate of interest?

a) 8.50% p.a.
b) 9.06% p.a.
c) 8.84% p.a.
d) 8.71% p.a.

4. A retired person needs inflation adjusted annuity in his post-retirement period. If inflation is assumed at 4% p.a. and rate on annuity is 7.5% p.a., what should be the real rate of return?

a) 4.05% p.a.
b) 7.50% p.a.
c) 3.36% p.a.
d) 11.5% p.a.



Unit 4: *Investment Vehicles*

Introduction

In India, the concept of saving is well understood by most people, however very few understand the concept of investing. We all save money to cater for our future needs. In order to get best out of our saved money, we must understand:

- Our possible future requirements, needs and aspirations.
- Various avenues/vehicles available for investing this saved money.
- Pros and cons of these investment vehicles.
- What are various concerns and how to address these concerns?

Once we understand the available investment opportunities along with the pros and cons of investing in these vehicles, it would become easier to align our investments to achieve our financial Goal.

Learning Goals

Investment Vehicles

4.1 Investment Concerns – Returns, Capital Protection, Inflation, Taxation, Liquidity, Divisibility

4.2 Small Savings Schemes – Public Provident Fund, National Savings Certificate, Kisan Vikas Patra, Senior Citizen Savings Scheme, Post Office MIS. PO T&D

4.3 Fixed Income Instruments – Government Securities (Bonds, T-Bills, CD, CP, Zero Coupon Bonds, Promissory Note, etc.), Corporate Securities (Corporate Bonds, etc.) Corporate Deposits, Bank Deposits, etc. Small Savings Instruments such as Public Provident Fund, National Saving Certificate, Kisan Vikas Patra, Post Office Monthly Income Scheme, Post office Term Deposit, Post Office Saving Accounts, Senior Citizen Saving Scheme, etc.

4.4 Mutual Fund Products - Generic (Equity Growth Funds, Income Funds, Balanced Funds, Liquid Funds, Index Funds, ETFs, FMPs,), Specific (, Thematic & Sectoral Funds, , Arbitrage Funds, etc.), Overseas opportunities, Short-term Funds for parking liquidity, diversified equity fund.

4.5 Equities – Types of Shares, Dividend Yield, EPS, P/E, etc., Modes of Valuation, Portfolio Management aspects, Value Growth investing.

4.6 Derivatives and Commodities – Essential features, Types-Future and Options.

4.7 Real estate - Forms of real estate investment, financing real estate, Costs of buying and maintaining, Loans and financing.

4.1 Investment Concerns

The most common concerns that needs to be addressed, while investing and choosing the assets are-

1. Returns

The return from the investment could be in the form of capital gains, cash flows, or both. A retired person may be more interested in regular cash flows to cater for his day to day needs, where as a younger person in accumulation phase may be more concerned with growth of his investment for creating a corpus for his retirement.

2. Capital Protection

Protecting your capital is the most important aspect of investment. By nature majority of us in India are risk averse. We feel investments are risky and thus leave most of our saved money in instruments earning low income, without understanding the effect of inflation, which reduces the value of our money every day. Risk is part of our lives. Anything and everything we do have some kind of risk associated with it. Even if we cross a road, there is risk of meeting with an accident. Risk and reward go hand in hand, higher the risk, more is the reward expected. Each of the investment assets has its own associated risk and reward/return, which one must understand before investing his money in any of the investment vehicles.

3. Inflation

By definition, inflation is the rise in general level of prices of goods and services in an economy over a period of time. When prices rise, each unit of currency buys fewer goods and services, resulting in erosion in the purchasing power of money. This is a loss in the real value of money. The aim of investment is to get returns in order to increase the real value of the money. In other words our investment asset should be able to beat inflation.

4. Taxation

Income from our investment assets is liable to taxation, which is going to reduce our returns. The real return from any investment vehicle would be the return after taxation and inflation.

5. Liquidity

It is the ability to convert an investment into cash quickly, without the loss of a significant amount of the value of the investment. Any amount which may be required at a short notice should only be invested in an investment vehicle with high liquidity.

6. Divisibility

This is the ability to convert part of the investment asset into cash, without liquidating whole of the asset. Divisibility may be an important consideration for many investors, while choosing an investment vehicle. For example, while investing Rs. 15 lacs in senior citizen scheme, one could increase the divisibility without affecting returns by dividing this investment in ticket size of Rs. 2-3 lacs, rather than investing Rs.15 lacs in one go.

Before committing your capital to any investment vehicle, it is preferable to consider your financial needs, goals, and aspirations, as well as the risk profile.

Avenues for Saved Money / Investment Vehicles

Various places where one can park his saved money can be broadly classified into:

1. Financial Assets
2. Non-Financial Assets

Financial Assets

Financial Assets can further be classified into:
1. Cash instruments
2. Debt instruments
3. Equity instruments

Cash Instruments

Money in cash form is most useful in emergencies because of easy access; however it tends to lose its value because of inflation. Over a period of time purchasing power of cash money would considerably reduce. Some of the future requirements cannot be anticipated like sudden health problem, accidents, natural calamities etc. These emergencies require sudden unexpected cash out flow, for which we must prepare ourselves. Thus it is very essential to have some of our saved money in cash form to cater for these emergencies. Now question arises, how much money should be kept in cash form, and what are various cash instruments available. On an average three to six months of our average monthly expenses should be kept in cash instruments.

Various cash instruments could be:

i) Cash in Hand
ii) Cash in Bank

Debt Instruments

Investing in debt instruments is like lending your money to a third party, who utilizes this money to earn more money. Generally, periodically part of this money is passed on to you as interest. The capital is returned after the stipulated time period. These instruments beat inflation to some extent;

however taxation may be a concern in many of these instruments. The lock in period could be short, medium or long term depending on the type of debt instrument chosen. Capital is relatively safe; returns are lower than equity but higher than cash instruments.

Various debt instruments used are:
1. Small Saving Schemes
2. Government and Corporate Debt Securities
3. Bank deposits

4.2 Small Saving Schemes

Various schemes which fall under this category are:
1. Public Provident Fund
2. National Savings Certificates
3. Post office Monthly Income Scheme
4. Senior Citizen Saving Scheme
5. Post Office term deposit
6. Post office savings Accounts
7. Post office recurring deposit
8. Kisan Vikas Patra

Public Provident Fund (PPF)

- Public Provident Fund Scheme, 1968 came into force w.e.f. 01 July 1968 following Government of India, MOF (DEA) notification GSR 1136 dated 15/06/1968 and further amended from time to time.

- Account can be opened by an individual for himself/herself, and or on behalf of a minor of whom he/she is a guardian. Opening of account on behalf of HUF (Hindu undivided family), AOP (Association of persons), and BOI (Body of individuals) has been discontinued w.e.f. 13-05-2005; vide RBI notification GSR291 (E). **Non Resident Indians** are not eligible to open an account under the Public Provident Fund Scheme:-Provided that if a resident who subsequently becomes Non Resident Indian during the currency of the maturity period prescribed under Public Provident Fund Scheme, may continue to subscribe to the Fund till its maturity on a Non Repatriation Basis. [MOF (DEA) Notification No GSR 585 (E) dated 25.7.2003]
- Joint account cannot be opened, however nomination facility is available.
- The PPF account can be opened in branches of State Bank of India, a few branches of some nationalized banks, and all head post Offices.

- Account matures after expiry of 15 years from the end of financial year in which the account was opened. For example if the account is opened in the financial year 2000-2001, the account shall mature on 01 Apr 2016. In other words this is an instrument with a term of 16 years.

- Minimum amount that needs to be deposited in this account is Rs.500/- and maximum amount that can be deposited in a financial year in this account is Rs.70,000/-. Subscription should be in multiples of Rs.5/- and can be paid in one lump sum or in installments not exceeding 12 in a financial year.

- Contribution to PPF is eligible for deduction under sec 80C of Income tax Act 1961. The Interest earned is completely exempt from tax without any limit as per the present tax laws.

- Interest at the rate, notified by the Central Government in official gazette from time to time, shall be allowed for calendar month on the lowest balance at credit of an account **between the close of the fifth day and the end of the month and shall be credited** to the account **at the end of each year. At present, the interest rate is 8% p.a.**

- ***Loans:*** There is a loan facility available. An investor can borrow any time after completion of 5 years. The amount of loan cannot exceed 25% of the balance in account at the end of second year immediately preceding the year in which the loan is applied for.

- ***Repayment of loan and interest:*** - (1) The principal amount of a loan under this Scheme shall be repaid within thirty six months from sanction. The repayment may be made either in one lump sum or in two or more monthly installments. The repayment will be credited to the subscriber's account. (2) After the principal of the loan is fully repaid, the subscriber shall pay interest thereon in not more than two monthly installments. The interest shall be charged at the rate of 1% p.a. of the principal for the period of the loan. If the loan is repaid only in part within the prescribed period of thirty six months, interest on the amount of loan outstanding shall be charged at 6% p.a. instead of at 1% p.a.

- ***It is recommended to avoid loans since interest is paid out of non taxable interest and therefore the advantage gets diluted.***

- Partial Withdrawals are allowed beginning from 7th year and every year thereafter. An account holder can withdraw 50% of his balance at the end of the 4th or the 1st previous financial year, whichever is lower.

For example, if the account is opened in Financial Year 2000-2001. You may add 6 years to the financial year end i.e. 2001+6=2007 (FY 2006-2007). Accordingly, the 4th preceding year will be 2007-4= 2003 (FY 2002-2003) and preceding year will be 2007-1= 2006 (FY2005-2006). So the amount of 1st withdrawal in the 7th year, FY 2006-2007 is 50% of the balance to the credit as on 31-03-2003 or 30-03-2006, whichever is lower.

- The account can be continued for a block of 5 years after maturity. This facility is available for any number of blocks after expiry of extended period. The continuation can be with or without contribution. Once an account is continued without contribution for more than a year, the option cannot be changed.

- In post maturity continuation with fresh subscriptions, one can withdraw up to 60% of balance at the commencement of each extended period in one or more installments, but only once per year.

- In post maturity continuation without fresh subscriptions, any amount in part or full, can be withdrawn in installments but not exceeding once in a year.

- A PPF account is not subject to attachment (seizure of the account by Court order) under any order or decree of a court. However income tax authorities can attach PPF accounts to recover tax dues.

- A person can have only one account in his name. Two accounts even at different places anywhere in India are not permitted.

National Saving Certificates

NSC-VIII has a six years term with tax benefits under section 80-C of Income Tax Act, 1961. Minimum investment is Rs.500/- without any maximum limit. It can be bought by an individual or jointly by two adults. Nomination even with joint holders is possible. NRI, HUF, Companies, trusts, societies, or any other institutions are not allowed to purchase the National Saving Certificates.

- Interest on this cumulative scheme is 8% p.a. compounded half yearly, which works out to be 8.16% p.a.
- Premature encashment is allowed only in case of death of the holder, forfeiture by a pledgee, or under orders of court of Law.
- Certificates are available in denominations of Rs. 100, 500, 1000, 5000, and 10000.

Kisan Vikas Patra

- In this scheme minimum investment is Rs.100/-, without any maximum limit.
- Investment doubles in 8 years and 7 months, which works out to rate of return of 8.41% p.a. compounded annually.
- No Tax deduction at source and a withdrawal facility after two and a half years is available.
- It can be pledged as a collateral security for raising money.

Senior Citizen Savings Scheme

Eligibility is 60 years of age 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.

- NRIs, PIOs and HUF are not eligible to invest in this scheme.

- Maximum limit is Rs.15,00,000/-(Rupees fifteen Lac only), however in case of retirees before the age of 60 years the limit is restricted to retirement benefits or Rs15 Lac whichever is less. Any Post Office in India doing savings bank work, or an office or banking company or institution authorized by Central Government can operate this scheme. An investor can open more than one account subject to the condition, that amount in all accounts taken together does not at any point of time exceed Rs.15 Lac.

- At the same accounts office, two or more accounts cannot be opened during one month. Some offices insist on a gap of 30 days.

- The investment is non transferable and non tradable.

- The interest rate is 9% p.a. payable quarterly. Annualized equivalent is 9.31% p.a. assuming the interest component is re-invested. The benefit of section 80C is available on investment but interest is fully taxable.

- The term for the scheme is 5 years. A onetime extension of three years is allowed, if applied within one year of its maturity.

- Premature closure is allowed after expiry of one year subject to following conditions-
  - After expiry of one year but before 2 years, 1.50 % of deposit shall be deducted.
  - After expiry of 2 years, 1% of the deposit shall be deducted.
  - No deduction is made in case of closure of account due to the death of the account holder.

- Nomination facility is available even in case of joint account.

Post Office Monthly Income Scheme (POMIS)

- This scheme provides a regular monthly income to the depositors and has a term of 6 years.
- Minimum amount of investment is Rs.1500/-, and maximum amount in case of single account is Rs.4,50,000/-, and in case of joint account is Rs.9,00,000/-.
- Interest rate is 8% p.a. payable monthly with a bonus of 5% payable on maturity.
- Nomination facility is available.

Premature withdrawal / encashment / closure and Penalty

- 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.
- The bonus amount is forfeited when you close the account early.

Post Office Time Deposits (POTD)

These are similar to fixed deposits of commercial Banks. Interest rates are calculated half yearly and withdrawals are permitted after six months. No Interest is paid on closure of accounts before one year, and thereafter the amount of deposit shall be repaid with interest @2% below the corresponding Time Deposit rate for the completed number of years. Accounts can be pledged as a security for availing a loan. Also nomination facility is available for this account.

The POTD is offered for various durations as mentioned in the below table:

Duration	*Interest rate (p.a.) **
One Year	6.25%
Two Year	6.50%
Three Year	7.25%
Five Year	7.50%

* These are current interest rates as of September 2010 and are subject to change.

4.3 Marketable Fixed Income Instruments

The Government Securities and Corporate securities markets form two main segments in Indian debt markets and play an important role in capital formation process. These securities form an important source of funds for corporate and Government.

The market for government securities is the most dominant part of the debt market in terms of outstanding securities, market capitalization, trading volume and number of participants. It sets benchmark for the rest of the market. Major investors in Debt Market are shown in table on the next page.

The Central Government mobilizes funds mainly by issue of dated securities and T -bills. Dated Govt. securities are long term investment instruments, where as T-bills are short term investment instruments. The major investors in sovereign papers are banks, insurance companies and financial institutions, which generally do so to meet statutory requirements.

Participants and Products in Debt Market

ISSUER	INSTRUMENTS	MATURITY*	INVESTOR
Central Government	Dated Securities	2 – 30 Years	RBI, Banks, Insurance Companies, Provident Funds, Mutual Funds, Individuals, FIIs, trusts, Pension Funds
Central Government	T- Bills	91/364 Days	RBI, Banks, Insurance Companies Provident Funds, Mutual Funds, Individuals, FIIs, trusts, societies, Pension Funds
State Government	State Development Loan	5 – 10 Years	Banks, Insurance companies, Provident Funds, Individuals, insurance companies, mutual funds, trusts, societies, Pension Funds
PSUs	Bonds, Structured Obligations	5 – 10 Years	Banks, Companies, Provident Funds, Mutual funds Individuals, Corporate, FIIs, insurance companies, trusts, societies, Pension Funds
Corporate	Debentures, Bonds	1 -12 years	Banks, Mutual Funds, Corporate Individuals, FIIs, insurance companies, Pension Funds
Corporate	Commercial papers	15 Days to 1 year	Banks, Mutual funds, Financial Institutions, Corporate, Individuals, FIIs, insurance companies, Pension Funds
Banks	Certificates of Deposits	3 months to 1 year	Banks, Corporate, Individuals, FIIs, insurance companies, mutual funds, Pension Funds

*Maturity as mentioned in most cases. The same may be different in certain cases.

4.4 Mutual Funds

Mutual Funds are an important financial intermediary for an investor. They are a vehicle to mobilise money from investors, to invest in different avenues, in line with the investment objectives of the scheme. Professional expertise along with diversification becomes available to an investor through Mutual Fund route of investment. Through mutual funds one can invest almost in all categories of assets.

Various advantages of Mutual Funds are:-
A) Portfolio Diversification
B) Professional Management
C) Diversification of Risk
D) Liquidity
E) Convenience and Flexibility
F) Low Cost

The Structure of Mutual Funds

It is important for an advisor to understand the structure of mutual funds. Their unique structure has various safety features built-in. The regulatory oversight only adds to the safety of the investors' money invested in the mutual funds.

Mutual funds are constituted as public trusts in India. These are set up for the benefit of the unit holders, who are the owners of the fund. Unlike other investments, mutual fund is not an investment in itself but just a vehicle to help an investor access various investment options discussed earlier.

- Investors pull their money and invest in a mutual fund
- The money in the fund is managed by an entity called Asset Management Company (AMC). The AMC invests the fund's money in line with the scheme's objectives. The AMC is promoted by sponsors
- Since the mutual fund is a trust, there are trustees who oversee the management of the fund. Their job is to ensure the fund's money is managed in the best interest of the investors and as mandated by the scheme objectives. Majority of trustees are independent of the sponsors of the AMC
- The scheme earns returns through investment in various avenues
- These returns are passed on to the investors in form of either distribution of dividends or growth of capital.
- The AMC collects its professional fees for managing the fund's money
- SEBI, the securities market regulator, has issued detailed guidelines

and regulations for protection of investor interests and regulated and orderly growth of mutual fund industry.

Mutual funds can be ***open-ended*** or ***close-ended***. Units of open ended funds can be purchased from and sold to the fund houses on all working days where as the close-ended funds do not allow the investors to redeem units directly from the funds before maturity. Close-ended funds accept purchases only during the period of launch of the scheme, also known as the NFO. These funds are not allowed to accept purchases after the NFO is over. Listing of units of closed-end fund on one or more recognised stock exchanges is mandatory to provide liquidity to existing investors. The units generally trade on the exchanges at discount to the NAV. Earlier, mutual funds had an option of offering liquidity through listing on a stock exchange or through a periodic redemption facility.

Each of the Mutual Funds has an objective and terms of scheme stated in their Offer Document/ Key Information Memorandum, which every investor must go through, in order to check if his own needs and objectives match with the fund's objectives. Mutual funds could invest in equity, bonds, short term income instruments, Gold or other precious metals, or Real Estate. Depending on these investments Funds could be classified as:-

a) Money Market or Cash or liquid Funds
b) Debt Funds
c) Equity Funds
d) Hybrid Funds
e) Exchange Traded Funds (ETFs)
f) Fund of Funds

Mutual funds could choose to invest in a mixture of above assets in any combination or could invest in any particular type of sector in that asset and have accordingly been named in accordance with the investment guidelines.

a) Money Market / Liquid Funds

These Mutual Funds invest the investor's money in most liquid assets, like, Treasury Bills, Certificates of deposit, Commercial papers etc. These instruments in which Money Market Mutual Fund (MMMF) invests can be encashed at a short notice; capital is safe though returns are low. Post tax the returns from MMMF may be higher than keeping money in savings account in the bank. These funds invest in debt instruments of short term nature like Treasury Bills issued by Government, Certificate of Deposits issued by Banks, and Commercial papers issued by companies. These are considered to be most liquid and least risky investment vehicles. Though interest rate risk and credit risk are present, the impact is low as the investment vehicle's maturities are short and quality of papers is sound.

These are ideal for investors looking to park their short term surplus with an objective of high liquidity with high safety.

b) Debt or Income Funds

These funds invest in fixed income generating debt instruments, issued by government, private companies, banks, financial institutions, and other entities such as infrastructure companies/utilities. The main objective of these funds is to generate stable income at a low risk for the investor. As compared to the Gilt funds these debt funds have a higher risk of default by their borrowers. These funds can further be categorized as, a) Diversified Debt funds, b) Short Term Debt funds, c) High Yield Debt funds, d) Fixed Term Plans, e) Gilt Funds

• Diversified Debt Funds

These funds invest in a diversified basket of debt securities. They can invest in debentures issued by Government, companies, banks, public sector undertakings, etc. The objective of these schemes could be to provide safety of capital and regular income. At the same time, some funds may also have an objective of generating higher returns than traditional debt investments. This objective can be achieved by proper management of certain risks, viz. credit risk, interest rate risk or liquidity risk.

• Gilt Funds

These funds invest in government securities. Since the funds invest largely in the securities issued by Government of India, the credit risk can be assumed to be non-existent. However, these government securities, also called dated securities, may face interest rate risk, which means as the interest rates rise, the NAV of these funds fall (and vice versa). The NAVs of these funds could be highly volatile, if the maturity is long. These funds are also known as Government Securities Funds or G-Sec Funds.

• Short Term Debt Funds

In order to reduce interest rate risk, some funds are mandated to invest in debt securities with short maturity, generally less than 3 years. Such funds earn large part of returns in form of interest accrual and are less sensitive to interest rate movements. These funds may or may not take liquidity and credit risks. One would be advised to read the scheme objectives and investment style to know more about specific schemes.

These funds have the potential to earn higher than liquid funds but the NAVs of these funds also exhibit some degree of volatility. At the same time, the volatility is likely to be much lower than diversified debt funds.

• High Yield Debt Funds

High quality (those having high credit rating) debt securities offer low interest rates and hence some investors are not happy with such low returns. They are willing to take some risk without getting exposed to the risk of equity.

High yield debt funds are ideally suited for such investors. These funds invest in debt securities with lower credit rating. The lower rating ensures the securities offer higher interest rates compensating the investor for the extra risk taken.

• Fixed Term Plans

As seen earlier, debt funds are subject to interest rate risk and the NAVs of these funds fluctuate if the interest rates change. Investors willing to hold the investments for a defined term face the risk when they need to take the money out of the scheme.

If there was an option where the investor's risk could be reduced as the withdrawal time approaches, it serves a major purpose for the investor. Fixed term plans, popularly known as FMPs (Fixed maturity plans), have a defined maturity period; say 3 months, 6 months, 1 year, 3 years, etc. The maturity of the debt securities in which the fund invests, and the maturity of the scheme are almost the same. Hence, when the scheme matures and money has to be returned to the investors, the fund does not have to sell the bonds in the market, but the bonds themselves mature and the fund gets maturity proceeds. Since the fund does not have to sell the bonds in the market, the fund is not exposed to interest rate risk.

These are close-ended debt funds. The units of these funds have to be listed on a stock exchange to provide liquidity to the investors.

These funds are ideally suitable for investors who know the time when they will need the money and also do not need money before the maturity of the FMP.

c) Equity Funds

These funds invest in equities and depending on the type of equities these funds have been further classified as, a) Growth funds, b) Value funds, c) Dividend Yield funds, d) Large Cap funds, e) Mid Cap or Small Cap funds, f) Speciality funds or Sector funds, g) Diversified Equity funds and h) Equity Index funds. Certain equity funds have tax benefit under section 80C of the Income-tax Act, 1961 and have a lock in period of three years. These are Equity Linked Savings Schemes popularly called as ELSS. These funds have higher risk, but potential for higher returns.

• Growth funds

These funds invest in the growth stocks, which ie stocks that exhibit and promise above average earnings growth. Managers using the growth style select stocks which are normally quite high profile. Such stocks being high growth are more visible and also have high investor interest. Due to this, the stocks may appear to be costly on historical valuation parameters. However, the high valuation is justified by the expected high future growth.

• Value funds

As the name suggests, value funds buy value stocks as we discussed earlier. Such stocks are generally out of favour with most investors in the market and hence the market price is low as compared to the inherent value of the business. The value style managers generally hold the stocks for longer time horizon than their growth style counter parts.

• Dividend yield funds

One of the valuation parameters a value style fund manager looks for is high dividend yield. However, there is a category of funds that consider this one parameter as the most important factor to select stocks. As compared to other parameters of considering value, dividend is believed to be more reliable as it involves cash movement from the company account to the share holder account and hence there is no room for any subjectivity.

• Large cap funds / Mid cap funds / Small cap funds

Equity mutual funds can be classified based on the size of companies invested in. In capital market terms, the size of the companies is measured in terms of its market capitalisation, which is the product of number of outstanding shares and the market price. It also denotes the price the market is willing to pay to buy the entire company. Larger the market capitalisation, larger the company. In popular usage, the word market capitalisation is referred to as “cap”.

Fund investing in stocks of large companies are called Large Cap Funds and those investing in stocks of midsized companies are called Small Cap Funds.

• Speciality / sector funds

Certain funds invest in a narrow segment of the overall market. The belief here is that stocks in similar industry move together, as companies in such sectors are similarly impacted due to some factors. There are funds that invest in stocks of only one industry, e.g. Pharma Funds, FMCG Funds or broader sectors, e.g. Services Sector Fund or Infrastructure Fund. Similarly, there could be thematic or speciality funds that invest based on some common theme, e.g. PSU Funds or MNC Funds.

Most advisors recommend that an investor would be better off keeping the exposure to such funds limited. These funds are more suitable for aggressive and savvy investors.

• Diversified equity funds

These funds invest in stocks from across the market irrespective of size, sector or style. The fund manager has a greater freedom to pick up stocks from a wider selection. Most advisors advise investors to have diversified funds as core part of their portfolio. These funds, being diversified in nature, are considered to be less risky than thematic or sector funds.

• Index funds

In all the above categories of funds, the fund manager plays an active role in carefully selecting stocks to build the portfolio.

d) Hybrid Funds

These are mixed equity and debt funds. Depending on the objective these funds can be further classified as a) Balanced funds, b) Monthly Income Plans (MIP) and c) Asset allocation funds.

• Balanced funds

The most popular among the hybrid category, these funds were supposed to be investing equally between equity and fixed income securities. However, in order to benefit from the provisions of the prevailing tax laws, these funds invest more than 65% of their assets into equity and remaining in fixed income securities.

These funds are preferred by investors who seek the growth through investment in equity but are not very comfortable with the volatility associated with pure equity funds.

• Monthly Income Plans (MIPs)

This category of funds invests predominantly in fixed income securities with marginal exposure to equity. The fixed income component provides stability to the portfolio, whereas equity provides capital appreciation over long periods of time. Generally, 80% of the scheme corpus is invested in fixed income securities and the balance 20% in equity. However, the allocation could be different from the above. Recently, some fund houses have also launched schemes under this category that invest in equity, fixed income and gold.

These funds are ideally suitable for any investor who wishes to have steady growth of capital with the ability to beat inflation over long periods of time.

• Asset allocation funds

We saw earlier that asset allocation is a very important part of the investment plan. Advisors have a choice of either constructing portfolios for their clients through careful selection of components. Alternately, they can also look at readymade solutions available in the form of "Asset Allocation Funds" launched by certain mutual fund companies. These funds are designed with certain investor profiles in mind and most of the fund houses also offer tools to match the investor profile with the various options under these funds.

e) Exchange Traded Funds (ETFs)

These funds combine the best features of open and closed mutual fund schemes, and trade like a single stock on stock exchange. Thus these funds can be purchased and sold at real time price rather than at NAV, which would be calculated at the end of the day. These funds, available in India track indices (e.g. Nifty, Junior Nifty or Sensex) or commodities like Gold (Gold ETFs). Recently, active ETFs have also been introduced in Indian market. ETFs are very popular in other countries, especially USA. The biggest advantage offered by these funds is that they offer diversification at costs lower than other mutual fund schemes and trade at real time prices.

f) Fund of Funds (FOF)

Mutual funds that do not invest in financial or physical assets, but invest in other mutual fund schemes, are known as Fund of Funds. Fund of Funds maintain a portfolio comprising of units of other mutual fund schemes, just like conventional mutual funds maintain a portfolio comprising of equity/debt/money market instruments or non financial assets. There are different types of 'fund of funds', each investing in a different type of collective investment scheme. Fund of Funds provide investors with an added advantage of diversifying into different mutual fund schemes with even a small amount of investment, which further helps in diversification of risks.

4.5 Equities

In simple terms, investing in equity means either investing one's funds in a business that isrun by self or becoming a shareholder in other businesses, thus taking a higher risk, but with a higher potential of returns. If company/business does well and makes profit, the investor is going to benefit as he is part owner of this profit, however if the business goes in loss, the investor would also lose proportionately. Thus it is important to understand the fundamentals of the company/business in which one is investing. If an individual does not have the expertise to analyse the business and company, he could use the expertise of others in the field by either investing through mutual funds or Portfolio Managers.

Investments in equities have a higher potential for returns, though with higher risks too, as one must understand risk and reward go hand in hand. Knowledge, expertise in analyzing the equities and longer horizon of investment, would help to considerably reduce the risk.

Returns from equities could be in the form of capital growth, dividends or both. In order to know the growth potential of a company/business, it is prudent to analyse the balance sheet, profit and loss statement and cash flow statement of the company and compare it with previous year's statements and peer company's statements.

Few of the important terms are described below to help understand these aspects:

a) ***Earnings per share (EPS):***- This is net profit minus dividend earned by preference shares, divided by number of equity shares.

b) ***Dividend percentage***: - This is dividend per share divided by face value of share and then multiplied by hundred to get the percentage.

c) ***Dividend yield (%)***:- This ratio gives the return in terms of dividend you receive by buying a share in market. It is the dividend per share divided by market price of the share, and then multiplying by 100 to get the percentage.

d) ***Price-Earnings Ratio (P/E Ratio)***:- It is market price of share divided by earning per share. In other words it indicates the number of times the earning per share, the market is valuing the share.

e) ***Book Value***: - This is defined as (Equity capital + net shareholder's reserve)/ no. of equity shares. Whenever the book value of a company is higher than the market price of the company, it indicates the share of the company is available at a discount.

Analysis of financial statements is necessary but not sufficient. One must analyse the business dynamics as well e.g. market size, customer preferences, competition, regulations etc.

Investors in equity shares employ certain parameters for the selection of stocks in their portfolios. Two popular styles used are "growth" and "value". Under value style, the investors select stocks which are priced very low compared to their inherent value. In order to determine this, the investors look at parameters like low price-to-earnings ratio, low price-to-book value ratio, high dividend yield, etc. Generally, such stocks are out of favour with most investors and hence the value style managers are sometimes referred to as contrarian investors. On the other hand, there are stocks that exhibit very high rate of earnings and business growth. Such stocks are known as growth stocks and are favourite picks for growth style investors. Generally, growth stocks exhibit high price-to-earnings ratio, high price-to-book value ratio and low dividend yields.

Various ways of investing in equities for an individual are:-

1. Equity Oriented Mutual Funds
2. Portfolio Management Schemes
3. Direct Investment in Equities.

4.6 Derivatives

These are basically risk management leveraged instruments, which derive their value form the underlying assets. These are extensively used by Hedgers, Speculators, and Arbitragers. Speculations in derivative markets can be very risky, where as if used with proper knowledge as risk management instruments; these could help to protect the returns of the underlying asset.

Various derivatives in use are:

i) Forwards
ii) Futures
iii) Calls
iv) Puts
v) Swaps
vi) Warrants
vii) Leaps

Index futures were started in the year 2000 in India and later on stock futures and index and stock options were added to the F&O segment at exchanges in India. CALLS and PUTS are types of options, which give the buyer a right to buy or sell the underlying asset, without any obligation to do so. In order to get this right the buyer of an option pays an amount, called the premium, to the seller (also called writer) of the option. Thus the seller of the option has an obligation whereas the buyer has the right to buy or sell. This results in a possibility of limited loss or unlimited gain for the buyer of the option and the reverse for the seller of the option.

Buying or selling futures contracts is similar to going long or short on stocks, except that one pays only margin money while going long or short on futures where as in case of stocks full payment is made. There is a possibility of unlimited loss or unlimited gain when the security moves against or in the expected direction of the investor.

Futures could be used for Hedging, Arbitrage, and Speculations.

Hedging is basically protecting your assets from losses; however it does not maximize the profits. If one is holding a stock already in profit and feels the stock might fall in near future temporarily, one can protect the profits by selling a future in F&O segment. This would compensate him from any losses in cash market from fall of the stock price. A hedge does not result in better outcome; it results in more predictable outcome.

In an Arbitrage opportunity one can take advantage of difference in prices in different markets, and thus look for risk free gains. Say stock price in cash market is significantly lower than the futures price. One buys the stock in cash market and sells the same stock in futures markets, and thus ensures profits, as at the end of expiry of futures (the last Thursday of the month) price of stock in cash and futures markets would be the same. Stock markets could move in any directions but your profit, which is generally low, is booked.

Speculators often take positions in futures markets based on their expectations regarding the price movements of the underlying assets without having a position in cash markets.

Commonly used terminology in Options market is:

a) **Call Option**: This option gives the buyer a right to buy the underlying at a predetermined price during a predetermined period. Call option gives the buyer a right to purchase the shares/underlying asset at a price which is below the market price and vice versa for seller.

b) **Put Option**: This option gives the buyer a right to sell the underlying at a predetermined price during a predetermined period. Put option gives the buyer the right to sell the shares/ underlying asset at a price which is above the market price.

c) **American Option**: This option can be exercised at any time on or before the expiry day/date.

d) **European Option**: This option can be exercised only on its expiry.

e) **Strike Price/ Exercise Price**: It's the price at which an option is exercised.

f) **Expiry Day/Date**: The day/date on which option expires and the contract ceases to exist.

g) **Exercise Day/Date**: The day/date on which option is exercised.

h) **In The Money Option (ITM)**: If the strike price is more than the market price of the underlying it is said to be in the money (ITM) option. Thus a CALL option would be in the money when market price of the underlying asset is more than the strike price and for the PUT option to be in the money, the market price of the underlying asset is less than the strike price.

i) **Out Of The Money Option (OTM)**: If the strike price is less than the market price of the underlying asset, it is said to be out of the money (OTM). Thus a CALL option would be out of the money when market price of the underlying asset is less than the strike price and for the PUT option to be in the money, the market price of the underlying asset is more than the strike price.

j) **At The Money Option (ATM)**: When the strike price and the market price of the underlying are equal the option is called at the money (ATM).

k) **OPTION PREMIUM**: It is the price which an option buyer pays to the seller to buy this option/right. The option premium is the inflow for the option writer/seller, whether the buyer exercises the option or not. The option premium consists of two components – Intrinsic value and time value. The intrinsic value of an option is the amount by which option is in the money. Thus only, in the money options have intrinsic value and all out of the money and at the money options have zero intrinsic value. In these cases options have only time value in its premium. The time value of the option is also called the extrinsic value of the option.

With respect to European options, we have the following four major strategies:

Buy a Call option:
This gives the buyer of the option the right to buy a security on a specified date in future at the specified price, also known as strike price. The buyer of option pays a premium to the seller of option (also known as writer). The buyer exercises the right if on the specified date, the strike price is lower than the market price (spot price) of the security.

Buy a Put option:
This gives the buyer of the option the right to sell a security on a specified date in future at the specified price (strike price). The buyer of option pays a premium to the seller of option. The buyer exercises the right if on the specified date, the strike price is higher than the market price (spot price) of the security.

Sell a Call option:
This obligates the seller (writer) of the option to sell a security on a specified date in future at the specified price (strike price), if the buyer of the option exercises the right to transact. The seller of option receives a premium from

the buyer of option. The buyer exercises the right if on the specified date, the strike price is lower than the market price (spot price) of the security.

Sell a Put option:
This obligates the seller (writer) of the option to buy a security on a specified date in future at the specified price (strike price), if the buyer of the option exercises the right to transact. The seller of option receives a premium from the buyer of option. The buyer exercises the right if on the specified date, the strike price is higher than the market price (spot price) of the security.

Non Financial Assets

Commodities

So far we have discussed about the financial investment instruments, which are all in paper form, whereas the commodities are the real assets like, agricultural products, metals, bullion, silver, oil etc. Derivative contracts on these products are traded on commodities exchanges like, MCX and NCDEX in India. Investment in commodities could be done through mutual funds (only for gold), derivatives or directly. Investment in gold is good for hedging against inflation. The best way to invest in gold is using gold exchange traded funds. This route of investment in gold decreases the cost and taxation, and gives safety against theft. The liquidity and divisibility is good.

4.7 Real Estate

In India most of us have our major investment in acquiring a house. Every one dreams of having a house of one's own.. There is plenty of scope for the planners to professionalize in this field. A house where one lives is a personal asset. It is the second house or other forms of real estate which could form the investment vehicle, as these would be the ones giving returns. We could categorize the real estate in following types:

a) Residential Property.
b) Commercial property.
c) Industrial real estate
d) Agricultural land.
e) Semi urban land.
f) Time share in a holiday resort.

Residential Property: This investment vehicle provides returns in the form of rent and capital appreciation. Tax rebates are available on interest paid and principal repayment when the investment is through a loan. Further, long term loans at attractive rates make this investment attractive.

Commercial property: For an investor, constructing a commercial complex or buying a shop or office in a commercial complex could offer regular rental income and capital appreciation over a time period. However this investment requires sufficient outlay and time and effort in managing it.

Agricultural land: Agricultural income from agricultural land is not taxable. Further, agricultural land is exempt from wealth tax too. Appreciation in agricultural land value along with regular income makes it an attractive investment vehicle.

Semi urban Land: Residential land in suburban areas is usually available at prices lower than those prevailing in the city. This is usually a converted land in private layouts and has a high potential for capital appreciation as the infrastructure increases and surrounding areas develop.

Time Share in a Holiday Resort: The concept of time share holidays is increasing every day. The outlay is modest and affordable. It could prove especially useful for people who like to enjoy regular vacations. The stay period if not used could be rented and value of time share also increases over a time period. The investment can be passed in a will and can also be sold in future.

Real estate investments require a large investment, and thus needs to be financed. For house, loans could be taken from various financial institutions or from employer. Loans for houses are available usually at a concessional rate as compared to other loans.

Other Investments:

Art objects, collectibles and precious stones are costly and illiquid investments. These require lot of knowledge in these products and one really has to know the market for these products to be able to buy and sell these products. One should be cautious while making such investments.

Private Equity: It is the money invested in firms which have not 'gone public' and therefore they are not listed on any stock exchange. Private equity is highly illiquid because sellers of private stocks must first locate prospective buyers. Investors in private equity are generally compensated when: (i) the firm goes public (ii) it is sold or merges with another firm or (iii) it is recapitalised.

Venture capital: Venture capital is a type of private equity investment. Investing in new projects or entrepreneurial business, in exchange for an equity stake in the business involves high risks. As a share holder, the return is dependent on the growth and profitability of the business. This growth is generally earned by selling its shareholding when the business is sold to another owner.

Before recommending any investment vehicles, it is preferable to consider your clients' financial needs, goals, and aspirations, as well as the risk profile.

SUMMARY:

Investment is commitment of the capital to purchase assets in order to profitably gain in the form of regular income or appreciation of assets. These assets could be financial or real/non financial assets. Inflation, Tax and risk of losing capital are the main concerns while investing. Risk and reward go hand in hand, higher the risk more is the reward expected. Financial investment vehicles could be cash instruments, Debt instruments, or equity, cash instruments being least risky while equity being most risky. Real or non financial instruments could be commodities, bullion, real estate, collectibles and art. Investment in gold is a good hedge against inflation. While choosing to invest in any asset, one must align it to one's financial goals and the risk profile.

- In India, the concept of saving is well understood by majority, however very few understand the concept of investing.
- Investing is committing capital to purchase assets in order to profitably gain in the form of regular income or appreciation of capital or both.
- Before **recommending** any investment vehicles, it is preferable to consider your clients' financial needs, goals, and aspirations, as well as the risk profile.
- Important concerns while investing capital are Inflation, Tax, and risk to capital, Returns, liquidity and divisibility.
- Investment vehicles could be broadly classified into financial assets and real/non financial assets; financial assets are further subdivided into, cash, debt, equity and derivative instruments. Commodities, real estate, bullion, collectibles, art etc. form the non financial assets.
- Mutual funds form an important investment vehicle, as it is possible to invest in most of the assets through mutual funds.
- It is important to keep three to six months expenses in cash instruments for looking after any unforeseen emergencies.
- Short term requirements should preferably be kept in debt instru-

ments. Provident fund / PPF is good investment, being safest and tax friendly, however being illiquid. For senior citizens, senior citizens saving scheme is a good investment to get regular income for 8 years.

- Equities though are riskier investments; they provide higher returns. For long term investors, equities are good investments to beat inflation.
- Derivatives are leveraged risk management tools, however could prove very risky if used for speculation. One requires a thorough knowledge of derivatives in order to use them profitably.
- Real estate requires large outlay of capital. This should form long term investment where liquidity is not an immediate requirement.
- Gold is a good hedge against inflation. Investment in Gold through ETF's can prove very easy and profitable, due to less cost of procurement, safety and tax benefits.

Sr. No.	Name of Scheme	Period	Rate of Interest (p.a.)	Maturity Value
1.	Savings Bank	-	3.50 %	-
2.	Post Office Recurring Deposit	Five years (can be extended up to five years)	7.50 %	For Rs.100 denomination Rs.728/-
3.	Post Office Time Deposits	One Year	6.25 %	Interest paid yearly
		Two Years	6.50 %	-do-
		Three Years	7.25 %	-do-
		Five Years	7.50 %	-do-
4.	Monthly Income Scheme	Six Years	8 %	Interest paid monthly plus 5 % bonus on maturity
5.	Kisan Vikas Patra	Eight Years and seven months	8 %	Double after maturity
6.	6 Years National Savings Certificate VIIIth issue	Six Years	8 %	For Rs.1000/- Rs.1601/-
7.	Sr. Citizen Scheme 2004	Five years	9 %	Interest paid quarterly
8.	Public Provident Fund Scheme	Fifteen years	8 %	For deposit Rs.500/-per month gets Rs.1,85,156/ considering a period of 15 years* of actual investment

* In PPF scheme, the maximum invest periods can be 16 years.

Review Questions

Questions to assess your learning:

1. Which of the following account cannot be opened under PPF scheme?

a) Account in the name of Mr. X who is a resident
b) Account on behalf of Mr. Y who is resident minor
c) Account in the name of Mr. and Mrs. X (both are resident)
d) Account in the name of Mr. Z who is resident

2. For how many years an account under senior citizen scheme can be extended?

a) 5 years
b) 3 years
c) 1 year
d) 6 years

3. The Price at which option is exercised is known as ___________.

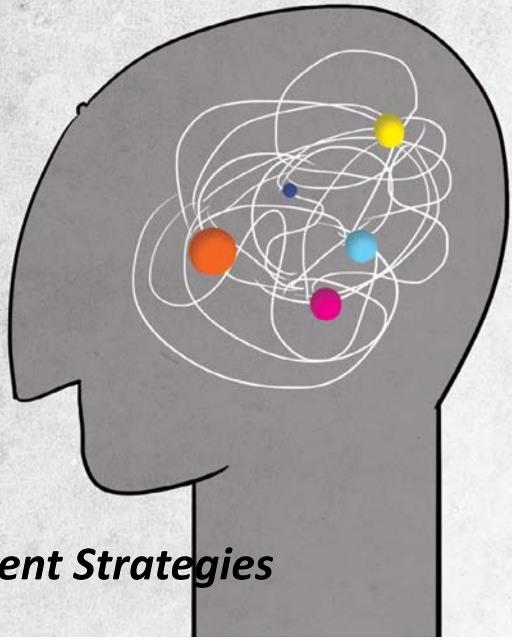
a) Market Price
b) Book Price
c) Strike Price
d) All of the above

4. If a PPF account is opened in FY 2005-2006, the same will normally mature on ____________.

a) 31st March, 2021
b) 1st April, 2020
c) 1st April, 2021
d) 31st March, 2020

5. What is the range of period for which Treasury Bills (T-Bills) are issued?

a) 91days to 364 days
b) 90 days to 180 days
c) 1 year to 3 years
d) 2 years to 25 years



Unit 5: *Investment Strategies*

Learning Goals

5.1 Explain Active and Passive strategies (Asset allocation across risky and risk-free portfolios, cross border diversification, Market timing, Buy/ hold).

5.2 Discuss Asset allocation (Strategic Asset Allocation, Application of client lifecycle analysis, Client risk tolerance measurement and application, Asset class definition and correlation, tactical asset allocation, Fixed and flexible allocation, Rebalancing strategies, Formulae based monitoring and revision of portfolios).

Introduction

All of us have dreams and goals which we want to accomplish in life. Some of us may have the goal of purchasing a new house, some may want to start their own business venture and some may just decide to fund a comfortable retirement.

So what do we do to accomplish these goals? Plan for it and as they say that failing to plan is planning to fail.

Planning for the same means that we have to prepare a strategy for the same to be achieved. Hence, an investment strategy is a set of rules, behaviours and procedures which are designed to guide the selection of a portfolio of assets, which in turn is aligned to what you want and when you want it. This is done bearing in mind the risk return profile of an individual. You may choose to invest in a highly risky asset with expectation of high returns or you may choose to invest in risk free investment options which are considered much safer. Most of the time it's a mix between the above two asset classes.

5.1 Active and Passive Strategies

Active Strategy and its suitability

Let us understand this with the help of an example:
A market savvy well informed investor aged 45 years has allocated Rs. 1,00,000 in his portfolio in the following way:

(Amount in Rs.)

Existing		**Proposed**	
Asset Class	***Amount***	***Asset Class***	***Amount***
Equity	45,000	Equity	30,000
Debt	30,000	Debt	45,000
Cash	25,000	Cash	25,000

The above table shows the existing portfolio of an investor divided into 3 broad asset classes.

Let's now assume that the investor expects that in the coming year equity as an asset class is likely to underperform. Therefore in the proposed portfolio:

- He reduces the exposure to equity in the portfolio from existing 45% to 30%, due to high equity exposure in the existing portfolio.

- He simultaneously increases the exposure to the debt markets from 30% to 45%, with the objective of safeguarding his return.

The above is an example of an active strategy by timing the markets. Here the Investor or the Portfolio managers actively departs from his normal portfolio (Existing) to another portfolio of assets (Proposed) which reflects his expectation of how the various asset classes would perform in the near future.

So in this example: What happens after a year? Has the Investor benefited at the end of the year because of this portfolio asset allocation move? Let's assume two scenario's:

Scenario 1

His expectation turns out to be correct and the equity markets fall in general by 20%.

This would have a similar effect on the proposed equity portfolio and hence he loses Rs. 6,000 on his equity asset class. This is comparatively lower to the decrease in existing Equity asset class had the portfolio asset allocation not changed, in which case he would have lost Rs. 9,000 (45,000*20%). Under the proposed and existing asset class, the final portfolio would look as follows:

(Amount in Rs.)

Proposed		**Existing**	
Asset Class	***Amount***	***Asset Class***	***Amount***
Equity	24,000	Equity	36,000
Debt	48,600	Debt	32,600
Cash	25,000	Cash	25,000
Total	97,600	Total	93,600

Scenario 2

His expectation turns out to be incorrect and equity markets rise by 20%. Needless to say that his gains would also be substantially lower under the proposed portfolio as compared to his existing portfolio. Here he earns Rs. 6,000 (30,000 X 20%) on the proposed portfolio as compared to Rs. 9,000 on the existing portfolio.

(Amount in Rs.)

Proposed		**Existing**	
Asset Class	***Amount***	***Asset Class***	***Amount***
Equity	36,000	Equity	54,000
Debt	32,600	Debt	32,400
Cash	25,000	Cash	25,000
Total	93,600	Total	111,400

(Assumed rate of return on debt investment is 8% and Cash is 0%)

Therefore, the success of an active strategy depends on whether the markets behaviour has been in line with the expectations of the Portfolio Manager/ investor.

The four vectors of active investment strategy are:

1. Market timing
2. Sector rotation
3. Security selection
4. Use of a specialized concept, investment style.

In a nutshell Active Investment strategies refer to:

Those strategies which are responsive to changing expectations of the portfolio manager. These strategies attempt to capitalize between the portfolio manager's belief concerning security/ asset class valuation and that of the marketplace.

A portfolio managers' prediction is based on fundamental and technical analysis.

Suitability

Empirical studies show that only a handful of portfolio managers have outperformed the markets on a consistent basis. It involves lot of behavioral aspects on each individual in terms of accepting mistake, realizing herd behavior etc. Also active strategy would involve higher trading costs since there is lot of churning of the assets.

The following factors determine the suitability :
1. The portfolio managers' expectation on the performance of an asset class
2. Alpha defining the portfolio managers' experience and performance

Conclusion

Hence, active investment strategy seeks to maximize the returns, by exploiting the ups and downs in the market and buying stock when they drop and selling them when they are overvalued. The strategy aims at higher level of returns from the stipulated benchmark. It takes a high degree of knowledge on the economy, industry, company valuations and stock markets. Needless to say that this strategy should be adopted by managers and investors who choose to put in the time and the effort for the same and prefer taking risks.

While the fund managers endeavour to outperform the benchmark index, the ability to do so is questioned by certain sections of the market, media and academia. This is an on-going debate.

Asset Allocation

Asset allocation means investing an individual's money for meeting the goals, needs etc broadly in three categories i.e. equities, fixed-income, and cash and equivalents based on the risk profiling and expected return of the individual. Any Investor investor with a set of objectives/ goals with a particular risk profile would require his finances to be arranged and focused based on a certain asset allocation to achieve the same.

Asset allocation put simply is the process of deciding how to distribute the investor's wealth among the various asset classes for investment purposes. It is this decision which determines how much of the assets need to be distributed over the following asset classes with different characteristics. Asset allocation also provides for a direction to the future income, cash flows of the investor in terms of where he should invest to achieve his financial goals.

Following is the list of generally used asset classes:

Cash	• Generally required for meeting day to day and emergency requirements. • Cash held holds negligible value in terms of returns and hence there is minimal risk.
Bonds	• Bonds are debt securities in which an issuer owes the holder of the security a debt. It has different terms attached to it including interest and repayment of principal on maturity. • Government bonds provide returns which are fixed and backed by central or state governments. Those issued by Central Government are considered to be risk-free as it is believed that a Government will not default on its obligations towards its own citizens. • Risk and return characteristics of bond are relatively lower than equity and hence suitable for an investor seeking regular income flows with minimal risk.
Stocks	• A stock represents ownership in a company. • Empirical study suggests that this asset class pro-

	vides higher returns if invested for long run. • Volatility is higher in this asset class than cash and bonds as an asset class.
Real estate	• Involves investment in land or building (commercial as well as Residential), or Real Estate Investment Trust's (REIT). So far, REITs are not available as an investment option in India. • Generally speaking real estate as an asset class has a high degree of management issues including tenancy management, property maintenance, Legal Clearances, Illiquidity etc.
Precious metals such as gold	• Generally gold is preferred by Indian families as a secure investment and also highly liquid • Gold also provides as an option of asset class for diversification within a portfolio of assets being directly/ indirectly correlated with other asset classes. • Gold is generally used as a hedge against inflation.
Other alternative assets (Investment in Art/ Wine/ Stamps)	• Investment in art/ wine is being made for reasons which are personal and emotional generally deriving pleasure from the taste and visual experience. • Art/ wine have a very low correlation with other asset classes and hence have diversification benefits. • The value of Fine art/ old wine is that these being collectible, the value is very subjective in nature and hence no exact measure for determination of the same. • This asset class comes with very low level of liquidity.

Necessity of Asset Allocation

It is very difficult to determine in a year which particular asset class would be the best performing one. Investing in only one class of asset could prove to be risky. However in the long term it may overlook the market cycle and provide returns.

A fundamental justification for asset allocation is the notion that different asset classes offer returns that are not perfectly correlated. Hence, diversification reduces the overall risk in terms of the variability of returns for a given level of expected return. Therefore, having a mixture of asset classes is more likely to meet the investor's expectations in terms of amount of risk and possible returns.

Conclusion

Asset allocation is the strategy used to choose between the various kinds of possible investments, in other words, the strategy used in choosing in what asset classes such as stocks or bonds one wants to invest. A large part of financial planning consists of finding an asset allocation that is appropriate for a given person in terms of their risk appetite, expected return, investment horizon, needs, goals etc.

Risk Free Asset

To understand what makes an asset risk free, let us go back to how risk is measured for investments. Investors carry a certain expectation in terms of returns from the asset. The actual returns that they make over a certain holding period may be very different from the expected returns, and this is where the risk comes in. Risk in finance is viewed in terms of the variance in actual returns around the expected return. For an investment to be risk free in this environment the actual returns should always be equal to the expected return.

To illustrate, consider an investor with a 1-year time horizon buying a 1-year Government of India Bond assuming a 6% expected return. At the end of the 1-year holding period, the actual return that this investor would have on this investment will always be 6%, which is equal to the expected return.

The above illustration shows that there is no variance with the expected returns. A risk free investment offers returns that are uncorrelated with risky investments in a market.

Expected return is a combination of periodic income and capital appreciation.

Risky Asset

Risky asset is an asset which has a degree of uncertainty of return attached to it. This may be measured by risk measures such as a variance and standard deviation.

For example, investing in equity markets or equity linked products has an inherent risk of returns not matching expectations. On the other hand there is a possibility of delivery of returns over and above other assets. However the underlying logic for the same is that higher the risk undertaken higher is the returns payoff possibility.

For Example: Let's assume that someone has invested an amount of Rs. 1,00,000 in an Equity diversified mutual fund. Assuming that the equity markets increase by 18% from their present level and the value of the fund increases to Rs. 1,18,000. Here, in comparison the returns are more than any other asset class of assets. But also in this case, there exists a risk that the actual returns may not match the expected returns. It may even decrease to Rs. 80,000 in case the markets fall.

Conclusion

A risk free asset and a risky asset have a different risk return profile and are usually chosen as a mix of assets in any portfolio scenario. The investment plan depends on the nature of investor's financial goals, the time remaining towards the goal and the risk profile of the investor.

Diversification

Lets understand this with the help of an example:
On a particular island the entire economy consists of two companies; one that sells umbrellas and another that sells sunscreen. If a portfolio is completely invested in the company that sells umbrellas, it will have strong performance when it rains, but will perform poorly during the summer season .

The reverse occurs if the portfolio is only invested in the sunscreen company, the alternative investment: the portfolio will perform well during the summer season, but will be poor when clouds roll in.

To minimize the weather-dependent risk in the example, the investment should be split between the companies. With this diversified portfolio, returns are decent irrespective of the weather, rather than alternating between excellent and terrible.

Hence in conclusion, Diversification is the process of mitigating the risk of concentration of investments in a particular asset or asset class. It is generally said that one should not put all the eggs in one basket. In simple words, it is spreading the wealth of the investor both across and within asset classes in a way that achieves healthy returns based on a particular level of risk.

The goal of diversification is to reduce the risk in a portfolio. This is because of the underlying principle which states that not all asset classes or industries or individual companies move up and down in value at the same time or at the same rate. Diversification reduces both the potential upside and downside and allows for more consistent performance under a wide range of economic conditions.

Cross Border Diversification

As the name suggests this involves investments in assets class beyond that of one's own country. Global investments provide for attractive opportunities available outside India, since investors and portfolio managers may be of the opinion that the valuations in many of these sectors have become somewhat stretched.

The benefits of cross border diversification are that by investing across nations whose economic cycles are relatively independent of each other, an investor can look at a better risk return trade-off. In general, broader the diversifications less variable are the returns. A lot of the hedge funds in the US and the European nations are looking at the Asian economies, since the same provides for more opportunities and better returns.

Indian investors have several options among mutual funds to take the benefit of international diversification.

Other investment strategies

There is a school of thought that believes that asset allocation is not a foolproof strategy and that there are certain strategies that can enhance portfolio returns. Some of these strategies are:

1) Market Timing

Market timing is based on making a plain or an implicit forecast of the general market conditions. Let's assume that the investable resources of the financial assets are 100 and the asset allocation fixed for stocks and bonds are 30:70. If the portfolio manager estimates that stock would outperform then he would step up the allocation for equity of your portfolio to a higher percentage, say 65:35 in favor of equity.

The portfolio manager makes use of various tools such as fundamental and technical analysis involving business cycle analysis, moving average analysis, advance decline analysis, economic outlook etc. Needless to say that these strategies have the risk of a call going wrong.

Timing the market is a very tempting game to play. The prediction may be based on an outlook of market or economic conditions resulting from technical or fundamental analysis. This is an investment strategy based on the outlook for an aggregate market, rather than for a particular financial asset.

2) Security Selection

This strategy involves identification of securities which are undervalued and have better future prospects to give returns in context of the overall market or in comparison to its peers.

For example, if one believes or expects that in the coming years or in the forthcoming period, the infrastructure stocks in India would outperform, the portfolio manager would substantially increase the exposure to the infrastructure space

Fundamental analysis indicates stocks which are overvalued or undervalued. An undervalued stock may be purchased in a portfolio and an overvalued one may be sold. Unlike market timing strategy, security selection strategy is based on a specific stock or a particular sector.

3) Investment Style

This means that the portfolio manager focuses his effort only on certain types of stocks. This could be growth stocks, value stocks, cyclical stocks, momentum stocks etc.

Generally 2 management styles are adopted by equity portfolio managers:

Value Style

Value-style investing focuses on companies that have been ignored or overlooked by the markets. Value management is a style adopted by the managers to buy stocks that have a low Price to earnings ratio, low Price to book value ratio, which have above average earnings growth etc. These types of stocks generally are out of favour in the market at any given point in time. These provide value over the long term on a risk adjusted basis.

Growth Style

Growth-style investing looks for companies that are growing rapidly. Growth management is a style adopted by managers who pursue high rate of earnings growth, high price to earnings ratio, high price to book value. These stocks are very popular in the markets.

Passive investment strategies refer to those strategies that are not responsive to changes in Portfolio manager's expectations. Investing in a passive investment strategy involves two basic steps:

1. Step 1: Creating a well diversified portfolio at a predetermined level of risk; and

2. Step2: Hold it over a period of time until it becomes inconsistent with the investors risk return preferences.

Indexing and 'buy and hold' are examples of passive investment strategies.

Suitability

Unlike in the case of active investment strategy, here the time and effort are required only at the time of constructing the portfolio. The portfolio manager does not react to the movements of the markets. Hence the same is suitable for portfolio managers and investors who believe that there is no mispricing which can be exploited.

This is a strategy, where a small investor who wants to have an exposure to the equity markets can purchase a diversified mutual fund; hold it till the time the goal is achieved. This reduces the transaction costs, capital gain tax.

Why adopt a passive strategy?

- Investors may not have the expertise to time the market and hence they invest their money and forget about it. The idea is to allow the money to grow in the long run.
- The investor may not be interested in taking higher risk and beating the benchmark
- He may want to avoid the transaction costs associated with active strategy as it may have an effect on the portfolio performance depending on the investment horizon.

Buy and Hold

A buy and hold strategy is one in which an investor buys a certain asset class or a mix of asset class products, and then holds on to the investments. He does not churn the portfolio with the objective of maximizing returns or minimizing the risk. This is the kind of investor who prefers to spend time and effort at the beginning of the security/ asset class selection.

A buy and hold is a strategy is based on the sound principle of returns over a long term. This means that the returns from financial markets are good despite the period of volatility or decline. A buy and hold strategy also assumes that all securities are very fairly valued, and that it's not worth to have a very active strategy or spend time trying to beat the benchmark.

One of the greatest investors in the world, Mr. Warren Buffet advocates finding an undervalued business, then buying and holding the business forever.

Indexing

Indexing is an investment strategy that seeks to match the investment returns of a specified stock or bond market benchmark, or index.

When indexing, an investment manager attempts to replicate the investment results of the target index by holding all-or in the case of very large indexes, a representative sample-of the securities in the index. The portfolio manager does not attempt to adopt an active strategy to outperform the markets. Thus, indexing is a "passive" investment approach emphasizing broad diversification and low portfolio trading activity.

The underlying premise of the indexing strategy is that the markets are priced efficiently and that there is no mispricing in the market to be exploited. The benefits of indexing are also derived over a long period of time just like the Buy and Hold strategy.

Systematic Investment Plan - SIP

A Systematic Investment Plan (SIP) is a vehicle offered by mutual funds to help you save regularly. An SIP means you commit yourself to invest a fixed amount regularly for a predefined period. An SIP allows you to take part in the stock market by averaging out on the market fluctuations. It makes you disciplined in your savings and it helps you make money over the long term enabling individual to meet future goals and Invest disposable funds – that might otherwise lie in Savings accounts, earning low interest and letting inflation eat into them.

Systematic Withdrawal Plan – SWP

A service offered by a mutual fund that provides a specific payout amount to the shareholder at predetermined intervals, generally monthly, quarterly, semi-annually or annually. Three main reasons for using SWPs are to meet living requirements (usually when retired), for tax planning purposes, or to comply with mandatory retirement plan withdrawal rules after reaching age.

Systematic Transfer Plan – STP

While investing in a debt fund normally assures you of fairly consistent returns, equities have the potential to create wealth. But the unpredictability in equity funds can be quite a deterrent when you make a choice. To combine the best of both worlds, STP is used. Investors who want to invest lump sum money in schemes with stable returns and ensure small exposure to equity schemes in order to avail of the potential for higher growth through equities.

Invest a lump sum amount in a debt-oriented scheme (Debt schemes can be either 100% debt or High Debt and Low equity). Specify a desired amount to be transferred to any equity schemes of the same AMC. This works like a SIP (Systematic Investment Plan). Lowering Risk and increasing returns. This is best suited when markets have peaked or the investor is unsure of the further uptrend in the market

5.2 Asset allocation

Strategic Asset Allocation

Combining the asset allocation to the capital market expectations to formulate long term target weightings for the asset classes to be included in a portfolio is known as Strategic Asset Allocation. It refers to the portfolio for the investor which achieves that level of risk and return suitable to the investor. This may be done in an informal way and a formal way.

Informal approach involves three broad steps:
- Determination of risk bearing capacity of the investor as High, medium and low.
- Determination of the investment horizon as short, intermediate or long.
- Establishing some asset allocation using a certain rule of thumb, for example an aggressive portfolio can use 70:20:10 for equity, debt and gold respectively. A conservative portfolio on the other hand can use portfolio allocation of 5:95:0 for equity, debt and gold.

Formal approach on the other hand includes the following steps:
- Determine the expected returns and the risk parameters of standard deviation, correlation of the two asset categories of stocks and bonds etc.
- Define what would be an efficient frontier (where maximum returns are achieved with minimum risk) containing the entire efficient portfolio's on the risk return graph.
- Specify the indifference curves reflecting the risk disposition of the investor. Indifference curves represent the risk and the return profile

for a customer which is unique for each individual. All the Points lying on the indifference curves represent the same level of satisfaction.
- Choose an asset allocation on the risk return graph where the optimal portfolio is the point of tangency between the efficient frontier and the utility indifference curve.

Tactical Asset Allocation

Tactical Asset Allocation involves a well thought out departure from a set asset allocation pattern, with the objective of capitalizing on the perceived value in a particular asset class. This may be a result of the portfolio manager perceiving higher than expected earnings outlook or a higher yield to maturity.

Therefore, an investor may buy in an asset class when the assets are perceived to be cheaper and sell when the asset is perceived to be overvalued. As may be implied from the above there is an element of prediction of the markets behaviour in the same.

If the desired profits are achieved by the portfolio's tactical strategy then the original asset mix may be restored.

Life Cycle Asset Allocation

The Life Cycle of any individual can be typically sub-divided into following stages:
- Childhood Stage
- Young Investor
- Young Couple in Mid 30's
- Mature Couple with grown up children
- Retired Couple

The age at which each stage of the life cycle starts may vary from one individual to another, but in our society most people would fall into a standard cycle.

Childhood Stage

Childhood Stage is a period of dependency that usually lasts until children finish their full-time education. In this stage, the financial needs are met by parents or guardians. Most general financial needs for the parents would be to plan for their Education. The most ideal way to give their children more privileged opportunities is to start investing money for this purpose when their children are still young. The allocation for this purpose would be to start early with aggressive portfolio allocation which would have equity allocation of around 80% and Debt allocation of around 20%. The allocation needs to be transferred to more conservative i.e. from equity to debt when the goal is near approaching.

Young Investor

In this stage, the client is young, a single professional with long term focus of wealth creation and investment horizon. Capital Growth is paramount. He seeks to accumulate as much wealth over the next 30 years to retirement as possible and is happy to tolerate a high degree of portfolio volatility.

The primary objective of this client is to maximize their opportunity for capital growth over a 10-year plus timeframe. The portfolio would typically comprise aggressive into Equity and very small portion into fixed income asset class.

Young Couple in Mid 30s

In this stage, the client is married, has children and is in his Mid 30's. He has long term focus and capital growth is of paramount importance. They seek to accumulate as much wealth over the next 20-25 years prior to retirement as possible, and would be ready to tolerate the portfolio volatility, long term capital preservation for estate planning purpose is also important in this stage.

The primary objective of this client is to generate long term capital growth with average emphasis on current income and capital preservation. The investment time horizon would be seven to ten years. In this stage also the equity would dominate the portfolio with some active management of Equity and Fixed Income assets to provide some degree of balance.

Mature Couple with grown up children

In this stage, the clients are a couple with an age of around 45-50, who are looking to work for another 10-15 years and then retire. They have responsibilities towards higher education of one or two of their children. They seek to accumulate as much wealth for retirement as possible but without taking excessive risk.

The primary objective of this client is to invest in a portfolio that is evenly split between interest bearing securities and growth oriented investments, An exposure to a range of investment sectors including cash, fixed interest and shares ensures the portfolio is truly balanced. Ideally the allocation between income and growth assets should be 55: 45.

Retired Couple

In this stage, clients are retired couple, both aged 60 and above with independent children, married and settled down comfortably. In their investment portfolio they are looking for income as well as some capital growth. Capital preservation is important to them.

They don't mind a relatively small holding in growth assets. A high level of stable income is sought by investing in fixed income securities with exposures to government bonds and securities and other fixed income asset class. The client is also concerned about the underlying liquidity in the portfolio and being able to access some or the entire money invested if required.

In conclusion, we can say that it is very important for an advisor to identify the client life cycle and accordingly he should advise on the asset allocation based on his risk profile.

Goal linked Asset Allocation

This is arguably the most appropriate form of asset allocation strategy as it links the asset allocation to the investor's financial goals. The investment horizon is a function of the investor's financial goals, depending on when the money would be required to fund some of life's major events. Here an advisor considers the following steps:

- Assessment of the investor's risk profile based on ability and willingness to take risks
- Many advisors use various risk profiling tools to find out the risk profile of their clients. However, there are some who ignore the risk profiling completely and focus only on the next steps
- Assessment of the needs
- The investor's needs are essentially about answering the questions: how much money would be required and when?
- Along with this, the advisor also assesses the available resources and matches the same with the needs
- Arriving at recommendations based on the above two steps
- Most advisors arrive at an investment plan based on the above two steps. Often, both the steps offer two different solutions. The advisor is then required to counsel the investor and help arrive at a mutually agreed investment plan.

Contagion Impact in Times of Crisis

The word contagion means "a sort of infection which spreads". We are however concerned with the Financial contagion.

Financial contagion refers to the transmission of a financial shock in one entity to other interdependent entities or so to say from one country to other countries. This can refer to either economic booms or economic crisis.

A famous example is the "Asian Contagion or Asian crisis" that occurred in 1997 and started in Thailand. The economic crisis in Thailand spread to bordering southeast Asian countries including India and then eventually spilled over to Latin America.

Before we actually critique on the concept of contagion, we must understand there exist a certain degree of interdependence between countries. There also exists a certain degree of interdependence in the economic activities.

So we come across various types of goods and services in our daily life. Those products and services have been made by organizations. These organizations make use of specialized services of various groups such a labour, marketing staff, sales staff, finance and accounts staff, administrative staff etc all of whom co-ordinate to complete the economic activity and make the product/ service finally available to us.

Also one country may be dependent on one another for different reasons. For example India is dependent on oil producing countries for basic energy requirements. On the other hand, the US and other developed countries are also dependent on India for gaining access to the markets of India, because of favourable demographics. These interdependencies could be in the form of Food, energy, minerals, manufactured goods, debt etc.

We referred to Contagion as a shock. A financial shock in the time of Crisis is one which is an unexpected or unpredictable event that affects an economy, either positively or negatively.

Monitoring and Rebalancing of Portfolio

Monitoring portfolio is the ongoing process of reviewing and valuation of the portfolio composition consisting of various asset classes. Meanwhile portfolio rebalancing is the action of bringing a portfolio of investments that have deviated away from the targeted asset allocation back into its original allocation.

When to Consider Rebalancing

You can rebalance your portfolio based either on the calendar or on your investments. Many financial experts recommend that investors rebalance their portfolios on a regular time interval, such as every six or twelve months. The advantage of this method is that the calendar is a reminder of when you should consider rebalancing.
Others recommend rebalancing only when the relative weight of an asset class increases or decreases more than a certain percentage that you've identified in advance. The advantage of this method is that your investments tell you when to rebalance. In either case, rebalancing tends to work best when done on a relatively infrequent basis.

There are three basic policies in respect to rebalancing:

Buy and Hold

Here the policies are essentially that of buy and hold, ignoring the market value of the assets. For Example there exists a Rs. 1,00,000 portfolio which is divided into equity and bond at Rs. 50,000 each with a 50:50 allocation. At the end of the First year, if the value of the same stands at Rs. 40,000 and Rs. 54,000 for equity and debt respectively, we do not change the proportion of the portfolio. In other words, the portfolio is allowed to drift with no steps taken to change the portfolio allocation.

Constant Mix Policy

This involves maintaining the mix of the asset allocation of the various asset classes in accordance to what is its target asset allocation. Therefore in the above example we need to increase our exposure to stock by Rs. 7,000 and reduce from that of bonds by Rs. 7,000 in order to maintain the target asset allocation of 50:50, which will take the portion of debt and equity in the portfolio to Rs. 47,000 each.

Portfolio Insurance Policy

Taking the above example forward let's assume that there is a rise in the stock value from Rs. 50,000 to Rs. 75,000, then the Portfolio manager under this policy would reduce the exposure to the stock in order to ensure that the value remains intact. Alternatively, if there is a fall in the value of the stock from Rs. 50,000 to Rs. 40,000, there is a substantial reduction in the value of the portfolio. This is done to ensure that the portfolio value does not fall below a floor price.

Periodic / Calendar Rebalancing of the portfolio is indicative of the frequency of the portfolio rebalancing and reviewing. This could be quarterly half yearly or any other period.

Generally, a review or a rebalancing of the portfolio is required to be done based on the investment objectives of the client. Clients have goals with differing priorities and time horizons. The investment portfolio consisting of securities suggested looks to achieve those goals. Change in the investment products performance and changing goals, change in the earning and the expense pattern, change in the assets and liabilities structure of the client makes need based review very beneficial from an investor's point of view.

Ways to rebalance a portfolio:

1. You can sell off investments from over-weighted asset categories and use the proceeds to purchase investments of under-weighted asset categories.
2. You can purchase new investments of under-weighted asset categories.
3. If you are making continuous contributions to the portfolio, you can alter your contributions so that more investments go to under-weighted asset categories until your portfolio is back into balance.

Before you rebalance your portfolio, you should consider whether the method of rebalancing you decide to use will trigger transaction fees or tax consequences. The role of a financial planner is to identify ways to minimize these potential costs.

Stick with Your Plan: Buy Low, Sell High - Shifting money away from an asset category when it is doing well in favour an asset category that is doing poorly may not be easy, but it can be a wise move. By cutting back on the current "winners" and adding more of the current so-called "losers," rebalancing forces you to buy low and sell high.

Summary

An active investment strategy is adopted with the objective to outperform the benchmark. This requires the portfolio manager to take a decision based on various factors such as the economic growth, the industry outlook, the global markets and their correlation with the domestic markets etc. This call is generally taken by an expert.

On the other hand, a passive investment strategy is one in which the portfolio manager generally would not change on the basis of the environment. Generally, this means adopting and approach of buying the asset and holding it.

Investment strategies thus are answer to the ways and means one should achieve one's goals. Generally, investments made in mutual funds, alternative investments, Fixed Deposits etc., which are suitable to the investor, describes the asset allocation based on different factors. . At the heart of it, an **investment strategy** is centred on a risk-return trade-off for a potential investor.

Asset allocation is an important part of investment, and one must align his investments to his financials needs, goals and aspirations in order to achieve higher returns from the assets purchased.

Review Questions

Questions to assess your learning:

1. Risk free rate implies a return equal to ________.

a) **G-Sec Yield**
b) Equity Market Return Yield
c) Corporate Bond Yield
d) Bond Yield

2. Under which investment strategy undervalued stocks are purchased and overvalued is sold?

a) Passive Strategy
b) Active Strategy
c) Management Strategy
d) Business Strategy

3. Process of distributing investor's wealth among various asset classes is known as _________.

a) Financial Planning
b) Financial Advising
c) Asset Allocation
d) Investment Strategy

4. Buy and hold is a type of ____________.

a) Passive Strategy
b) Active Strategy
c) Business Strategy
d) Management Strategy

5. How can a risky asset be defined?

a) An asset which has high degree of uncertainty of return
b) An asset which has low degree of uncertainty of return
c) An asset which has no uncertainty of return
d) An asset which has any degree of uncertainty of return

Unit 6: *Insurance Planning*

Introduction

Insurance is a form of risk management used to primarily transfer risks. It means transferring risk from one entity to another.

"Pooling of fortuitous losses by transfer of such risks to insurers, who agree to indemnify insured for such losses, to provide other pecuniary benefits on their occurrence, or to render services connected with the risk".
- American Risk and Insurance Association

Insurance transfers the risk from an individual to a group. It provides an important means of ensuring risk from interfering with a client achieving his/ her financial objectives.

Insurance is a contract between two parties - the insurer (the insurance company) and the insured (the person or entity seeking the cover) - where-in the insurer agrees to pay the insured for financial losses arising out of any unforeseen events in return for a regular payment of "**premium**".

These unforeseen events are defined as "risk" and that is why insurance is called a risk cover.

Hence, insurance is essentially the means to financially compensate for losses that life throws at people.

Insurance can be used as a tool to shield an individual against potential risks like travel accidents, death, unemployment, theft, property destruction by natural calamities, fire mishaps etc.

Learning Goals

6.1. Risk management, Meaning and objective, law of large numbers

6.2. Personal risk management, Risk control and risk financing

6.3. Nature and Function of Insurance; Categories of insurance, features: Insurance of Assets, Insurance of Liabilities, Term, and Health

6.4. Life insurance Needs analysis (Human life approach, Needs approach, Multiple Approach, Capital needs analysis approach)

6.1 Risk Management, Law of Large Numbers

Meaning of Risk

Risk implies a condition where there is a possibility of an adverse deviation from a desired outcome that is expected or hoped for.

Meaning of Risk Management

Identifying potential risks and making decisions so as to reduce the possibility and/ or impact of the risks. It is overall a systematic approach to analysing risk and evaluating methods that will reduce the impact in the event the risk turns into reality, e.g. Loss of life, damage to an asset (house, car etc).

Objective

The objective of Risk Management is to avoid, minimize or control the impact of losses to an individual due to any accident/ catastrophe that may be caused to him.

Methods of Risk Management

1. Avoidance – Trying to avoid the risk as far as possible through measures which are non hazardous.
2. Reduction – Steps taken for reduction in chances and severity of the losses.
3. Retention – Keeping or retaining the risk with oneself.
4. Transfer – Handing over one's risk to someone else. A commercial and the most important form of 'transfer' of risk is through insurance.
5. Sharing – Having common pools called 'risk sharing pools' to which every member would contribute his share. It is a private arrangement.

Characteristics of Insurance

- **Pooling of losses** - Spreading of losses incurred by a few over the entire group, so that in the process, average loss is substituted for actual loss. Grouping of large number of similar exposure units helps operation of law of large numbers, exposing to similar perils.
- **Law of Large Numbers:** "Greater the number of exposures, the more closely will the actual results approach the probable results that are expected from an infinite number of exposures"
  Advantage of Law of large numbers is sharing of losses & prediction of future losses.
- **Fortuitous losses** – A fortuitous loss is unforeseen & unexpected and occurs as a result of chance. This could be accidental and at random.
- **Risk transfer** - Risk which involves the chances of loss or no loss but never a gain is referred to as Pure Risk. It is transferred from insured to insurer, who typically is in a stronger financial position to pay the loss than the insured.
- **Indemnification** - Insured is restored to his or her approximate financial position prior to the occurrence of the loss.

Risk Management and its importance to an individual

Risk Management is the process of deciding how to minimize the adverse effects of accidental losses upon an individual.

By identifying the risk and estimating the value of loss, an individual is in the position to cover or try to protect against the loss. It may be noted that risk management is a rough tool to cover up for losses or it's an ineffective hedge against the catastrophe.

6.2 Personal Risk Management: Risk Control and Risk Financing

Risk Control measures intend to minimize the risk to which an entity is exposed to. This is accomplished by avoiding the action that gives rise to risk. Avoiding risk is an appropriate strategy for high severity risk. It includes restraining self from such conditions or action which might carry risk. An example would be not buying a property or doing business in order to not take on the liability that comes with it. Another would be not flying in order to not take the risk that the airplane might be hijacked. Avoidance may seem the answer to all risks, but avoiding risks also means losing out on the potential gain that accepting (retaining) the risk may have allowed. Not entering a business to avoid the risk of loss also avoids the possibility of earning profits.

Concept of risk financing

Paying for the losses in case an eventuality does occur is called Risk Financing. The retention of risk can be voluntary or involuntary. There are two ways to finance risk:

a. Retain
b. Transfer

How does one pay for losses in case of a risky event taking place?

He either pays from his pocket or transfers the risk, at a cost, to another person (or a company, e.g. Insurance Company). If an event is not adequately insured, it eventually happens that some part of the risk is transferred and some part of the risk retained by the individual.

Example: A person insures his house against fire for Rs. 20 lacs, while the value of the house is Rs. 40 lacs. In case a fire damages the house fully, the insurance company will only pay Rs.20 lacs and the balance Rs. 20 lacs worth risk was retained by the individual and hence he bears the remaining loss.

6.3 Nature and Functions of Insurance and Types of Insurance

Need for Insurance:

Income / Expense Protection

- Risks and uncertainties are many – accident, illness, natural disaster, death and so on. Due to such uncertainties, future cannot be predicted.
- If an individual falls prey to one, the loss of income of that individual may cause financial loss to dependents.
- To protect against financial losses in the future, insurance must be taken.
- Insurance provides as a means to financially compensate for losses and make life a little easier for the dependents.
- It also provides a sense of security to the earning member that his/her family will be taken care of.

Requirements of an Insurable risk

There are six requirements of an Insurable risk as below:

- **Large number of exposure units** - Large group of similar units, need not be identical, are subject to the same peril or group of perils.
- ***Accidental and unintentional*** - Loss must be accidental and unintentional. Loss should be fortuitous and outside the insured's control.
- **Determinable and measurable** - Loss should be definite as to Cause, Time, Place and Amount
- **Not be catastrophic** - Large proportion of exposure units should not incur losses at the same time
- **Chance of loss must be calculable** - Insurer must be able to calculate with some accuracy, average frequency and average severity of future losses.
- **Premium must be economically feasible** - Premiums should not only be affordable but also far less than the value of the policy.

It is important, too, at this point to note that not all risks are insurable. To benefit from the advantage of insurance protection, a risk has to have certain characteristics as follows:

- It must involve a loss which can be **measured in actual money** rather than, for example, sentimental value. This is clear in the case of damage to buildings, loss of profits, or awards of compensation made by the courts.

- There must be a **large number of similar risks**. We have said that the insurance company is able to offer the protection it does because it operates a common pool in which only a few will suffer loss in any one year. In the absence of a large number of people being exposed to the same risk, this kind of operation would not be practical as there would be so few in the pool that each would require contributing much more.

- A further characteristic of the insurable risk is that it **does not involve any prospect of gain or profit.** This means that, if it was possible to insure against not making a profit from selling goods in a shop, there would be very little incentive to try to sell the goods if the owner knew the insurance company would step in and pay up anyway.

- Further to be insurable, the loss **must be entirely fortuitous, accidental,** as far as the person insuring is concerned. This rules out, for example, any advantage people might hope to gain from burning down their own factory or shop. The fortuitous character of most risks is quite apparent, but in life insurance it could be argued there is no uncertainty about death. It is one of the few certainties we have. Life insurance is however still involved with fortuity as it is the timing of death which is uncertain. This is not so with suicide and, to take account of this, most policies will exclude death from suicide for, say, the first 12 months of a new policy's existence.

- To be insurable, it **must not be against public policy** to have that insurance protection. In most cases, it is in the interest of society to have insurance, but in a few cases this is not so. It would not be, for example, in the public good to allow insurance protection against a fine imposed by the Court. A fine is a penalty to be met by the offender and it would contravene what society considers right and proper if a person could take out a policy of insurance to pay the fine.

- **The premium charged by the insurance company must be reasonable,** and this imposes certain restrictions on the risks which are insurable. Similarly, there could be some cases where the risk occurs so often that the premium would be far too high.

- Finally, it is essential that **the person insuring must be the one who will suffer** should the loss occur. In other words, you can insure your camera against loss or damage, as you are the one who will suffer if it is lost or damaged, but you cannot insure your friend's camera.
- Insurance, then, is the means by which those unfortunate enough to be the victim of some loss can gain compensation.

Advantages:

- ***Indemnification of loss***
  It restores individuals to their former financial condition. As a result, it reduces the amount of disruption that such losses would otherwise cause.

- ***Reduction of anxiety***
  It reduces stress & anxiety as individuals need not worry about financial insecurity in case of adverse events.

- ***Source of Investment Funds***
  The premiums collected by the Insurance companies are accumulated and invested and this promotes capital investment & economic Growth.

- ***Loss Prevention***
  Since Insurance companies benefit if incidence of loss occurs causing events to go down, they actively promote best practices for loss prevention amongst insured. Insurance companies employ a variety of personnel who specialize in loss prevention such as safety engineers etc.

- ***Enhancement of Credit***
  Insurance makes a borrower to command credit risk because it acts as collateral to the lender. The lender knows that in case of any adverse event which causes financial losses or affects the income potential of the borrower the insurer will restore the borrower to his former financial position.

- Advice/assistance of insurers in risk management

Disadvantages:

- ***Costs of doing the business***
  The costs for the administration, sales, marketing etc incurred by the insurers for the purpose of doing business are also recovered.

- ***Fraudulent claims***
  Many insured submit fraudulent claims to Insurance companies by faking losses resulting in the increased cost of Insurance affecting all other insured.

- ***Inflated claims***
  While the loss is actual and accidental, many policy holders inflate the severity of the loss so as to profit from Insurance, and this would again lead to high premiums for all the Insured.

- Time and effort in identifying right Insurer, right amount of coverage and negotiation of premium.

- Lax attitude may creep in.

But how can insurers provide this compensation – especially when they know there is much possibility of fire, accidents, thefts, injuries and other losses each day? Insurers predict with some certainty how many incidents there will be. They do not know exactly but, based on their long experience of dealing with risk, they have fair idea. More important, they know it is not everyone who is going to suffer. In fact, only a few people actually suffer as a result of some risk. Think for a moment of the street where you live. How many houses around you have caught fire recently? It is not always that your house would catch fire, that your car will be in an accident, that you will be injured at work. Nevertheless, if it did happen, it could be a disaster for you.

The insurance company is able to offer you the protection it does by grouping together **a large number of people** who all feel exposed to the same form of risk. This could be fire, theft, accident or any other risk we have either mentioned or will look at later.

The company gathers these people together knowing that in any one year very few in the group will actually suffer loss. By collecting a small amount of money from each person in the group, it then can accumulate a fund – an amount of money, out of which the losses suffered by the few who become victims can be paid.

This seems fine but why not just put the money in the bank instead of paying it to an insurance company, and wait for the day the loss might happen? If you own a house worth Rs. 1 Cr, a car worth Rs. 30 lacs & another property worth Rs. 50 lacs, how much will you put in the bank? You do not know when the risk will happen, and it is unlikely you could put away enough money for such an occurrence.

The money paid to an insurance company (it is called the **premium**) is a very small amount in relation to the value of a house or a car. The only reason the insurance company requires such a relatively low premium is because they have gathered premiums from a large number of people, most of whom will not suffer a loss – at least not in the same year. That is how insurance companies survive on the “law of large numbers”.

The premiums paid by all the people who seek protection go towards paying for the losses of the few who actually suffer. This does not imply that even if a person did not suffer during the occurrence of an event has wasted his money paid towards premium. The premium paid has resulted in security, the peace of mind all throughout the period of insurance cover, if anything had happened, you would have been financially protected.

Functions of Insurance

The functions of insurance can be bifurcated as below:

1. Primary Functions
2. Secondary Functions
3. Other Functions

The primary functions of insurance include the following:

Provide Protection - The primary function of insurance is to provide protection against future risks, accidents and uncertainties. Insurance cannot check the realisation of the risk, but can certainly provide for the losses of risk. Insurance is actually a protection against economic loss, by sharing the risk with others.

Collective bearing of risk - Insurance is a means by which few losses are shared among larger number of people. All the insured contribute the premiums towards a fund and is paid to the people who incur a loss due to occurrence of an insured risk.

Assessment of risk - Insurance determines the probable volume of risk by evaluating various factors that give rise to risk. Risk is the basis for determining the premium rate also.

The secondary functions of insurance include the following:

Prevention of Losses - Insurance cautions individuals and businessmen to adopt suitable devices to prevent unfortunate consequences of risk by observing safety instructions; for example, installation of automatic sparkler or alarm systems, etc. Prevention of loss causes lesser payment to the insured by the insurer and this will encourage for more savings by way of premium. Reduced rate of premiums stimulate for more business and better protection to the insured.

Small capital to cover larger risks - Insurance relieves the businessmen from security of investments, by paying small amount of premium against larger risks and uncertainty.

Contributes towards the development of larger industries - Insurance provides development opportunity to those larger industries having more risks in their set up. Even the financial institutions may be prepared to give credit to sick industrial units which have insured their assets including plant and machinery.

The other functions of insurance include the following:

Means of savings and investment - Insurance serves as savings and investment; insurance is a compulsory way of savings and it restricts the unnecessary expenses by the insured. People also invest in insurance for the purpose of availing income-tax exemptions.

Source of earning foreign exchange - Insurance is an international business. The country can earn foreign exchange by way of issue of marine insurance policies and various other ways.

Risk Free trade - Insurance promotes exports, which makes the foreign trade risk free with the help of different types of policies under marine insurance cover.

Types of Life Insurance

Endowment

It is a level premium plan with a savings feature. At maturity, a lump sum is paid out equal to the sum assured (plus bonus). If death occurs during the term of the policy then the total amount of insurance and any bonus accrued are paid out.

Endowments are considerably more expensive (in terms of annual premiums) than either whole life or universal life because the premium paying period is shortened and the endowment date is earlier.

There are a number of products in the market that offer flexibility in choosing the term of the policy; you can choose the term from 5 to 30 years. There are products in the market that offer non-participating (no profits) version, the premiums for which are cheaper. Endowment insurance is a popular plan providing protection to self and family. It serves as source of financial needs during active life. It also acts as a good tool for retirement planning.

Whole Life insurance

It provides life insurance cover for the entire life of the insured person or up to a specified age (age varies form company to company). You generally pay the same premium amount throughout your lifetime.

Some whole life policies let you pay premiums for a shorter period such as 15, 20 or 25 years. Premiums for these policies are higher since the premium payments are made during a shorter period. There are options in the market to have a return of premium option in a whole life policy. It means after a certain age of paying premiums, the life insurance company will pay back the premium to the life assured but the coverage will continue. Whole life insurance provides for a level premium, and a cash value table included in the policy guaranteed by the company. The primary advantages of whole life are guaranteed death benefits; guaranteed cash values, fixed and known annual premiums, and that mortality and expense charges will not reduce the cash value shown in the policy.

The primary disadvantages of whole life are premium inflexibility, and the internal rate of return in the policy may not be competitive with other savings alternatives. Riders (a clause or condition that is added on to a basic policy providing an additional benefit) are available that can allow one to increase the death benefit by paying additional premium. The death benefit can also be increased through the use of policy bonuses.

Whole Life insurance is mainly devised to create an estate for the heirs of the policy holders. It is also suitable for people of all ages who wish to protect their families from financial crisis that may occur owing to the policy holder's sudden death.

Money Back Insurance

The money back plan not only covers your life, it also assures you the return of a certain per cent of the sum assured as cash payment at regular intervals. It is a savings plan with the added advantage of life cover and regular cash inflow. Since this is generally a participating plan the sum assured is paid along with the accrued bonuses.

Children's Plans

Children's plans not only cover the life of the parent; but also ensure that in case of their death, the child gets the sum assured and the insurance company may fund future premiums and the child gets the value accumulated at the end of the term. This happens usually when the child needs funds for graduation or post graduation. As the plan is on the child's life the premium is very low. Children's plans are suitable for passing on a financial asset to a child. In this wealth is created in the name of the child.

Pension Plans

Retirement Plans or Pension Plans are normally plans which an individual invests in (pays premium for) till he retires. He can then take a monthly payment (annuity) from the accumulated funds. He can also withdraw one third of total accumulated corpus once he has retired, in case he has requirements of paying lump-sum amounts for example for clearing home loans, for children's marriage etc. The following are the various annuity options:

1. Annuity for Life
2. Joint Life last survivor annuity
3. Annuity guarantee for certain periods
4. Life annuity with return of purchase price
5. Increasing annuity

ULIP

Market-linked plan or unit-linked insurance policy (ULIP) is a financial product that offers you life insurance as well as investment in the financial markets.

Market-linked insurance plans invest in a basket of securities, allowing you to choose between investment options predominantly in equity, debt or a mix of both.

The major advantage market-linked plans offer is that they leave the asset allocation decision in the hands of investors themselves. They are in control of how to distribute the funds among the broad class of instruments. There are charges like Premium Allocation charges, fund management charge, policy administration charge, mortality charge etc. Please refer unit on investment strategy to understand asset allocation.

There are variants of this available today:

Unit Linked Endowment Plans

In this type of policy, you can choose a flexible payment tenure (for example make premium payments for only 10 years and let the policy continue for another 10) and you can also choose your asset allocation and change it according to your preference or market conditions multiple times during the tenure of the policy. You can also add riders to this policy. Riders are add-on benefits that can be attached to policies in case of eventualities. These options allow for enhancement of risk cover and extra protection against death, illnesses etc.

Unit Linked Children's Plans

It is a variant of the Unit Linked Endowment Plan (ULEP), but since it is a children's plan- there are a few features which are exclusive to this kind of policy:

- Option of double death benefit-double the sum assured is paid in case of accidental death only (rider)
- Option of triple death benefit- triple the sum assured is paid in case of accidental death only (rider)
- Options to make withdrawals once the child is a major for his requirements

Unit Linked Pension Plans

This kind of pension policy is very useful when one is planning his retirement early (minimum vesting age can be 40 years and it varies from company to company) as the benefit of being invested in equity could be taken via this option. It helps address the risk of living too long by providing for monthly (periodic) payments throughout one's life time. However, there is not much flexibility for withdrawing money while one is not retired thereby making this exclusively a retirement fund.

Term cover

Term insurance is a pure risk cover product. It pays a death benefit only if the policy holder dies during the period for which one is insured. Term insurance generally offers the cheapest form of life insurance. Term life insurance provides for life insurance coverage for a specified term of years for a specified premium. The policy does not accumulate cash value. Term is generally considered "pure" insurance, where the premium buys protection in the event of death and nothing else. Term insurance premiums are typically low because it only covers the risk of death and there is no investment component in it.

The three key factors to be considered in term insurance are: sum assured (protection or death benefit), premium to be paid (cost to the insured), and length of coverage (term).Various insurance companies sell term insurance with many different combinations of these three parameters. The term can be for one or more years. The premium can remain level or increase.

Term assurance is a straightforward protection insurance against one's life. A policy holder insures his life for a specified term. If he dies before that specified term is over, his estate or named beneficiaries receive a payout. If he does not die before the term is up, he receives nothing. In the past, these policies would always exclude suicide. However, after a number of court judgments against the industry, payouts do occur on death by suicide (presumably except for in the unlikely case that it can be shown that the suicide was just to benefit from the policy). Generally, if an insured person commits suicide within the first two policy years, the insurer will return the premiums paid. However, a death benefit will usually be paid if the suicide occurs after the two year period.

Several variants of this are available in the market.

Loan Cover Policy

It covers the individual's home loan amount in case of an eventuality. In this, the sum assured normally reduces along with the value of the loan. This plan provides a lump sum in case of death of the life assured during the term of the plan. The lump sum will be a decreasing percentage of the initial sum assured as per the policy schedule. Since this is a non-participating pure risk cover plan, no benefits are payable on survival till the end of the term of the policy.

Term Policy with Return of Premium

In this variant, normally the premium is higher than a regular term policy and at the end of the term, if the individual survives; he gets back the premiums that he paid to the company.

Non Life Insurance

General insurance business in the country was nationalized with effect from 1st January, 1973 by the General Insurance Business (Nationalization) Act, 1972. More than 100 non-life insurance companies including branches of foreign companies operating within the country were amalgamated and grouped into four companies, viz., the National Insurance Company Ltd., the New India Assurance Company Ltd., the Oriental Insurance Company Ltd., and the United India Insurance Company Ltd. with head offices at Kolkata, Mumbai, New Delhi and Chennai, respectively.

General Insurance Corporation (GIC) which was the holding company of the four public sector general insurance companies has since been delinked from the later and has been approved as the “Indian Reinsurer” (insurance company transferring all or part of the risk by some contract to another insurance company) since 3rd November 2000. The share capital of GIC and that of the four companies are held by the Government of India. All the five entities are Government companies registered under the Companies Act.

Property

Property insurance provides protection against most risks to property such as fire, theft etc. Property insurance generally means insuring the structure and the contents of the building against natural and man-made disasters. Property insurance covers fire, burglary, theft etc.

Things not covered in property insurance:

- Willful destruction of property
- Loss/ damage due to wear and tear
- Art and antiques

Health – Medi-claim policy and Critical illness policy

Health insurance will protect the policy holder and his/ her family against any financial contingency arising due to a medical emergency. It is popularly known as Medi-claim in India. Earlier only group insurance was available but now a lot of innovations have been introduced. This policy provides for reimbursement of hospitalisation/ domiciliary treatment expenses for illness/ disease or accidental injury. The claim is allowed only for “Inpatient” (patients who are admitted in a hospital for treatment that requires at least overnight stay in hospital) treatments and domiciliary treatments (patients can be treated at home when they are not in a condition to be moved to the hospital) as specified.

Earlier the policies were on reimbursement basis only but now we have cashless facility available after appointment of 3rd party administrators (TPA). Medical expenses incurred during period of 30 days prior to and period of 60 days after hospitalisation are covered.

Any one illness will be deemed to mean continuous period of illness and it includes relapse within 45 days from day of discharge from the hospital. Thereafter it is treated as fresh insurance. Normal exclusions include all diseases/ injuries which are pre existing at the time of taking the cover. Some policies cover pre-existing diseases as well after a specified period of time.

Critical illness insurance

This policy provides for a lump sum benefit to be paid if the named insured contracts certain specified diseases such as cancer, heart attack, stroke, kidney failure or multiple sclerosis (check policy document). It differs from life insurance in that there is no payment on death. Payment is usually subject to a minimum survival period of 30 days.

Advances in medical science mean that many more people can now survive major illness. They may, however, be unable to continue to earn at previous levels, if at all. The lump sum payment under the critical illness policy can be used in whatever way the claimant chooses. It could be used for example, for income, or for repaying a mortgage. Today, these are available either with life insurance policies or as standalone policies and as many as 30 illnesses can be covered.

Others

Keyman Insurance

Keyman insurance offers the employer protection in the event of the untimely death or disability of a key person- a top salesperson, senior executive or the owner of a business. It provides a financial cushion to the company for: Loss of sales affected by the Keyman's ability, the cost of recruiting and training a suitable replacement, delay of business projects. Any person can be a key person who has specialized skills and whose loss can cause a financial strain on the company he works in.

Motor Insurance

Under this Insurance the company indemnifies the insured in the event of accident caused by or arising out of the use of the motor vehicle anywhere in India against all sums including claimant's cost and expenses which the insured shall become legally liable to pay in respect of (i) death or bodily injury to any person, (ii) damage to the property other than property belonging to the insured or held in trust or custody or control of the insured.

The insurance of motor vehicles against damage is not made compulsory but the insurance of third party liability arising out of the use of motor vehicles in public places is made compulsory. No motor vehicle can ply in public place without such insurance.

Personal Accident Insurance

This type of policy provides that if the insured shall sustain any bodily injury resulting solely and directly from accident caused by external violent and visible means, then the company shall pay to the insured or his legal personal representative , as the case may be, the sum or sums set forth, in the policy. Following types of disablement are covered under this policy:

(i) Permanent total disablement
(ii) Permanent Partial disablement
(iii) Temporary total disablement

Liability Insurance
The purpose of liability insurance is to provide indemnity in respect of damages payable under law for personal injury to third parties or damage to their property. This legal liability may arise under common law on the basis of negligence or under statutory law on no fault basis i.e. when there is no negligence.

6.4 Life Insurance Needs Analysis

Human Life approach:

Human life value of any person can be measured by capitalized value of that part of his income or income earning capacity devoted or meant for dependants arising out of economic forces incorporated within his being, like character , health, education, training, experience and ambition. Simply put the human life value is the present value of the person's future earnings.

This is a method of calculating the amount of life insurance a family will need based on the financial loss that family would incur if the insured were to pass away today. It is usually calculated by taking into account a number of factors including but not limited to the insured individual's age, gender, planned retirement age, occupation, annual wage, employment benefits, as well as the personal and financial information of the spouse and/ or dependent children. Since the value of a human life has economic value only in its relation to other lives such as a spouse or dependent children, this method is typically only used for families with working family members. The human-life approach is different from the needs approach.

Notes: Remember, when using the human-life approach, include only the after-tax pay and make adjustments for personal expenses incurred. Also, add the value of health insurance or other employee benefits to the income number.

Information Required

The information required to calculate the same is as follows:

- The number of years the individual is likely to earn (Retirement age less present age)
- Average annual earnings during the 'earning' years
- Amount of personal expenses like taxes, cost of employment, insurance premia, etc.

Method of calculation

Deduct personal expenses from average annual expenses.
Then, find the present value of future earnings. That is Human Life Value and would be the amount of Insurance required.

Example: Siddhartha is earning Rs.15 lacs p.a. and expects his income to increase by 2% every year. He also expects a growth of 8% p.a. on his investments. He has 15 years of working life left as he would like to retire at age 55. Calculate the insurance he needs as per Human Life Value as on today.

Income Growth	2%
Expected Return	8%
No. of Working Years	15
Current Income	Rs. 1,500,000
Human Life Value	Rs. 14,393,154

Calculate the income for 15 years from now with income growth, and then discount the same using 8% discount rate.

NPV = (8%, 1500,000, 1530,000…………1979,218) = INR 14,393,154

He has existing investments/ assets worth Rs. 55 lacs and a house worth Rs. 80 lacs.

The insurance still required is Rs. 1.44 Cr as Human Life Value considers only replacement of income. However, for practical purposes, the value of investments may be deducted from the insurance requirement to reduce the cost of life insurance

Example: Puneet is earning Rs.15 lacs a year and expects his income to increase by 2% year on year (Y-O-Y). He also expects a growth of 8% p.a. on his investments. He has 30 years of working left as he would like to retire at age 60. Calculate the insurance he needs as per Human Life Value.

Income Growth	2%
Expected Return	8%
No. of Working Years	30
Current Income	1,500,000
Human Life Value	20,499,793

Need Based Approach

This is a method of calculating how much life insurance is required by an individual/ family to cover their needs (i.e. expenses). These include things like funeral expenses, legal fees, estate, gifts and taxes, probate fees, medical deductibles, emergency funds, mortgage expenses, rent, debt and loans, college, child care, schooling and maintenance costs.

Notes:
The needs approach is really a function of two variables:
How much will be needed at death to meet obligations?
How much future income is needed to sustain the household?

When calculating expenses, it is best to overestimate the needs a little. Yes, one might be buying and paying for a little more insurance than he needs, but if he underestimates, he will not realize his mistake until it's too late. Care should be taken in overestimation also as compounding over longer period would mean much higher outgo of premium.

Needs are divided into 3 types:

- Cash Needs – Funeral Expenses, Uninsured portion of medical bills, legal charges, etc.
- Income Needs – Income for the family.
- Special Needs – Debt, Children's education, children's marriage, contingencies, etc.

What is already available to meet these needs?

Investment & deposits
Death Benefits from Employer
Existing Life Insurance
Other Assets
Method of calculation
Add all needs (Cash needs + present value of income + special needs)
Deduct all available assets
The result would be the amount of Insurance required.

Example 1: Mr. Ram Kumar, a businessman has the below expenses. He wants you to calculate the amount of insurance required for him based on the Need based approach.

Current Expenses	20,000
Less: Insurance Premium Paid	2,500
Less: EMI	2,500
Net Expenses	15,000
Less: Proportion of Personal Expenses	10%
Personal Expenses	1,500
	13,500
Age of dependent	26
Life Expectancy of dependent	85
Annual Expense	162,000
Expected Inflation	6%
Expected Return	7%
No. of Years	59
Expense Protection	7,373,022
Liability Protection	500,000
Total Insurance	7,873,022

He also has investments worth Rs. 20 lacs and a house worth Rs. 50 lacs.
Insurance required (-) Investments = Insurance required currently.
Rs. 78.7 lacs- Rs. 20 lacs = Rs. 58.7 lacs

He needs life cover worth Rs. 58.7 lacs

Example 2: Mr. Uday Kumar, a professional has the below expenses. He wants you to calculate the amount of insurance required for him based on the Need based approach.

Current Expenses	150,000
Less: Insurance Premium Paid	25,000
Less: EMI	32,000
Net Expenses	93,000
Less: Proportion of Personal Expenses	10%
Personal Expenses	9,300
	83,700
Age of dependent	59
Life Expectancy of dependent	85
Annual Expense	1,004,400
Expected Inflation	6%
Expected Return	7%
No. of Years	26
Expense Protection	23,279,976
Liability Protection	4,000,000
Total Insurance	27,279,976

He has investments worth Rs.50 lacs and existing insurance policies Sum Assured is Rs.1 Crore. He also owns a Villa worth Rs.40 lacs.
Insurance required (-) Investments & Existing Life Insurance Cover = Insurance required currently
2.73 Cr- 1.5 Cr = 1.23 Cr. He needs life cover worth Rs.1.23 Crore.

Summary

Insurance is a must for anyone who has dependants. Even if one has no dependants, one must protect one against financial loss on account of accidents/ illnesses and must provide for one's retirement needs.
There are various forms and types of insurance. Insurance must be calculated in a proper manner and must be taken for the right amount as being under insured is sometimes equal to having no insurance at all.

The primary functions of insurance include the following:
Provide Protection
Collective bearing of risk
Assessment of risk

The types of insurance are:
Life, Health, Property, Personal accident, Motor, Liability
Life Insurance can further be divided into Pure risk insurance, Savings linked insurance and Unit Linked Insurance Policies.
Health policies can further be divided into Medical Policies and Critical Illness Policies/ riders.

Glossary

- **Age** – The age of an individual is a determinant of the premium to be paid for insurance. The higher the age, the more the premium.

- **Premium** – The amount to be paid to an insurance company for transferring the risk while buying a policy.

- **Premium Payment Term** – The tenure for which premium has to be paid for a given policy.

- **Risk-** Probability or threat of a financial loss due to any unforeseen event is called risk.

- **Term** – The tenure for which an insurance policy is taken. This will be the period for which the risk cover will be provided by the policy.

- **Nomination** – The process of selection a person by the insured who has the right to receive the policy money in the event of death of the life assured. The nominee does not have the right on the money received out the insurance claim. Nominee only has the right of valid discharge.

- **Sum Assured** – This is the amount of money that the insurance company guarantees to pay. This is also referred to as cover or coverage and is the total amount the individual is insured for.

- **Death Benefit** – The amount that is payable by the insurance company to the nominee of the policy on death of the insured.

- **Maturity Benefit** – The amount that the insurance company pays to the policy holder at the end of term of the policy or policy maturity.

- **Survival Benefit** – The amount payable at the end of pre-specified periods during the term of the policy. The amount paid is usually a percentage of the sum assured and the percentage is pre-determined as well. Survival benefits typically do not reduce the death benefit in the policy.

- **Bonus** – A share of the profits made by the company is passed on to the policy holders in the form of bonuses. Bonuses may be paid every year (reversionary bonus), in between a policy year (interim bonus) and at the end of the term of the policy (terminal bonus).

- **Lapse** – A policy is said to lapse when premiums are not paid when due. A policy lapse means that the contract between the insurer and the insured is terminated. There will be no risk cover for a lapsed policy.

- **Surrender Value** – The amount that is paid to the policy holder when the policy is surrendered or discontinued. The policy ceases to exist once this amount is paid.

- **Paid Up Value** – The value that the policy acquires when premium payment is stopped after 3 full years are paid. No further premiums can be paid into a paid up policy and no further benefits will be payable as well.

- **Foreclosure** – A policy will be foreclosed if premiums are not being paid and the value of the policy is not sufficient to carry the charges in the same.

- **Revival** – Revival is the process by which the lapsed benefits of a policy are revived by paying the dues within a specified period of time.

- **Assignment** – This is the act of transferring the rights of the property in the policy from one person to another. On assignment, the benefits of the policy becomes payable only to the assignee, the owner of the policy.

- **Loan** – An owner of an insurance policy which has a cash value may be able to borrow against it for quick cash at very low interest.

- **Riders** – Riders are add-on benefits that can be attached to policies in case of eventualities. These options allow for enhancement of risk cover and extra protection against death, illnesses, etc.

- **Claim** – A claim is a demand on the insurer to redeem its obligation or promise made in the contract.

- **Participating Policy** – A policy which participates in the 'profits' of the insurance company and earns a part of the profits.

- **Non-participating Policy** - A policy which neither participates in the 'profits' of the insurance company nor gets any of the profits.

- **Reinsurance-** When an insurance company transfers portions of risk to other parties by some form of agreement in order to reduce the likelihood of having to pay a large obligation resulting from an insurance claim.

Review Questions

Questions to assess your learning:

1. Insurance operates on the logic of :

a) pooling resources
b) law of large numbers
c) Minimization of overall claim ratio and risk
d) All of the above

2. Providing protection is a __________function of insurance:

a) secondary
b) other
c) primary
d) is not a

3. What is human life value?

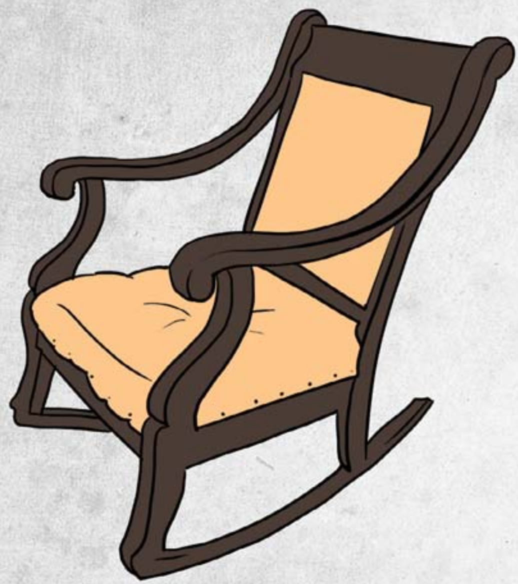
a) **Present value of person's future earnings**
b) Present value of person's estimated expenses
c) Present Value of person's future savings
d) Present value of person's future expenses

4. Which of the following is the elementary requirement of Insurable Risk?

a) Loss must be catastrophic
b) Loss should be fortuitous
c) Non homogenous Exposure
d) Intentional loss

5. Which contract provides a series of periodic payment?

a) Annuity
b) ULIP
c) Endowment Insurance
d) Term Life Policy



Unit 7: *Retirement Planning*

Introduction

Simply put, retirement planning is the important task of deciding how much money one would require upon retirement. For instance, a person who is earning, say Rs 30,000 per month currently and is not expected to have same level of income once he retires will need some money to meet up his expenses at the time of retirement for survival. The necessities and desires in life do not cease with retirement and there will have to be a form of substitution for his current income which may allow an individual to maintain his similar standard of living. The planning which goes into substitution of this income constitutes the core of retirement planning.

Varied number of factors impacts the planning such as, current age, retirement age, life expectancy, investment horizon, number of dependants, the dependency period, risk profile of the person, how much money will he require to cover his (and his family's) monthly expenses - areas of personal interest, medical costs, etc.

Each person's situation is unique (with respect to life cycle stage, financial goals and risk profile) and so, retirement planning isn't a 'one-size-fits-all' plan. It involves more than just saving one's money.

Learning Goals

7.1. Retirement Planning process (Financial need analysis, determining needs, Replacement ratio and expense methods, future value, shortfall in retirement funding, Inflation-adjusted discount rates and nominal return on investment, Retirement products like PF, gratuity etc

7.2. Annuities, its types, Pension Plans, NPS

7.3. Shifts in Assets Allocation before and during retirement as part of overall retirement plan

7.4. Concept of Reverse Mortgage and features of available products

7.1. Retirement Planning Process

The Retirement Planning process – How do we arm ourselves for a happy retirement? Experts say "saving money for retirement through one or all of the available retirement planning options is the first place to start". Also, one should ideally begin retirement planning at an early stage in life - preferable from the first job onwards. Taking small steps early, when time is on your side will save you a lot of worry when you are closer to retirement. Also, a young adult who starts investing early in life experiences lower payouts towards investments and gives his/her money more time to multiply. Having money invested early will aid you to build an adequate retirement corpus.

However, in many cases it may not be possible for everybody to start investing for retirement early in life due to family commitments, or various other reasons. For such people too, there are ways to increase post-retirement earning potential – like postponing retirement by few years, getting a job to supplement one's pension, avail retirement advances such as reverse mortgage schemes (if one possesses an own house) as the last resort.

Most employees have retirement planning options/benefits available through their employees – Employee Provident Fund (EPF), gratuity, superannuation, etc. Such types of retirement options available through the employers are called 'Retirement Benefit Plans'.

Retirement planning is an ongoing process and there are a lot of things to consider. The below steps summarise the essence of sound retirement planning process –

- Analyse your current financial situation;
- Identify your future financial needs/goals/requirements.

- Compute the gap between your current financial position and future financial requirements.
- Fill the gap by creation of an asset allocation through one's savings and a basket of retirement products that would generate regular income and capital protection over a period of time.
- Monitor the retirement plan at regular intervals

A good retirement plan provides adequate corpus for the sunset years without compromising on the standard of living of the person. It also involves smart selection of retirement products to not only save for retirement but also help save on taxes.

Expense Protection method and Replacement ratio

Calculating how much retirement corpus one would require forms the basis of comprehensive retirement planning. Setting goals involves estimating retirement needs. These retirement needs will have to be assessed correctly. While a short estimation will lead to the person outliving his retirement corpus – which can be rather scary, a high estimation creates cash flow problems to the person during the accumulation phase. So a right balance has to be achieved.

The process of approximating one's retirement needs can be done in 2 ways -

a) Expense method or 'Expense protection' method;
b) Income Replacement method

a) Expense Protection Method:

Under this method, monthly/annual expenses of the person (just before retirement) are estimated. The figure so arrived at is adjusted for inflation rate and the concluding amount indicates the corpus required by the person upon retirement which should be able to generate regular income equal to the expenses so arrived at.. In many cases, the monthly/annual expenses required by the person on retirement is taken as a percentage of the monthly/annual expenses of that person just before retirement – the assumption being that one's post retirement expenses will not include certain expenses (such as transport, home loan EMI etc.) and so, it would be a lesser amount than his expenses just-before retirement or its assumed that you will take a lifestyle shift once you are retired.

'Expense Protection' is a slightly cumbersome method due to the detailed listing out of expenses as many people do not keep a tab/record of each

and every expense incurred, lack of which would make the determination of retirement corpus inaccurate. The process involves preparing a list of pre and post retirement (current and future) expenses and arriving at the total expense list.

Following are the steps involved in calculating retirement needs through 'Expense Protection' method –

Step-1: Find out 'current annual expenses' (including insurance premiums and loan EMIs);
Step-2: Determine present value of 'post retirement expenses';
Step-3: Add Step-1 and Step-2
Step-4: Deduct 'work-related expenses' from Step-3' computed above;
Step-5: The amount so arrived in Step-4 above is to be inflation-adjusted and must last as long as the 'dependency period' (post retirement period).

b) Income Replacement Method:

This is another method of estimating one's retirement needs. Here, instead of estimating retirement needs based on an individual's numerous and limitless expenses, his 'income just before retirement' is considered. It works on the premise that a certain percentage of the 'income just before retirement' will be sufficient for rest of the person's retired life.

COMMON 'POST RETIREMENT' EXPENSES

1) Food & Clothing
2) Housing –
   a) Rent;
   b) Property tax, property maintenance & repairs;
   c) Home Insurance;
3) Utilities –
   a) Gas;
   b) Electricity;
   c) Water;
   d) Telephone & Mobile;
   e) TV bills
4) Transport
5) Insurance premium –
   a) Medical,
   b) Personal Accident
   c) Motor
6) Income Tax
7) Liabilities –

a) Personal loans;
b) Vehicle loans;
c) Credit card payments

8) Recreation –
   a) Travel;
   b) Dining out;
   c) Hobbies
9) Miscellaneous expenses

SOURCES OF 'POST RETIREMENT' INCOME

1. Savings and retirement proceeds from investments;
2. Pension annuity from employer and/or insurer/mutual fund;
3. Post retirement job to supplement income e.g. Teaching, part time consultancy etc
4. Reverse Mortgage
5. Regular income from investments in form of Dividend and Interest income
6. Other sources

Inflation adjusted return and nominal return on investments:

While calculating the retirement needs estimation one should necessarily factor inflation in the working of expenses.
It is important to understand two terms at this stage:

Nominal rate of return: Rate at which money invested grows.
Real rate of return: Rate at which the purchasing power of an investment increases.

Inflation is a general **rise in prices of goods and services over a period of time.** Over time, as the cost of goods and services increase, the value of one unit of money will go down and one won't be able to purchase as much with that unit of money as he could have purchased earlier i.e. last month or last year. Inflation eats away the purchasing power of money over time. For instance, if consumer goods prices rise 6% a year over the next 30 years, items that cost Rs 100 today would cost Rs 179 in 10 years, Rs 321 in 20 years and Rs 574 in 30 years.

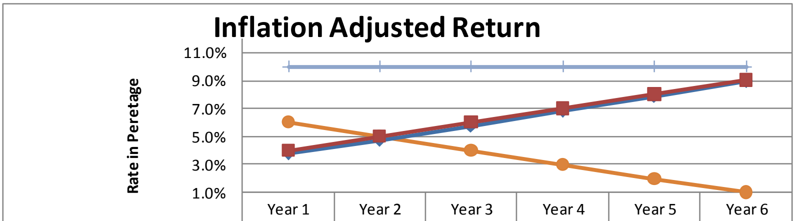
In another example, if you're planning to live on Rs 60,000 a month during retirement, a 6% inflation rate means that in 10 years you would actually need Rs 107,451 a month, and in 20 years you'd need Rs 192,428 a month to cover the same expenses.

In order to maintain a person's same standard of living, the return on an investment must beat or at least keep pace with the prevalent inflation rate.

To protect your retirement savings against inflation, one needs to earn return more than the inflation i.e. beating inflation. The portfolio must consist of instruments that give regular returns, as well as those that offer scope for capital appreciation. Debt instruments such as fixed deposits, bonds, debt schemes of mutual funds will provide regular income at low levels of risk, while the equities and equity-oriented mutual fund schemes and gold or other commodities might provide capital appreciation and the much needed cushion against inflation.

In short, Inflation Adjusted Rate or inflation adjusted return is the periodic rate of return on an investment after adjustment for inflation.

$$\text{Inflation - Adjusted Return} = \frac{(1 + \text{Return})}{(1 + \text{Inflation Rate})} - 1$$



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Expected Return	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Inflation Rate	6.0%	5.0%	4.0%	3.0%	2.0%	1.0%
Actual Return - M1	3.8%	4.8%	5.8%	6.8%	7.8%	8.9%
Actual Return - M2	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%

Actual Return – Method 1: Calculation is done on the basis of discounting the inflation rate.
Actual Return – Method 2: Calculation is done by simply subtracting the inflation from the expected return.

Why is it important to calculate Inflation adjusted return?

It allows the investor to see the true earning potential of the security, without external economic forces by removing the effects of inflation from the return of an investment

Example –
The rate of return on a bank fixed deposit is 8 % p.a. The current inflation rate is 6 % p.a. Calculate the real rate of return on the bank FD.

Analysis – Here, nominal rate of return is 8% p.a., inflation rate is 6 % p.a. using the above formula, and we arrive at a real rate of return of 1.89% p.a. That means that the actual return on the bank FD after adjusting for inflation comes to 1.89% p.a. This rate is further adjusted for taxes and the final rate would be much lower.

Therefore, from the above examples you can see how important it is to make an allowance for inflation while considering an investment. For government employees, dearness allowance (DA) is revised upwards from time to time to compensate for decrease in purchasing power due to general inflation.

How to tackle inflation – An effective way to counter inflation from eating into the return on investments is to include equity, gold and real estate assets into one's portfolio to the extent of the person's risk appetite.

Tax aspects before, during and at retirement for retirement funds (Gratuity, Pensions and Provident fund)

Gratuity

Gratuity is a part of salary that is received by an employee from his/her employer in gratitude for the services offered by the employee in the company. Gratuity is a defined benefit plan and is one of the many retirement benefits offered by the employer to the employee upon leaving his job. An employee may leave his job for various reasons, such as - retirement/ superannuation, for a better job elsewhere, on being retrenched or by way of voluntary retirement.

Eligibility

As per Sec 10 (10) of Income Tax Act 1961, gratuity is paid when an employee completes 5 or more years of full time service with the employer.

How does it work?

An employer may offer gratuity out of his own funds or may approach a life insurer in order to purchase a group gratuity plan. In case the employer chooses a life insurer, he has to pay annual contributions as decided by the insurer. The employee is also free to make contributions to his gratuity fund. The gratuity will be paid by the insurer based upon the terms of the group gratuity scheme.

Tax treatment of Gratuity

The gratuity so received by the employee is taxable under the head 'Income from salary'. In case gratuity is received by the nominee/legal heirs of the employee, the same is taxable in their hands under the head 'Income from other sources'. This tax treatment varies for different categories of individual assessee. We shall discuss the tax treatment of gratuity for each assessee in detail.

For the purpose of calculation of exempt gratuity, employees may be divided into 3 categories –
(a) Government employees
(b) Non-government employees covered under the Payment of Gratuity Act, 1972
(c) Non-government employees not covered under the Payment of Gratuity Act, 1972

In case of government employees – they are fully exempt from income tax arising on from receipt of gratuity.

In case of non-government employees covered under the Payment of Gratuity Act, 1972 – Maximum exemption from tax is least of:
I. Actual gratuity received; or
II. Rs. 10,00,000; or
III. 15 days' salary for each completed year of service or part thereof

Note:
- Here, salary = Basic Salary + Dearness Allowance + commission (if it's a fixed % of sales turnover).
- Completed year of service or part thereof' means: full time service of > 6 months is considered as 1 completed year of service; < 6 months is ignored.
- Here, number of days in a month is considered as 26. Therefore, 15 days' salary is arrived as = salary * 15/26

In case of non-government employees not covered under the Payment of Gratuity Act, 1972 – Maximum exemption from tax is least of:
I. Actual gratuity received;
II. Rs 10,00,000
III. Half-month's average salary for each completed year of service (no part thereof)

Note:

- Here, salary = basic salary + Dearness Allowance + commission (if it's a fixed % of sales turnover).
- Completed year of service (no part thereof) means: full time service of > 1 year is considered as 1 completed year of service. < 1 year is ignored.
- Average salary = Average salary of last 10 months (immediately preceding the month of leaving the job)

Important points to remember

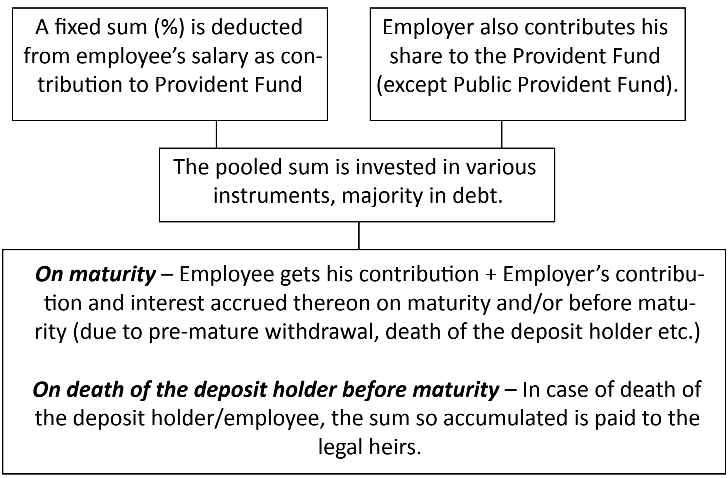
- In case gratuity is received from more than one employer during the previous year, maximum exemption allowed is up to Rs 10 lacs.
- In case of an employee who is employed in a seasonal establishment (not employed throughout the year), the gratuity exemption shall be for seven days wages for each season.

Provident Fund

There are many investment vehicles in our country for the purpose of saving for one's retirement. But the most popular one among them has been 'Provident Fund'. For a long time, provident fund has been the primary investment vehicle for saving for an individual's retirement nest until the entry of mutual funds and other new innovative products such as ULIP (Unit Linked Insurance Policy), ULPP (Unit Linked Pension Policy) etc.

Provident fund can be considered as a debt instrument as majority of the corpus is invested in debt.

How it works?



Types of Provident Funds –

a) Statutory Provident Fund
b) Recognized Provident Fund
c) Unrecognized Provident Fund
d) Public Provident Fund

Let's understand the different kinds of provident funds with the help of a table:

ITEM	ITEM STATUTORY PROVIDENT FUND (SPF)	RECOGNIZED PROVIDENT FUND (RPF)	UNRECOGNIZED PROVIDENT FUND (URPF)	PUBLIC PROVIDENT FUND (PPF)
What is it?	It is a provident fund (PF) set up under the provisions of the Provident Fund Act, 1925. It is maintained by the Central, state governments and their establishments.	A PF recognized by the Commissioner of Income Tax. The Employees' PF (EPF) & Miscellaneous Provisions Act, 1952 apply for RPF.	A PF not recognized by the Commissioner of Income Tax.	A PF covered under the PPF Act, 1968.
It covers whom?	All employees of Central, State governments and government establishments.	It automatically covers any establishment that employs > 20 persons. Establishments with < 20 employees are free/ encouraged to join RPF	-NA-	All individuals (whether salaried, self-employed, employed or not) and minors (through individuals acting as their guardians).
TAX BENEFITS				
Employee's contribution	Eligible for deduction under Sec 80C of Income Tax (IT) Act, 1961	Eligible for deduction under Sec 80C of Income Tax (IT) Act, 1961	Not eligible for deduction under Sec 80C of Income Tax (IT) Act, 1961. In other words, no tax exemption for employee's contribution.	Eligible for deduction under Sec 80C of Income Tax (IT) Act, 1961

ITEM	ITEM STATUTORY PROVIDENT FUND (SPF)	RECOGNIZED PROVIDENT FUND (RPF)	UNRECOG-NIZED PROVI-DENT FUND (URPF)	PUBLIC PROVIDENT FUND (PPF)
EMPLOYER'S CONTRIBU-TION	FULLY TAX EXEMPT FOR EMPLOYEE – Not treated as income in the hands of employ-ee in the year in which contribu-tion is made by employer.	< 12 % of salary – is tax exempt for employee. >12 % of sal-ary – taxable for employee.	TAXABLE AT MATURITY – Not treated as income in the hands of employee in the year in which contribution is made by employer. Taxable on maturity.	-NA- as there is no employer contribution in PPF.
INTEREST EARNED	FULLY TAX EXEMPT FOR EMPLOYEE – Not treated as income in the hands of employee in the year of credit.	<9.5% p.a. - is tax exempt for employee. >9.5% p.a. - tax-able for employee.	TAXABLE AT MATURITY - Not treated as income in the hands of employee in the year of credit.	FULLY TAX EXEMPT
MATURITY PROCEEDS	FULLY TAX EXEMPT FOR EMPLOYEE	FULLY TAX EXEMPT FOR EMPLOYEE	**Employee's contribution** – i) Maturity amount - FULLY TAX EXEMPT; ii) Interest earned – TAX-ABLE AS 'Income from Other Sources'. **Employer's contribution** i) Maturity amount – TAX-ABLE AS 'Sala-ries'; ii) Interest earned – TAX-ABLE AS 'Profits In Lieu Of Sal-ary'.	FULLY TAX EXEMPT

Inflation adjusted expense

Earnings (or return on investment) have to keep pace with inflation, as the cost of retirement will keep on moving northwards owing to the effect of inflation. Therefore, it is imperative for the financial planner to consider the effect of inflation while calculating his client's retirement corpus.

Example
Mr. Satish, aged 40 years, is an employee in an MNC earning Rs 1 lac p.a. His monthly expenses amount to Rs 30,000. He plans to retire at the age of 60 years, upon which, he wants to continue the same standard of living as he enjoys today. What would his monthly cost of living (expenses) be once he retires? [Assume inflation rate to be constant at 6 % p.a.].

Analysis – Mr. Satish's current monthly expenses are Rs 30,000. Upon his retirement (which is 20 years away), he wants to maintain the same standard of living as he does today. However, the same current monthly expense of Rs 30,000 will cost him more rupees in the future as inflation increases the general cost of goods and services over time, thereby increasing Mr. Satish's standard of living, and in the process, reducing the purchasing power of rupee.
So to maintain the same standard of living of Rs 30,000 pm, upon retirement, Mr. Satish needs to shell out Rs 96, 214 pm (inflation rate of 6 %. (30000*(1.06)20 = Rs. 96,214))

Corpus and current investment need/ Calculate the PV and investment required monthly as of today

In retirement planning process, we establish the goals and quantify them in money terms. For most of us, there may be a gap between the requirement and reality.
In such cases, the priority is to check the current resources (investible funds) available and the interest rate at which they will grow and yield the required figure in the future. We need to calculate this gap, which will tell us the additional requirements needed to bridge such gap in required funds.

Additional requirement (gap) = Future requirement – Current available resources (assets & investments)

All the items in the above equation are affected by inflation rate.

Example

Mrs. Rani, aged 35 years, is a divorcee and having a daughter aged 5 years old. Her monthly income is Rs. 25000, pm and expenses amount to Rs. 15,000 pm.

After 15 years she requires an amount of Rs. 25 lacs for her daughter's higher education and marriage. She is planning her retirement at the age of 60 and is looking at a monthly expense of approximately Rs 35,000 pm (today's value). Mrs. Rani expects to live for 20 years post retirement.
Mrs. Rani has invested Rs. 5 lacs today in a bank fixed deposit for a tenure of 5 years (rate of interest offered by bank is 7% p.a.; compounded annually).

Calculate the retirement corpus required by Mrs. Rani when she attains 60 years of age and the monthly investment to be made by her to achieve the same.
[*Assumptions* –Return on investments before retirement @ 12% p.a.; return on investments after retirement @ 8% p.a.; her income and expenses remain constant throughout her working tenure; Inflation rate to be constant at 6 % p.a.].

Analysis – Mrs. Rani's current monthly expenses are Rs 15,000 pm. She needs a monthly amount of Rs. 35,000 (in today's value) upon her retirement. Assuming an inflation rate of 6% p.a., her monthly expense of Rs 35,000 will become Rs 150,215 pm in 25 years.
Here, we have –

Payment to be made at the beginning of the month – Rs. 150,215
Tenure – 240 months (20 years* 12 months per year)

Interest rate on post-retirement investments – 8 % p.a.; Inflation rate – 6 % p.a.
Therefore, real rate of return (using the earlier formula) – 1.89% p.a.
The retirement corpus required by Mrs. Rani upon retirement (The Present Value) is = Rs 3,00,48,832.

(Using Microsoft Excel – find present value for rate =1.89%/12;nper =240;pmt=150215; fv =0; type =1)
Current investment to be made –
We have calculated the retirement corpus required by Mrs. Rani on her attaining 60 years of age. Now we need to calculate the amount of savings and investment to be made by her to achieve the targeted retirement corpus.

From the above data, we have –
Retirement corpus (Future Value) – Rs. 3,00,48,832
Tenure – 300 months (25 years* 12 months per year)
Interest rate on pre-retirement investments – 12 % p.a.

Therefore, monthly investment required to be made to achieve the targeted retirement corpus (or in other words, maintain the same standard of living post retirement) is approximately = Rs 16,000 pm.

(Find PMT using Excel where Rate = 12%/12; nper = 300; FV = Rs. 3,00,48,832; pv=0;type=0)

FV of existing corpus based on return expectation

We shall continue the same example of Mrs. Rani to have better understanding of this concept.

Mrs. Rani has mentioned that she has invested Rs 5 lacs today in a bank fixed deposit for a tenure of 5 years (rate of interest offered by bank is 7% p.a.; compounded annually).
Here, we have –

Existing value of investment (also called **Present Value**) = Rs. 5 lacs
Tenure = 5 years
Interest earned on bank FD = 7 % p.a. (compounded annually)
Therefore, the maturity amount of the bank FD (also called **Future Value**) at the end of 5 years, earning an interest rate of 7 %p.a. annual compounding) is = Rs. 701, 276

Note: Similarly, we can calculate the future value of a regular payment (made towards an investment).

Shortfall in retirement funding

While calculating Mrs. Rani's targeted retirement corpus, we established that she needs to save and invest Rs 16,000 pm for 25 years the purpose of her retirement.

However, Mrs. Rani's current monthly savings (Monthly income – monthly expenses) is Rs 10,000 pm.
We can see here that –

Her current resources (for saving and investment) are Rs 10,000 pm;
The required monthly investment to be made is Rs 16,000 pm;

Therefore, shortfall in retirement funding is = Rs 6,000 pm (Rs 16,000 – Rs 10,000).

Projected Income Shortfall –
Projected income shortfall is when retirement income is insufficient for the lifestyle you want to carry on. In other words, it occurs when post retirement lifestyle needs is more than the post retirement income.
In order to bridge this shortfall, Mrs. Rani may consider to –

- Increase her monthly income – by taking up a higher paying job and/or part-time job;
- Reduce her current expenses - so that it may be diverted into saving for retirement;
- Reduce her post-retirement monthly expense projection;
- Post-pone her retirement by a few years.

7.2 Annuities

An annuity is a contract between the insurer and an individual whereby the insurer agrees to pay a specified amount in future in exchange for the money now paid by the individual. It is an investment that you make, either in a lump sum or through instalments over a specified period of time (called the 'accumulation period'), in return for which you receive a specific sum at regular intervals (either annually, semi-annually, quarterly or monthly), either for life or for a fixed number of years. By buying an annuity or a pension plan the annuitant receives guaranteed income for the period as specified in the policy.

Annuities are also popularly known as 'pension plans'. This is because they are typically bought to generate regular income during one's retired life. Annuities can be viewed as a solution to one of the biggest financial insecurities of old age; outliving one's retirement corpus.

The period when you are investing is called 'accumulation phase'. In return for the investment, the annuitant receives back a specific sum every year, every half year or every month, either for life or a fixed number of years. This period when the annuitant receives the payments is known as the 'distribution phase'. Generally, one opts to receive annuity payments (also known as 'un commuted payments') upon retirement.

One important aspect is to make sure that the payments you receive will meet your income needs during retirement.

Some of the common pay out options upon retirement are–

- Receive lump-sum payment of all of the money you have accumulated during your working years.
- Receive regular payments over a specific period of time.

Advantages and Disadvantages of an Annuity:

Advantages	Disadvantages
1. An Annuity allows you to save a larger amount of money and defer paying taxes until maturity of the investment. One can reap the benefit of rupee cost averaging during the accumulation phase (like a systematic investment plan or SIP). This can be a big advantage over other taxable investments. Annuity serves as an accompaniment/add-on to retirement products, such as PPF (Public Provident Fund) and private pension plans.	1. There are hidden fees involved, such as - commissions, surrender charges, annual fees etc. These charges cancel out some of the benefits of an annuity. Compare that to a regular mutual fund or index funds where the charges are quite negligible per year. Insurance agents and others who sell them may create hype about the positive features and downplay the drawbacks. So it is up to the investor to carefully review the annuity plan first.
2. You have the option of naming a beneficiary on your annuity, and with certain types of payout options that beneficially could receive the money in your annuity in case you die.	2. Annuities are taxed on maturity – uncommuted pension/ withdrawal from annuity will be taxed as ordinary income as per the tax slab of the individual, no matter how long he has owned the account.

Types of Annuities

There are two basic types of annuities: deferred and immediate.

a) **Deferred Annuity** – Here, your money is invested for a specified period of time until you are ready to begin taking withdrawals, typically upon retirement. A deferred annuity accumulates money. Also, they accumulate interest on the investment.

b) **Immediate Annuity** – Here, you begin to receive payments from the insurer immediately. For example, upon retirement, an individual can purchase an immediate annuity with his accumulated retirement corpus. Here, a deferred annuity is converted into an immediate annuity. Payment will start as immediately at end of the month. An immediate annuity makes fixed payments to the individual at regular intervals (as chosen by him) - determined mostly by an individual's age, life expectancy and size of annuity payment.

Within these two basic categories, annuities are further divided into –
i) *Fixed annuity* – where the pay-out is a fixed sum or fixed amount;
ii) *Variable annuity* – where the pay-out is tied to underlying investment such as, performance of the overall market, a particular investment (example: gold), and/or a combination of the two. The value depends on the performance of the underlying product you choose. However, a variable annuity's annual expenses are likely to be much higher than the expenses on regular mutual funds.

The features of the above 2 annuities are further discussed below.

Fixed annuity and its features:

Fixed annuities are essentially debt instruments issued by the insurer – They are debt products that provide guaranteed payments to the investor, which makes them popular among risk-averse investors. They offer stability - well suited to those who want to make sure they don't have to worry if they will have just enough money to pay their bills each month.

However, fixed annuities, like any regular annuity, suffers from high surrender charges that cut into its returns. Plus, another disadvantage of fixed annuity is that it doesn't keep pace with inflation. As a result, the value of the money you receive will decline over time.

Variable annuity and its features:

Variable annuities are payments made depending upon the value of the underlying security/instrument. An individual can choose from a basket of investments, and the insurer makes payment as per the performance of the investments so chosen, unlike a fixed annuity, which provides guaranteed pay-out.

A variable annuity, with an underlying instrument being equity and/or equity mutual fund, is more likely than a fixed annuity to outpace inflation. However, higher returns mean higher risks too. There's a lot more risk associated with a variable annuity unlike a fixed annuity. For instance, if the value of the underlying security declines, the value of the annuity will also decline - resulting in lower pay-out.

Other types of annuity:

I. **Period certain annuity** – Here, the investor is guaranteed a specific payment amount for a specific period of time (say, 10 years or 25 years). If the investor passes away (dies) before the end of the period, his beneficiary will receive the balance annuity payments for the balance specified period.

II. **Life certain annuity** – Here, the investor is guaranteed specific payment for the rest of his life; there is no survivor benefit (i.e. beneficiaries don't get anything). At the time of death, all payments stop. Also, if the investor passes away before receiving any annuity pay-outs, the entire balance in his account will be retained by the insurer. The main purpose of this type of annuity is that it provides protection against outliving one's retirement money. The annuity provides a guaranteed, regular amount of income for the rest of the investor's life. Life certain annuity is also called 'longevity annuity' and 'advanced life delayed annuity'.

III. **Life with period certain annuity** – This annuity is a combination of the above 2 – life certain annuity and period certain annuity. Here, the investor receives a guaranteed pay-out; either for the rest of his life or until a specified period – whichever is early.

IV. **Either or survivor annuity** – Here, either partner/spouse will continue to receive pay-outs from the insurer for the rest of his/her life even after the spouse passes away.

V. **An equity-indexed annuity** - It is a combination of fixed and variable annuity. Here, one gets to enjoy the upside of a stock market bull run and also protect oneself against the downside as the investment earns a guaranteed minimum return even if stock prices fall.

However, they suffer from certain drawbacks such as low transparency, lower return compared to benchmark index (due to guaranteed component), high charges etc.

Taxation of individual annuities:

A wide variety of investments have been brought under the tax deduction benefit ambit - designed to minimize tax implications – Equity-linked saving scheme (ELSS) mutual funds, Public Provident Fund (PPF) and other recognized provident funds, certain saving schemes of post office and more.

If taxes aren't a concern, there is no shortage of investment opportunities designed to meet just about any imaginable investment objective.

In order to make the most of one's investment decision, one needs to comprehend the principles of investing.
The tax implication of individual annuities is twofold, as explained below -

A) During payment of premium:

Deduction u/s 80CCC of IT Act, 1961 is allowed on account of investment to the extent of Rs 1 lac p.a. The policy can be taken on self, spouse and children.

B) On receipt of pension (annuity):

Commutation of pension is capitalization of a fraction of monthly pension. It is a lump sum payment of the commuted value of fraction of pension. The commuted value of pension received from a life insurance plan is tax-free. Uncommuted pension amount received is taxable in the hands of the pensioner/investor. Such amount shall be taxed as income in the year in which it is received by the assessee or his nominee, as the case maybe.

Note:

- Annuity received from present employer is taxable as 'income from salary'.
- Annuity received from former employer is taxable as 'profits in lieu of salary'.
- Annuity received from any other source (other than the above), i.e. from insurance companies, mutual funds, is taxable as 'income from other sources'.
- Annuity received by the nominee in any mode as mentioned above is added to nominee's taxable income under the head 'income from other sources'.

Types of Pension plans including New Pension Scheme (NPS) with its features

A pension plan is nothing but an annuity. Both terms are used inter changeably. Typically annuities are bought to generate income during one's retired life, which is why they are also called pension plans.

Pension plans are perfect investment instruments for a person who after retiring from service has received a large sum as superannuation benefit. He can invest the proceeds in a pension plan as it is safest way of secured income for the rest of his life. One can pay for a pension plan either through an annuity or through instalments that are annual in most cases.

The two most common types of pension plans are the *defined contribution* (or the money purchase plan) and the defined benefit plan. Sometimes these two plans are combined and the combination is thus known as *hybrid plans or combination plans.*

Defined Benefit (DB) plans

In these kinds of plans, the benefit to be paid to the employee is defined or fixed at the beginning of the plan, e.g. final year's salary multiply by number of years of service. Here the employer funds the plan and the employee reaps the rewards upon retirement. The employer has to use actuarial assumptions like retirement age, mortality, expected life span, expected compensation increase and other demographic assumption to estimate the pension liability and accordingly contribute in the pension plan. From an employer's perspective, defined-benefit plans are an ongoing liability. Returns on the plans are assumed and estimated in such a way to get the desired payout to the employee. The funding for these plans must come from corporate earnings – which affect the company profits. The impact on profits can weaken a company's ability to compete. Moreover the demographics or the assumptions keep changing hence companies all around the world are slowly shifting the burden towards employees by introducing 'defined contribution plans'. The investment risk is borne by the employer in the defined benefit plan.

Defined Contribution (DC) plans

This is also known as 'money purchase plan'. Under this plan, the contribution to the pension plan by the employee is fixed (say 12% of salary) and the same is matched by the employer. The money is placed in the investment instruments selected by you in your investment account. After you retire, these investments along with interest are used to buy pension or annuity. However, under DC plan, one cannot be sure of the final pension amount at retirement. Ultimately, the pension benefit that you are going to receive after your retirement will depend upon the performance of the investment made on your behalf.

Unlike a defined-benefit plan, where the employee knows exactly what his or her benefits will be upon retirement, there is no such certainty regarding investments in a defined-contribution plan. After the money is pooled into the retirement account, it's up to the uncertainties of the investments to determine the final outcome.

Apart from pension plans of employers, there are two broad categories of pension plans from life insurers - Traditional endowment policies and unit-linked policies. They differ primarily in the way the money of the policyholder is invested and grows during the accumulation phase.

A traditional plan invests primarily in debt instruments. The buyer needs to choose a sum assured that becomes his maturity corpus if he survives the term. Over and above this guaranteed corpus, he would get loyalty additions and bonuses which the company would declare from time to time. The loyalty addition will be declared for the policy holder based on the period for which he has paid the premium amount even in case of death. Bonus is the amount given to the policy holder apart from their maturity or death benefits. The additions depend on the performance of the company and its profits. If the policyholder dies before the plan's maturity, the nominee gets the sum assured plus the additions. On survival, the policyholder gets the sum assured plus the bonus and loyalty additions for investing in the second stage.

Mutual funds also have started offering pension plans, which are also targeted towards saving for one's retirement. These are debt-oriented balanced funds that take equity exposure of up to 40 per cent and invest the balance in debt instruments. Though they are hybrid in nature, their equity exposure is much lower than balanced funds that invest up to 65 to 70 per cent in equity.

How do mutual funds' pension plans work?

These funds work like a mutual fund (MF) scheme, with a slight twist. The basic premise in these funds is that you invest in them throughout your working life. You do not withdraw your funds before you retire. Post-retirement, you can make a lump sum withdrawal or earn a regular income.

Like any regular Mutual Fund scheme, Mutual Fund pension plans collect money from several investors and then collectively invest the proceeds in equity and debt markets. You could either invest lump sum amounts when you have money or through a systematic investment plan (SIP).

They assume retirement age as 58 years. Since these plans aim to provide you with income after you retire, they discourage early withdrawals; withdrawals before you attain the age of 58 years attract a penalty.

After you turn 58, you can withdraw as much as you want, either the full amount or choose to receive a pension - much like annuity payments. The balance units in either case remain invested and continue to grow.

Other pension plans for private players:

Nowadays there are a number of private insurance players in the market. All of them generally provide two types of pension plans - with life cover and without life cover. However the Insurance Regulatory body IRDA has proposed mandatory life cover with Pension products. The 'with life cover' pension plans offer an assured life cover in case of an eventuality, even if the corpus built till the date of death happens to be below that amount. Under the 'without cover' pension plan, the corpus built till the date of death (net of deductions like expenses and premiums unpaid) is given out to the nominees in case of an eventuality, with no sum assured. The tax-ability of a pension plan is determined in two stages. The first is at the time of making annual premium payments and other at the time of maturity. Premium payments towards pension plans are eligible for deduction under Section 80CCC of Income tax Act 1961. The overall limit for deduction under Sections 80C and 80CCC is Rs 1 lac. In other words, one is eligible for same tax deduction for the premium amount paid for; with or without life cover pension plans.

At the time of maturity, the commuted value of the pension (lump sum amount) which is received from a life insurance plan is tax-free. However, the monthly pension amounts are fully taxable and included in one's tax-able income, irrespective of whether or not the policy holder claimed the deduction under Section 80C or Section 80CCC at the time of payment of premium.

New Pension Scheme (NPS) and its features:

It is a defined contribution scheme (unlike EPF, PPF where returns are guaranteed by the government) regulated by the Pension Fund Regulatory and Development Authority (PFRDA). The investment in NPS is to be main-tained until the age of sixty. Upon retirement, a part of your corpus will be allowed to be withdrawn as lump sum, and the balance will be mandato-rily paid out as pension annuity.

Let's look at the salient features of NPS:

Who is covered?

- An individual who has joined central government service At present, the equity component is invested such that it replicates a stock market Index. are expected tocomponent on or after 01 January 2004,

- Employee of a Central (Civil) Ministry or Departments, or

- Employee of a non-civil Ministry or Department including Railways, Posts,

- Telecommunication or Armed Forces (Civil), or

- Employee of an Autonomous Body, Grant-in-Aid Institution, Union Territory or any other undertaking whose employees are eligible to a pension from the Consolidated Fund of India.

However following individuals are excluded:

- Employees already covered under Provident Fund and Miscellaneous Provisions Act, 1952 and any other special Acts governing these funds,

- An individual who has joined Central Government service before 01 January 2004, or

- Employees of the Indian Armed Forces (Army, Navy and Air Force), or

- An individual employed in a Department or in a Post under which you are not eligible to receive a pension from the Consolidated Fund of India

Operational Aspects of New Pension Scheme:

Allotment of Account Number
When a person joins Government service, he/she is allotted a unique Personal Pension Account Number (PPAN). This unique account number will remain the same throughout. The same can be used from any location and can be continued even after job change. The PPAN will provide you with two personal accounts namely 1.A mandatory Tier-I pension account, 2.A voluntary Tier-II savings account.

Tier-I account
The subscriber to the scheme has to contribute 10% of basic +DA +DP into your Tier-I (pension) account on a mandatory basis every month. Contribution on employee's behalf more than 10% is allowed subject to any ceiling that may be decided by the Government. The government will also contribute 10% of basic+DA+DP. Withdrawal from this account is not allowed till the age of 60. Monthly contributions and savings in this account, subject to a ceiling to be decided by the government, will be exempt from income tax. The savings in this account are taxed on withdrawal at the time of retirement.

Contributions of employee as well as government towards Tier-I pension account will begin from the month following the month of joining of service. Such contributions will be transferred by the Government in the name employee to a Pension Fund Manager (PFM) who will invest them as a result the savings would grow over time.

Tier-II account

This is simply a voluntary savings facility. Contributions and savings in this account will not enjoy any tax advantages. But you will be free to withdraw your savings from this account whenever you wish. The government does not contribute to this account.

Pension Fund Managers

The PFRDA will appoint a limited number of leading professional firms to act as PFMs. One of these PFMs will be a public sector agency. The employee will select the PFM to manage your contributions and savings. The subscriber to the scheme can spread his/her savings across multiple PFMs. Subscriber can exercise his discretion as regards change of PFM and move all savings to another PFM of his/her choice.

Schemes Offered

FM will offer a limited number of simple and standard schemes. There are mainly three type of schemes offered: 1. **Scheme A**: This scheme will invest mainly in Government bonds, 2. **Scheme B** This scheme will invest mainly in corporate bonds and partly in equity as well as government bonds,3. **Scheme C** This scheme will invest mainly in equity and partly in government bonds as well as corporate bonds. The savings can be spread across these three schemes. The subscriber is free to switch savings from one scheme to another. The contributions to scheme would not guarantee or promise a specified rate of return. The returns earned by the PFM on the scheme selected by you will be credited to the account.

Charges

Central Recordkeeping Agency (CRA) would recover charges for maintenance of your accounts, at the same time PFM(s) would be paid for managing the savings. These charges will be deducted from the savings on a periodic basis. The fees and charges by the CRA and PFMs will be regulated by the PFRDA.

Utilisation of funds accumulated in Tier I Account

The funds in the Tier I account can be withdrawn only on attainment of 60 years of age. 60% of amount withdrawn can be taken in lump sum and balance 40% of is to be used for purchase annuity from Life Insurance Company. The life insurance company will pay a monthly pension for the rest of your life. In case the subscriber withdraws funds before 60 years of age, 80% of the savings must be used purchase the annuity and balance 20% can be withdrawn in lump sum. The subscriber can opt to purchase annuity with more than 40% of my savings accumulated. An annuity with option of family survivor pension can be purchased.

Advantages of NPS

- **Cost** - NPS is the cheapest among current retirement products and defined contribution schemes; it is also easy to transact in NPS.
- **Flexibility** – The subscriber is given a PRAN, which will remain with him for forever. The account is portable irrespective of change in job/ location.
- **Returns** – There is likelihood potential of having returns higher than traditional debt investments.

Disadvantages of NPS

- **Taxability** - The contributions get tax benefit under Section 80C. However, at the time of withdrawal, the lump sum would be tax exempt.
- **Comparison to mutual funds** - Since the NPS is meant for retirement and financial security; it does not permit flexible withdrawals as are possible in the case of mutual funds.
- **Returns** - If an individual is voluntarily investing in NPS, then he/ might as well invest in the stocks or mutual funds (MF).

One can create a pension plan with the help of mutual funds. In the accumulation phase, one can do a systematic investment in a mutual fund scheme and in the distribution phase, take the money out of investments through systematic withdrawal. Mutual funds offer greater degree of flexibility along with higher transparency to an investor as compared to other investment options. However, some of the other avenues can be more tax efficient.

7.3 Shifts in Asset Allocation before and during retirement

Retirement planning is an ongoing process. During the initial stages of planning, client's goals are determined by quantifying them in rupee terms. Once goals are fixed, asset allocation is done as per the client's risk profile and investments are made accordingly. After this, there is a need to monitor the plan at regular intervals and undertake constant review of portfolio evaluation.

Portfolio evaluation is the process of going through the existing portfolio of the client to check whether the current asset allocation is in line with his future financial requirements.
Other important reasons for conducting regular evaluation of one's portfolio are –

- Changes in life cycle stage of the client – for instance, the client may get married and there may be a need for a change in the asset allocation.
- To contain systematic risk - the evolving dynamic market conditions require review/changes in the asset allocation.

Overall, there has to be connection between the rebalancing of asset allocation and the overall retirement plan, whether it is done before or after retirement.

Example
Rajesh and Bina are a 'just married' couple. Let's take a look at their financial situation and chalk out a financial plan for them.

Age	: Rajesh – 26 yrs; Bina – 25 yrs;
Number of dependants	: None;
Occupation	: Rajesh - Accountant; Bina – IT Secu rity officer
Monthly income	: Rajesh – Rs 50,000 pm; Bina – Rs 30,000 p.m.;
Monthly expenses	: Rs 30,000 p.m.
Monthly savings	: Rs 50,000 p.m.;
Assets	: Own house;
Insurance	: No insurance policies taken yet;
Investments	: Bank FD – Rs 5 lacs,

Gold – Rs 5 lacs;
Mutual funds – Rs 3 lacs;
Balance in bank savings' account – Rs 3 lacs.

Future financial goals –

(a) Buy a car in 2 years – down-payment required is Rs 2 lacs (in today's value);
(b) Holiday in Europe in 5 years – Amount (in today's value) – Rs 6 lacs;
(c) Provide for couple's retirement in 30 years – Amount required – Rs 50,000 pm (in today's value) for 20 years after retirement;

Analysis – Rajesh and Bina are a 'just married' couple with the above future goals. They have surplus funds lying idle in their bank account to the tune of Rs 3 lacs. To start off, they can create a contingency fund by putting away 6 month's expenses (amounting to Rs 180,000) in liquid mutual funds or auto-sweep facility in their savings account to counter any sudden emergencies in future. The balance in the savings account (Rs 120,000) maybe diverted into buying adequate life and health insurance for couple and invest the rest (either through lump sum or regular contributions) to reach their above specified goals.

Broadly this could be their current suitable asset allocation before retirement. However, once children come into the picture, the asset allocation needs to be modified to include children's goals such as higher education, marriage etc.

This calls for revaluation of Rajesh and Bina's asset allocation. Since income is limited, the couple needs to cut down on their expenses in order to save more for their children's future needs which must be inflation-adjusted.

For their retirement goal, they may invest – as per their risk profile, in a basket of equity and debt products for better asset allocation, risk diversification and tax benefits.

So you can see here the need for review of initial asset allocation during change in life cycle stage of the client to ensure that the asset allocation is on the same line as his future needs. Similarly, when there is a market opportunity, revaluation and rebalancing may be considered to average out a better yield on investment over the long-term.

Even when retirement is nearing, process of portfolio evaluation does not have to stop.

Upon retirement, there is change in a person's life – spending more time at home, taking up a new job or hobby etc. The needs during retirement are also very specific, such as increase in medical expenses. There may be a sudden emergency. Such events call for more liquid assets in the portfolio in order to meet unforeseen circumstances. Therefore, it is advisable for retirees not to go overboard with illiquid assets such as real estate during retirement years as there may be a high chance of emergency requirements.

Example

Vimal is 55 years of age. His asset allocation consists of equity 70% and debt 20% and gold of 10%. He will retire at 58 years of age. What is the sort of asset rebalancing that needs to be done?

Analysis -Vimal is fast approaching retirement. Currently, he is heavily invested in equity. His portfolio needs to be rebalanced with considerable debt portion as equity markets tend to be volatile in the short-term. Therefore, from what we can see above, Vimal needs to slowly tilt his asset allocation from 70% equity to 30% equity by the time he approaches retirement. Debt may be increased to at least 60%.

7.4 Concept of Reverse Mortgage and features of available products

A mortgage is a loan secured by a property/house and paid in instalments over a set period of time. For most people, a mortgage is the largest and most serious financial obligation they ever make. A mortgage represents a loan or lien on a property/house to finance the purchase of your home that has to be paid over a specified period of time. To repay the debt, you make monthly instalments or payments that typically include the principal, interest, taxes and insurance. If you don't pay the debt, the lender has the right to take back the property and sell it to cover the debt.

Reverse Mortgage

A house can generate money by way of rent, which improves one's financial situation. This is the reason why the concept of 'Reverse Mortgage' was introduced. Although reverse mortgage is a well-developed product in the West 3 decades ago, it is a fairly new concept in India.

A reverse mortgage is a loan available to senior citizens. As its name suggests, it is exactly opposite of a typical home loan, where repayments are made to the housing finance company (HFC)/ bank every month until the tenure of the loan. Reverse mortgage is so named because the payment stream is reversed, that is instead of the borrower making monthly payments to the lender, the lender makes payments to the borrower.

The process is simple. Once you pledge your house for reverse mortgage with any HFC/ bank, the HFC/ bank estimates the value of the house. Then, taking into account the cost of credit, it makes monthly payments to you. The loan is typically settled after the death of the owner/co-owners.

The important features of Reverse Mortgage are summarized below:

1. In a typical mortgage, you borrow money in lump sum right at the beginning and then pay it back over a period of time using Equated Monthly Instalments (EMIs). In reverse mortgage, you pledge a proper-

ty you already own (with no existing loan outstanding against it). The bank, in turn, gives you a series of cash-flows for a fixed tenure.

2. The scheme is applicable for the entire country including rural areas. The property should be mortgagable. In some rural areas agricultural land cannot be mortgaged and hence reverse mortgage loans cannot be considered against a house constructed on such agricultural land.

3. Eligibility Criteria

   - Indian citizen of 60 years or more,
   - Married couples will be eligible as joint borrowers for joint assistance. In such cases, the age criteria for the couple would be at the discretion of the RML lender, subject to at least one of them being above 60 years of age and the other not below 55 years of age.
   - Should be the owner of a residential property (house or flat) located in India, with clear title indicating the prospective borrower's ownership of the property.
   - The residential property should be free from any encumbrances.
   - The residual life of the property should be at least 20 years. There is no minimum period of ownership of property required.
   - The prospective borrower(s) should use that residential property as permanent primary residence.

4. The amount of loan available under RML depends on the age of the borrower, appraised value of the house and the prevalent interest rates of the lending institution.

5. A reverse mortgage loan cannot be availed against commercial property. The property should be self-acquired, self-occupied and having clear title in favor of the borrower.

6. The maximum monthly payments under RML have been capped at Rs.50, 000/-. The maximum lump sum payment shall be restricted to 50% of the total eligible amount of loan subject to a cap of Rs.15 lakh, to be used for medical treatment for self, spouse and dependants, if any. The balance loan amount would be eligible for periodic payments.

7. All receipts under RML shall be exempt from income tax under Section 10(43) of the Income-tax Act, 1961.

8. Any transfer of a capital asset in a transaction of reverse mortgage shall not be regarded as a transfer. A borrower, under a reverse mortgage scheme, will be liable to income tax (in the nature of tax on

capital gains) only at the point of alienation of the mortgaged property by the mortgagee for the purposes of recovering the loan.

9. The rate of interest and the nature of interest (fixed or floating) will be decided by the lender. The rate of interest is determined by market conditions. Therefore, each lender will determine its lending rate as per its own policy. Each lending institution offers loans as per its own lending policy and the borrower can decide whether to take the loan on fixed or floating basis depending upon the respective terms.

10. The maximum tenure of an RML will be 20 years.

11. An RML will become due and payable only when the last surviving borrower dies or permanently moves out of the house. The loan may, however, be liable to foreclosure on the occurrence of certain events of default.

12. An RML will be settled by proceeds obtained from sale of the house property mortgaged. After the final settlement, the remaining amount (if any) will be given to the borrower or his/her heirs/beneficiary. However, the borrower or his/her heirs may repay the loan from other resources without bringing the property to sale.

13. The borrower will remain the owner of the house property and need not service the loan during his/her lifetime as long as the property is used as primary residence. Periodic payments under RML will cease after the conclusion of the loan tenure. Interest will accrue until repayment. On death of the borrower or when he/she moves out of the house permanently, the loan will be repaid out of the sale proceeds of the mortgaged house.

14. Generally, the owner of the residential property and his/her spouse are joint borrowers in an RML. In the event of death of one borrower (say, the owner), the other (i.e. the spouse) may continue to live in the property till his/her death. The payments will continue to be made to the spouse who would have been made a co-borrower at the time of the origination of the RML.

15. The Reverse Mortgage loan can be prepaid at any time during the currency of the loan. On clearance of all the dues, all the title deeds will be returned by the lender.

16. The borrower can opt for the frequency of EMI pay out a monthly, quarterly, annual or lump sum payments at any point, as per his discretion.

17. The lender will re-value the property mortgaged to it at intervals that may be fixed depending upon the location of the property, its physical state etc. NHB has advised that such revaluation may be done at least once every five years, and the quantum of loan may undergo revisions based on such revaluation at the discretion of the lender. The frequency of revaluation will be made known to prospective borrowers at the time of sanctioning of the loan.

18. The costs to be paid by the client to the Housing Finance Company include loan processing charges, documentation charges, commitment fees on undrawn loan amount etc.

Example

Assume the value of a house is assessed at Rs 50 lacs and the borrower 'A' is 70 years of age. Under the present governing rules of NHB (National Housing Bank), one will be eligible to get a loan for maximum tenure of 15 years. In that case, 'A' can avail the reverse mortgage loan benefits until he reaches 85 years of age.

Suppose he is eligible to receive Rs 10,000 per month, he will receive Rs 120,000 p.a. for the next 15 years (assuming that there are no changes in the value of the property). Therefore, on completion of 15 years, he would have received a total of Rs 18 lacs. Assuming the inclusion of interest component (compounded annually) on this Rs 18 lacs amounts to Rs 25 lacs, the total amount that he owes to the bank will now be Rs 25 lacs.

If 'A' passes away at the end of the tenure of 15 years, the bank has the right to sell the property to realise its dues i.e. Rs 25 lacs. The balance will be passed on A's beneficiaries. In case the property has appreciated to Rs 70 lacs and the bank decides to sell the property to realise its dues, it will recover Rs 25 lacs and pay the balance of Rs 45 lacs to A's beneficiaries.

Alternatively, if A's beneficiaries do not want to sell the property, they may pay the dues to the bank and retain the house.

Note: The above example is for illustrative purposes only. The amount of pay-out on a reverse mortgage loan will depend upon – the value of property (to be mortgaged), loan-to-value ratio (also called as 'LTV'), tenure of the loan (the higher the tenure the lesser the pay-out and vice versa), pay-out frequency (monthly, quarterly, half-yearly, annually or single lump sum) and interest rate.

Reverse Mortgage vis-a-vis Selling of Property

Reverse mortgage is a financial product that enables senior citizens (60+) who own a house to mortgage their property with a lender and convert part of the home equity into tax-free income without having to sell the house. Reverse mortgage aims at partially meeting the financial needs of senior citizens without selling the property and enables recurring funds in-flows to the senior citizens during their remaining life time.

Review Questions

Questions to assess your learning:

1. Which of the following is defined benefit plan?

a) Gratuity
b) Provident Fund
c) Pension
d) Annuities

2. Who can open an account with public provident fund?

a) Individual
b) Company
c) HUF
d) All of the above

3. Equity component of the New Pension Scheme investment portfolio replicates a/an _______.

a) Exchange Traded Fund
b) Hybrid Mutual Fund
c) Equity Mutual Fund
d) Index

4. What is the age limit for reverse mortgage scheme in India?

a) 65
b) 60
c) 55
d) 58

5. What maximum amount can be invested per year under New Pension Scheme?

a) No limit on maximum contribution per year

b) 6,000

c) 70,000

d) 1,00,000

Unit 8: *Tax and Estate Planning*

Introduction

Taxes have inherently been a complex and confusing subject. To make matters more complicated the provisions undergo amendments – both prospectively as well as retrospectively – every financial year making the entire process of understanding the law even more daunting. Even the great physicist Albert Einstein couldn't help but remark that "the hardest thing in the world to understand is the income tax"

This being the case the common man doesn't even tries to understand the nitty-gritty of this baffling subject but prefers to outsource their tax matters to their advisors or chartered accountants. Hence, this subject assumes paramount importance in the service offerings of every investment advisor. The foregoing units will give a walk-through of the significant provisions of the Indian Direct tax laws with the objective of providing basic and working knowledge of this subject.

Note: The provisions and limits under various sections mentioned in the following units, are as per the prevailing Finance Act, 2010.

Learning Goals

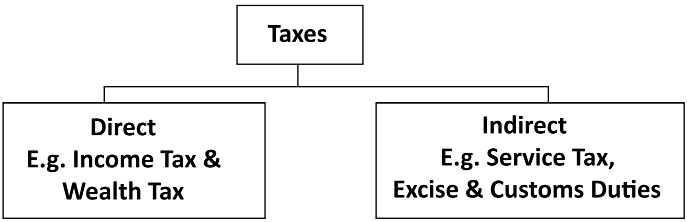
8.1 Heads of Income Gross Total income, Adjusted gross income, Itemized deductions, Taxable income, Tax liability, Clubbing of Income, taxation for NRIs, Capital Gains tax rules, Characterization of gain or loss, Netting rules, Indexation benefits, Capital loss limitations, Tax Planning Strategies (Tax relief, Exemptions, Deductions, Rebates),

8.2 Wealth Tax Act and its implication for clients

8.3 Estate Planning - fundamental objective of greater efficiency in wealth transfer, Valuing of an Estate, Hindu and Indian Succession Act, Wills, Probates, Transfers through trusts and contracts, Powers of Attorney, Mutation, Succession.

8.1 Income tax, Heads of Income and other Rules

Taxes basically represent the sum of money charged by the Government at the prescribed rates in lieu of the various services provided. Taxes form the basic source of revenue to the Government. There are mainly two types of Taxes, direct tax and indirect tax as depicted below:



Direct Taxes are those which are directly collected from the Tax payers i.e. the impact and incidence of direct Taxes fall on the same person. On the other hand, the impact and incidence of indirect Taxes fall on different persons since the Tax payer recovers the indirect Taxes paid from their consumers/ buyers/ clients, as the case may be.

Indian Direct Tax structure

Currently the Direct Taxes levied by the Government of India are Income Tax and Wealth Tax. Previously Gift Tax and Estate duty were also part of the Direct Tax revenue, however, these were repealed by the Government in its effort to rationalize and simplify the Direct Tax regime. The Indian Constitution empowers the Central Government to levy and collect the Direct Taxes.

The Income Tax law in India comprises of the following:

i. The Income Tax Act, 1961, (ITA)

The ITA was enacted in 1961, by the Central Government. It came into force w.e.f. 1st April 1962 and extends to the entire country. It contains approximately 400 sections and 12 Schedules. The ITA incorporates the basic provisions of the Income Tax law in India – the chargeability, scope, exemptions, computation mechanisms, Tax holidays, Tax collection, assessments, appeals, etc. However the ITA is amended every year through the Finance Act passed by the parliament.

ii. The Income Tax Rules, 1962

While the ITA lays down the Tax provisions, the Income Tax Rules are formulated by the Central Board of Direct Taxes (CBDT) for implementation of these provisions. The Rules are distinct from the ITA and in case of any difference between the two the provisions of the ITA prevails. The Income Tax Rules can be amended by the CBDT by means of a notification in the Official Gazette of the Government. Generally amendments to the Rules are consequential to the amendments to the ITA.

iii. Finance Acts or Annual Budget

As pointed out above, the Finance Act is passed by the Parliament annually in order to bring about amendments in the ITA. Further, the Finance Act also specifies the rates at which Income Tax is chargeable.

iv. CBDT Circulars

The CBDT is empowered to issue circulars in order to clarify certain provisions of the law as well as to issue directions/ instructions to the Income Tax authorities for proper administration of the ITA. However, these circulars/ directions can not in any way contradict or defeat the provisions of the law. Further, it may also be noted that the circulars issued by the CBDT are binding only on the Income Tax department – in other words neither the Tax payers nor the Courts are bound by them.

v. Judicial Precedents

As discussed earlier, Income Tax law is a highly complicated subject and a good number of provisions of the ITA are open for multiple interpretations. Therefore there is constant dispute between the Tax payers and the Tax collectors on several issues emanating there from. These disputes are ultimately settled by the Tax tribunals and the Courts and there after act as precedent for settling a future dispute on similar issues and facts. Thus, judicial precedents act as a basis for deciding a similar issue arising in future.

Tax Planning

'Tax Planning' is essentially a legal recourse for minimizing one's Tax liability. It can be defined as a systematic exercise undertaken within the scope of law to minimize one's Tax liability with the optimum use of available exemptions, deductions, reliefs and allowances. Since Tax planning is within the framework of the legal provisions, a Tax payer is legitimately entitled to arrange his affairs in a manner so as to reduce his Tax liability to the minimum. Further, this position has been time and again upheld by the Courts through various judicial precedents.

However, it is pertinent to note that under the pretext of Tax planning, a Tax payer cannot indulge in 'Tax avoidance' or 'Tax evasion' as the line between the two is extremely fine. While the result of both is same (i.e. minimizing Tax outgo) in case of Tax evasion or Tax avoidance the transactions are arranged in a manner so as to circumvent the provisions of law with the mala fide intention of not paying Taxes. Tax evasion or Tax avoidance means illegally avoiding paying Taxes through fraudulent techniques to circumvent the Tax laws – wilful under reporting of income or inaccurate claim of deduction would be an example of Tax evasion. Such Tax evasion measures are not permissible by law and invite penal consequences.

Thus, advisors need to be cautious at the time of devising Tax planning measures for their clients. While necessary strategies need to be undertaken to ensure that the client does not miss out on any legitimate claim, simultaneously precaution should be observed so that the planning measures are not construed as Tax evasion or Tax avoidance.

BASIC CONCEPTS

The basic chargeability of Income-tax can be understood as:

Any person whose total income for the previous year exceeds the basic amount not chargeable to tax is an Assessee and is liable to tax at the rates of Income-tax in force for the Assessment Year. The scope of total income is determined on the basis of the person's residential status.

As you may observe in the above paragraph, the fundamental meaning of the Income-tax law begins by gaining an understanding of the terms highlighted above.

Person [Section 2(31)]

Under the Income Tax Act (ITA), a person is understood as a unit liable to pay taxes and includes the following:

i. an individual,
ii. a Hindu undivided family,
iii. a company,
iv. a firm,
v. an association of persons or a body of individuals, whether incorporated or not,
vi. a local authority, and
vii. every artificial juridical person, not falling within any of the preceding sub-clauses.

[Explanation—For the purposes of this clause, an association of persons or a body of individuals or a local authority or an artificial juridical person shall be deemed to be a person, whether or not such person or body or authority or juridical person was formed or established or incorporated with the object of deriving income, profits or gains.]

Income [Section 2(24)]

Income-tax is levied as a charge on income, so it is equally important to first understand the meaning of income as defined under the Income Tax Act, 1961 (the Act). Here it is of utmost importance to understand the difference between 'receipt of money' and 'income'. All moneys received by an individual may not be income but every income received is definitely a receipt of money.

Income has been inclusively defined under section 2(24) of the Act to mean and include the following among others:

i. Profits and gains;
ii. Dividends;
iii. Value of any perquisites or benefits received by an employee;
iv. Value of any perquisites or benefits received from any business or profession;
v. Capital gains;
vi. Prize money from lotteries, crossword puzzles, card games, TV shows, races including horse races, etc.

Income may be in cash or kind, and illegal income is also taxable. Income earned by a person should be real, in other words, a person cannot make profit out of its own self by transferring money from one bank account to another.

All incomes earned by a person need not be taxable. Therefore, if a receipt of money qualifies as income, the next step is to ascertain whether the income is taxable or not.

Total income means the sum total of the taxable income computed in the manner laid down under the Act. The total income is characterized under five different heads of income, which is discussed in detail later in this book.

Previous Year [Section 3]

Previous year has been defined to mean the financial year immediately preceding the Assessment year. The previous year can also be understood as the year in which the income is earned by a person. For instance, the period from April 1, 2010 to March 31, 2011 will be referred to as the previous year. All the income earned during this period shall be clubbed at the end of the year and offered to tax as income from the previous year 2010-11.

Basic amount not chargeable to tax

The prescribed level of income, up to which, a person need not pay any taxes is referred to as the basic amount not chargeable to tax. The basic amount of income not chargeable to tax for the previous year 2010-2011 is discussed under the 'rates of tax'.

Assessee [Section 2(7)]

Assessee means a person by whom any tax or any other sum of money is payable under the Act. The term also includes every person in respect of whom any proceeding under this Act has been taken for the assessment of his income. In other words, every person who earns taxable income and is liable to pay taxes is called as an Assessee.

Rates of Income-tax

TAX RATES FOR ASSESSMENT YEAR 2011-12

Individuals/ Hindu Undivided Family/
Association of persons (AOP)/Body of Individuals (BOI)

Income (Rs.)	*Rate of Tax*
Up to 1,60,000	Nil
1,60,001-5,00,000	10%
5,00,001- 8,00,000	20%
8,00,001 and above	30%

For Resident Women (Below 65 yrs of age)

Income (Rs.)	*Rate of Tax*
Up to 1,90,000	Nil
1,90,001-5,00,000	10%
5,00,001- 8,00,000	20%
8,00,001 and above	30%

For resident Senior Citizen (Above 65 yrs of age)

Income (Rs.)	*Rate of Tax*
Up to 2,40,000	Nil
2,40,001-5,00,000	10%
5,00,001- 8,00,000	20%
8,00,001 and above	30%

For Firms/ Company

		Rate of Tax
Particulars	*Income < 1,00,00,000*	*Income > 1,00,00,000*
Firm	30%	30%
Domestic Company	30%	30%

Assessment year [Section 2(9)]

Assessment year means the period of 12 months commencing on the first day of April every year. All the income earned by persons during the previous year is assessed in the assessment year and the taxes on the same are paid during the assessment year itself. For instance, the period from

April 1, 2011 to March 31, 2012 shall be the assessment year for the previous year 2010-2011.

RESIDENTIAL STATUS & SCOPE OF INCOME

Scope of total income

The scope of the total taxable income for a person for a previous year is dependent on his residential status – which may be (a) resident, (b) resident but not ordinarily resident, and (c) non-resident.

A resident's total income comprises all his income accrued/ received or deemed to accrue/ received within and outside India. In simpler words, a resident's global income is taxable in India.

A non-resident's total income comprises only that income which has accrued/received or is deemed to have been accrued/received in India. In other words, a non-resident shall not be liable to pay tax in India for any income accruing or arising outside India.

The total income of a resident but not ordinarily resident is the same as that of a non-resident but with an exception. His/ her foreign income shall be taxable in India if it accrues or arises to him outside India from a business controlled in or a profession set up in India. In other words, if the foreign income is from a business controlled in or a profession set up outside India and such income accrues and is received outside India, it will not be taxable for a resident but not ordinarily resident.

Residential status

Residential status is the principal factor on which the tax liability for an assessee is determined. The rules for determining the residential status for the different categories of persons are different. The foregoing paragraphs emphasize on the rules for calculating the residential status of an individual. Please note that the residential status is determined separately for each year and thus an individual may have different residential status in different years.

An individual may be either resident or a non-resident. An individual will be resident in any previous year, if he satisfies at least one of the following basic conditions:

i. He is in India during the previous year for a period of 182 days or more; or
ii. He is in India during the previous year for a period of 60 days or more and has been in India for 365 days or more days during the four years immediately preceding the previous year.

Exception:

However, if the individual is an Indian citizen and leaves India in any previous year as a member of the crew of an Indian ship or for the purpose of employment, he will have to stay in India for at least 182 days (and not 60 days as in condition (ii)) to qualify as a resident.

[2] A person will be deemed to be of an Indian origin, if he or either of his parents or any of his grandparents was born in undivided India.

Similarly, if any Indian citizen or a person of Indian origin[2] who is living outside India and comes on a visit to India in the previous year, he will have to stay in India for 182 days (and not 60 days as in condition (ii)) to qualify as a resident.

If an individual doesn't satisfy any of the two conditions as specified above, he shall be treated as a 'Non-resident'.

A resident could further be categorized as a 'Resident and ordinarily resident' or a 'Resident but not ordinarily resident'. A resident individual shall be a resident and ordinarily resident if he satisfies the following two additional conditions:

i. He has been a resident in India for at least 2 out of 10 previous years immediately preceding the relevant previous year; and
ii. He has been in India for a period of 730 days or more during 7 years immediately preceding the relevant previous year.

If any one of the above 2 additional conditions are not satisfied, then the individual shall be a resident but not ordinarily resident.

Exempt Income

The ITA has enumerated a list of incomes under section 10 which are totally exempt from tax. In other words, these incomes do not get added to a person's total income. The foregoing paragraphs lists out some of the most common incomes which have been exempted from tax under section 10 of the Act.

Agricultural income [Section 10(1A)]

Agricultural income means:

a. Any income derived from an agricultural land which is situated in India and used for agricultural purposes;
b. Any income derived from agricultural operations including processing of the agricultural produce;
c. Any income from farmhouse.

However in case of individuals having net agricultural income exceeding Rs. 5,000 and non-agricultural income exceeding the basic amount not chargeable to Tax, will have to follow the prescribed procedure for the partial integration of agricultural income and pay the incremental Taxes on the same accordingly.

Partner's share of profit from a firm [Section 10(2A)]

A partner's share of profit in the income of a partnership firm will be exempt.

Leave Travel Concession [Section 10(5)]
Any concession or assistance received by an individual (and his family) from his employer for proceeding on leave to any place in India is exempt subject to the prescribed conditions. Similarly, any concession or assistance received by an individual (and his family) from his employer for proceeding to any place in India after retirement from service or on termination from service shall also be exempt (subject to the prescribed limits) under this section.

Gratuity, Pension, Encashment of Leave Salary, Retrenchment Compensation and Voluntary Retirement Compensation

All of the above constitute the retirement dues receivable by an employee at the time of retirement or resignation. Any amount received under these headings would be exempt subject to the prescribed limits. The Taxable amount shall be taxed under the head “Income from Salaries”. The employee is also eligible to claim relief under section 89(1) for these benefits.

Amount received under a Life Insurance Policy [Section 10(10D)]
Any sum received under a life insurance policy, including the bonus, will be exempt.

Income of minor child [Section 10(32)]
Any income of a minor child that is clubbed with the income of parent is eligible for an exemption of the actual amount or Rs. 1,500, whichever is less, in respect of each child.

Company and Mutual Fund dividends
Any income by way of dividends declared and paid by a company (on which the Dividend Distribution Taxes under section 115-O of the Act has been paid) and dividends paid by Mutual Funds (on which the Dividend Distribution Taxes under section 115-O of the Act has been paid) are exempt in the hands of the share/ unit holders.

Long-term capital gains [Section 10(38)]
Any long-term capital gains arising from the sale of equity shares or from the redemption of units of equity-oriented mutual funds[3] shall be exempt if:

i. the shares are sold through a recognized stock exchange after October 1, 2004; and
ii. the applicable Security Transaction Tax has been paid on the same.

[3] An equity-oriented mutual fund means a fund where the investible funds are invested by way of equity shares in domestic companies at least to the extent of 65%.

Reverse Mortgage scheme [Section 10(43)]
Any amount received by an individual as a loan, either in lump sum or in instalments, in a reverse mortgage transaction shall be exempt.

Computation of Total Income

Any income that is taxable has to be categorized into any one of the five heads of income that have been notified by the ITA. For all purposes of computing the total income or calculating the Income-tax, income shall be classified under the following heads of income:
1. Salaries;
2. Income from House Property;
3. Profits and gains of business or profession;
4. Capital gains;
5. Income from other sources.

INCOME-TAX UNDER THE HEAD SALARIES

"Employer-Employee" relationship is a must before charging any income under the head "Salaries". In the absence of this relationship, the income can never be characterized as salary. For instance, a partner in a partnership firm is not an employee of the firm, so the salary paid to a partner is not accounted for under the head Salaries. Similarly, a college teacher doing assessment of papers for the University is not an employee of the University. So any honorarium paid to her by the University is not salary.

Chargeability

Any salary due to an employee, whether paid to him during that previous year or not, shall be chargeable to Income-tax for that previous year. Similarly, if any advance salary is paid to an employee, the same shall be chargeable to tax in the year of payment, even if the same has not become due to the employee. Thus, salary is taxed on due or receipt basis, whichever is earlier.

The term salary has been defined to include:
a. Wages;
b. Annuity/ pension (received from former employers);
c. Gratuity (to the extent it is not exempt u/s 10);
d. Other retirement benefits like leave encashment to the extent it is not exempt u/s 10;
e. Fees, commissions, perquisites or profits in lieu of salary;
f. Advance salary;
g. Allowances

Allowances

An allowance is payment made to an employee in addition to salary to meet specific expenses related to the performance of duties. The common allowances that are offered to employees in their salary structure are House Rent Allowances, Children Education Allowance, entertainment allowance, transport allowance, telephone allowance, medical allowance, dearness allowance, overtime allowance, special allowance, etc.

Tax treatment of allowances

The allowances would be fully taxable, exempt to the extent amount spent by the employee or exempt to the extent notified by the ITA.

Medical allowance, Overtime allowance, special allowances are examples of allowances which are fully taxable.

Uniform allowance, helper allowance, conveyance allowances are examples of allowances which are exempt to the extent of amount received by the employee and the amount spent for the specified purposes, whichever is lower.

Children Education Allowance, Transport allowances are examples of allowances which are exempt to the extent of amount received by the employee and the amount notified by the Act, whichever is lower. In this regard it may be noted that Children Education Allowance is exempt to the extent Rs.100 p.m. per child up to 2 children while Transport Allowance is exempt to the extent of Rs. 800 p.m.

House Rent Allowance (HRA)

Being the most common allowance claimed by employees, merits a brief explanation for the calculation of exemption here. The HRA received by the employee from the employer is exempt subject to limits prescribed under Rule 2A of the Income Tax Rules. According to this rule the lower of the following three parameters will be exempt from Tax and the balance will be Taxable as salary:

a. Actual amount of HRA received;
b. Amount equal to 50% of salary for the relevant period, in case the rented house is situated in the four metro cities – Mumbai, Delhi, Kolkata and Chennai, and 40% of salary if the house is situated in any other cities;
c. Rent paid in excess of 10% of salary for the relevant period.

Salary for this purpose means basic salary and dearness allowance; to the extent it forms part of salary for the purpose of retirement benefits. All other allowances and perquisites will be excluded.

However, it may be noted that HRA exemption is not available in case the residential accommodation is owned by the employee or in case he is not incurring any expenditure on rental payment.

Perquisites

Perquisites have been defined to mean and include any benefits, amenities, services or facilities granted to employees over and above the salary. It basically is a personal advantage to employees.

Taxable Perquisites

Section 17(2) of the Act includes the following benefits granted to employees as perquisites:

i. Value of rent-free accommodation provided to the employee by his employer;
ii. Value of any concession in the matter of rent in respect of any accommodation provided to the employee by his employer;
iii. Value of any benefit or amenity granted or provided free of cost or at concessional rate to any of the following employees:
a. To a director;
b. To a employee being a person who has substantial interest in the company (a person having more than 20% beneficial ownership of shares in a company or more than 20% share in profits in entities other than companies);
c. To an employee (not covered under 'a.' and 'b.' above) and whose income under the head "Salaries", excluding the value of all benefits or amenities not provided for by way of monetary payment, exceeds Rs. 50,000.
iv. Any obligations of the employees being met by the employer;
v. Any sum payable by the employer, whether directly or through a fund, other than a recognized provident fund or an approved superannuation fund or a Deposit-linked Insurance Fund established under section 3G of the Coal Mines Provident Fund and Miscellaneous Provisions Act, 1948, or, as the case may be, section 6C of the Employees' Provident Funds and Miscellaneous Provisions Act, 1952, to effect an assurance on the life of the assessee or to effect a contract for an annuity;
vi. the value of any specified security or sweat equity shares allotted or transferred, directly or indirectly, by the employer, or former employer, free of cost or at concessional rate to the assessee;

vii. the amount of any contribution to an approved superannuation fund by the employer in respect of the assessee, to the extent it exceeds one lakh rupees;
viii. value of any other fringe benefits.

Tax-free perquisites

Some of the Tax-free perquisites as provided in the Act are given below for a ready reference:

i. value of any medical facility provided to the employee or any member of his family in a hospital, clinic, dispensary or nursing home maintained by the employer;
ii. medical expenses reimbursed by the employer for any expenditure on medical treatment of employee or any member of his family in any private hospital , clinic, nursing homes, etc up to Rs. 15,000 per annum;
iii. Tea, snacks and other refreshments provided by the employer during office hours will be exempt;
iv. Non-transferable meal vouchers which is usable at eating joints and where the value of each voucher is up to Rs. 50 per meal;
v. Interest-free or concessional loans to employees up to Rs. 20,000;
vi. Expenditure on telephones, including mobile phones, incurred by employers on behalf of employees.

Provident Fund

A Provident Fund scheme is intended to provide long-term benefits for employees, particularly for their retirement kitty. This fund is credited by an amount deducted from the employee’s salary every month at pre-specified rate. Statutory provisions make it compulsory for the employers to also make contributions towards the employees provident fund account. These funds earn interest at statutory rates, which are declared every year by the Government.

The salient features of the various Provident Fund Accounts are given in the table on the next page:

ITEM	Statutory Provident Fund	Recognised provident Fund	Unrecog-nised provi-dent fund	Public Provident fund
1	**2**	**3**	**4**	**5**
Employer's contribution to provident fund	Not treated as income of the year in which contribution is made	Not treated as "Income" up to 12 percent of salary. Excess of employ-er's contribution over 12 percent of salary is taxable.	Not treated as "Income" of the year in which contribution is made.	Employer does not contribute.
Deduction under sec-tion 80C on employee's contribution	Available	Available	Not Available	Available
Interest credited to provident fund	Not treated as income of the year in which interest is credited	Not treated as "Income" if rate of interest does not exceed the notified rate of interest (i.e. 9.5%), excess of interest over the notified rate is however, taxable.	Not treated as income of the year in which interest is credited. The total amount of interest on em-ployee's contri-bution is Taxable under the head "Income from Other Sources"	Exempt from tax.
Payment of accumulated amount at the time of retirement or termination of service.	Exempt from tax	Exempt from tax subject to the limits discussed above	The amount received to the extent of the employer's con-tribution and interest thereon is taxable.	Exempt from tax.

Public Provident Fund (PPF) is the only provident fund account referred above that is available for assesses in employment as well as self-employment. The Taxability of the same has been referred to provide a comparative view of the different provident funds.

Income from House Property

"Income from House Property" is the second head of income as laid down under the scheme of taxation. The ownership of the property may be direct or even deemed (as per the prescribed provisions). Computation of income from house property involves determining the annual value of the property under different scenarios, deductions available from the annual value and some relevant provisions.

Chargeability

Any income earned by a person from properties owned by him/ her would be Taxed under this head. The three most important conditions that are to be fulfilled for charging income under this head are:

i. The person should own the property;
ii. The property should not be used for the purposes of business by the person;
iii. The property should consist of both land and buildings.

In other words, if a person earns any income from a plot of land, whether vacant or not, such income cannot be counted under this head of income.

Taxability of income in whose hands

The income is always taxable in the hands of the owner/ deemed owner of the property. The income is chargeable in the hands of a person, even if he is not the registered owner of the property. Transfer of property to one's spouse or minor children (except in prescribed circumstances) without adequate consideration is one example where the transferor is deemed to be the owner of such property for calculating income under house property.

Computing income

The annual value of the property is the most important factor for calculating the income under this head. Annual value begins by calculating the Gross Annual Value (GAV) of the property. For determining the GAV, the higher of the following values will be considered:

a. The sum for which the property might reasonably expect to be let out from year to year based on higher of municipal valuation and fair rent;
b. In case the property is subject to the Rent Control Act, then the value, determined as above, cannot exceed the Standard Rent as set by this Act;
c. Where the property is let out and the rent received or receivable is more than the amount determined in 'a.' or 'b.' above, then the annual value would be the actual rent received;
d. In case of a let out property, if there is any portion of rent that has remained unrealized, the same will be deductible from the actual rent subject to fulfillment of prescribed conditions

e. If an individual is in occupation of a house for the purposes of his residence, the annual value of the property shall be considered to be nil (provided he does not derive any other benefit from the property). Such a property is also called as 'Self Occupied Property';
f. If the individual has more than one house for the purposes of his residence, the annual value of any one of such houses, at his option, would be considered nil. Notional income of the other residential house would be liable to tax.

Determination of the Net Annual Value

The following amounts are required to be reduced while determining the Net Annual Value:

a. Municipal Taxes – Taxes levied by the local authorities, only if they are actually paid by the owner during the relevant previous year. Taxes, if paid, by the tenant will not be allowed as a deduction for the property owner;
b. Unrealized rent – in case of a let-out property, where any rent is unrealized during the year, the same can be deducted from the GAV, provided the prescribed conditions are satisfied by the defaulting tenant.

Deductions from Net Annual Value

a. For let-out properties

In case of let out properties, 30% of the Net Annual Value (also known as Standard Deduction) and the interest paid/ payable for the acquisition / construction of the property

b. For self-occupied properties

Interest paid/ payable for the acquisition/ construction of the property is the only deduction permissible for this category of properties. The Act has laid down the limits for this deduction as follows:

i. If the property is acquired prior to April 1, 1999, - Rs. 30,000
ii. If the property is acquired after 1 April 1999 – Rs. 150,000 provided the acquisition/ construction is completed within three years from the end of the financial year in which the capital is borrowed

In cases where the property is acquired/ constructed using borrowed funds, the interest payable/ paid up to the period prior to the previous year in which the property is acquired or constructed would be allowed in five equal instalments starting from the year in which the property is acquired/ constructed (also known as ‘Pre-construction Period Interest’)

The deductions, as listed above, are the only deductions permissible under this head of income.

Income from Business/ Profession

“Income from Business and Profession” is the third head of income when arranged chronologically as per the sections. The income offered under this head of income is not the gross income earned from business or profession, but the profits (losses) computed by deducting the eligible expenses.

Chargeability

The profits and gains of any business or profession carried on by an individual at any time during the previous year shall be chargeable under this head of income. The value of any benefits or perquisites arising from the business or exercise of a profession shall also be chargeable here. The scope of income under this head also covers any interest, salary, bonus, commission or remuneration due to or received by a partner of a firm.

Computation of Income

Profits and gains under this head are computed by deducting the admissible expenses from the gross sale (in case of a business) and receipts (in case of a profession). Expenses under the Act are broadly classified as follows:

i. Expenses that are expressly deductible;
ii. Expenses that are generally deductible; and
iii. Expenses that are expressly disallowed.

All the expenses which are incurred wholly and exclusively for the purposes of the business/ profession carried on during the previous year are generally allowed to be deducted while calculating the profits of the business.

Some of the expenses that are expressly allowed as deductions are as follows:
i. Rent, rates and Taxes, repairs and insurance for building, plant and machinery, furniture;
ii. Insurance premiums paid against risk of damage or destruction of stocks used for the business;

iii. Bonus or commission paid to employees;
iv. Interest paid on borrowed capital;
v. Depreciation

Depreciation

Depreciation, which is understood as measure of loss in value of an asset used in business/ profession arising from use or even obsolescence, is allowed as a deduction while computing the profits of the business. The depreciation is allowed at specified rates on specified assets which are owned (fully or partly) by the assessee and used for the purpose of business/ profession carried on by the assessee.

The assets specified by the Act are Plant and Machinery, Buildings, Furniture (including electrical fittings) and Intangible assets. All the assets used in the business will have to be grouped under any of these categories of assets to be eligible for depreciation.

Depreciation is allowed on assets using the Written down Value method on “block of assets”. A “Block of assets” means a group of assets falling within a class of assets comprising –

a. Tangible assets, being buildings, machinery, plant or furniture;
b. Intangible assets, being goodwill, trade-marks, patents, etc.

In respect of which the same percentage of depreciation in prescribed.
Depreciation provisions are applicable even if the assessee has not claimed depreciation in the computation of his income.

Some of the expenses that are generally allowed as deductions are:

i. Printing & stationery expenses;
ii. Legal expenses relating to the business/ profession;
iii. Expenditure in relation to staff welfare.

Expenses not deductible

i. Income Taxes paid on profits or gains of any business or profession;
ii. Wealth Taxes paid;
iii. Any payment or payments made towards any expenditure, exceeding Rs.20,000 in a day, made by any mode other than an account payee cheque or an account payee bank draft;
iv. Payment of interest on capital to partners in a partnership firm in excess of 12% p.a.;

v. Payment of salary, bonus, commission or any other form of remuneration paid to partners in a partnership firm in excess of the limits specified under section 40(b) of the Act.

These are just some of the expenses that are not deductible in the computation of profits and gains.

Books of Accounts

Every person carrying on legal, medical, engineering or architectural profession, accountancy or technical consultancy or interior decoration or any other specified professions shall keep and maintain such books of accounts and other documents so as to enable the assessing officer to compute his/her income as per the provisions of this Act.

Audit

The following persons are required to get their accounts compulsorily audited by a chartered accountant and obtain the Tax audit report in the prescribed form before the due date of filing the tax returns:

i. A person carrying on business, if the total sales, turnover or gross receipt in business for the accounting year or years relevant to the assessment year exceed or exceeds Rs. 60 lakh.
ii. A person carrying on profession, if his gross receipts in profession for an accounting year or years relevant to any of the assessment year exceeds Rs. 15 lakh.

The object of audit is to assist the Assessing Officer in computing the total income in accordance with different provisions of the Act, and therefore the audit needs to be undertaken even if the income of a person is below the taxable limit.

Capital Gains

"Capital gains" is the fourth head of income when arranged chronologically as per the sections. The income offered under this head of income represents the capital profits earned by an assessee on transfer of assets.

Chargeability

Profits or gains arising from the transfer of a capital asset is chargeable to tax in the year in which transfer take place under the head "Capital Gains". The Act defines the following concepts as follows:

Transfer (section 2(47)): Transfer in relation to a capital asset includes the following:

- sale;
- exchange;
- relinquishment of the asset;
- extinguishment of any rights in the asset;
- compulsory acquisition of an asset under any law;
- conversion of the asset into stock-in-trade of a business;
- maturity or redemption of a zero coupon bond.

However the following modes are specifically excluded from the definition of transfer:

- Gift;
- Distribution of capital assets on partition of a HUF;
- Transfer under a will or an irrevocable trust;
- Conversion of bonds / debentures/ deposit certificates of a company into shares.

Capital Asset (section 2(14)): Capital Asset means property of any kind - fixed, circulating, movable, immovable, tangible or intangible - whether or not connected with his business or profession.

Exclusions —

- Stock-in- trade, raw materials, consumables stores held for business purposes;
- Personal effects of the assessee (excluding jewellery, archaeological col lections, paintings, sculptures, etc.);
- Agricultural land in a rural area;
- 6½% Gold Bonds 1977 or 7% Gold Bonds 1980 or National Defence Bonds 1980 issued by the Central Government;
- Special Bearer Bonds 1991 issued by the Central Government;
- Gold Deposit Bonds issued under Gold Deposit Scheme 1999.

Based on the period of holding, capital assets are classified as:

i. *Short-term capital asset (section 2(42A))* means a capital asset held by an assessee for not more than 36 months (i.e. 36 months or less) immediately preceding the date of its transfer. However, in case of the following assets, the aforesaid threshold is reduced to 12 months:
    - Quoted or unquoted equity or preference shares in a company;
    - Quoted Securities;
    - Quoted or unquoted Units of UTI;
    - Quoted or unquoted Units of Mutual Funds;
    - Quoted or unquoted zero coupon bonds.

ii. *Long-term capital asset: (section 2(29))* means a capital asset which is not a short-term capital asset

Capital gains are generally charged to Tax in the year in which the 'transfer' takes place, exceptions being—

a. Insurance Claim — in the year of receipt.
b. Conversion of capital asset into Stock-in-trade — in the year of actual sale of the stock.
c. Compulsory acquisition — when consideration or part thereof is first received.

Computation of capital gains

The method of computation depends on the nature of capital asset transferred, as summarized below:

Short-term Capital Gain	**Long-term Capital Gain**
(A) Find out Full Value of Consideration	(A) Find out Full Value of Consideration
(B) Deduct (i) Expenditure incurred wholly and exclusively in connection with such Transfer. (ii) Cost of Acquisition (iii) Cost of Improvement (iv) Exemption u/s 54B, 54D,	(B) Deduct (i) Expenditure incurred wholly and exclusively in connection with such Transfer. (ii) Indexed Cost of Acquisition (iii) Indexed Cost of Improvement (iv) Exemption u/s 54, 54B, 54D, 54EC, 54F
(C) (A-B) is short-term capital gain	(C) (A-B) is a long-term capital gain

Full value of consideration represents the gross consideration receivable in respect the asset. However in case of the transfer of land or building or both the full value of consideration shall be the higher of:

a. Full value of the consideration received or accruing
b. Value adopted or assessed or assessable by any authority of a State Government for the purpose of payment of stamp duty in respect of such transfer.

Cost of acquisition represents the cost incurred by the transferor for acquiring the asset in question. However, in case the asset being transferred became the property of the assessee by way of distribution on partition of a HUF or gift or under a will, the cost of acquisition in the hands of the assessee would be the cost of acquisition of the previous owner.

Cost of improvement represents the capital expenditure incurred by the assessee in making any additions or alterations to the capital asset.

$$\text{Indexed Cost of acquisition} = \frac{\text{Cost of acquisition or FMV on 1/4/81 [4]*Cost inflation index (CII) for year of transfer}}{\text{CII for the year of acquisition by assessee or 1981-82, whichever is later}}$$

Indexed cost of improvement can be arrived at using the same formula by substituting the denominator with the CII for the year of improvement.

However, indexation benefit is not available in case of Bonds, Debentures, and depreciable assets. Further, non residents are not entitled to avail of this benefit.

Cost inflation Index

1981-82	100	1991-92	199	2001-02	426
1982-83	109	1992-93	223	2002-03	447
1983-84	116	1993-94	244	2003-04	463
1984-85	125	1994-95	259	2004-05	480
1985-86	13	1995-96	281	2005-06	497
1986-87	140	1996-97	305	2006-07	519
1987-88	150	1997-98	331	2007-08	551
1988-89	161	1998-99	351	2008-09	582
1989-90	172	1999-00	389	2009-10	632
1990-91	182	2000-01	406		

[4] In case asset is acquired prior to April 1, 1981

CAPITAL GAINS - VARIOUS EXEMPTIONS DETAILS

Particulars	Sec 54	Sec 54B	Sec 54EC	Sec 54F
Kind of asset transferred	House Property used for residential purpose	Land used for agricultural purposes	Any Capital Asset	Any capital asset other than residential house
Eligible Assessee	Individual & HUF	Individual & HUF	All	Individual & HUF
Condition of period of holding original Asset	3 Years	2 Years	1 Year for Shares, Listed Securities, Units of UTI/ Mutual Fund specified u/s 10(23D), Zero coupon bonds. 3 years for any other capital asset	1 Year for Shares, Listed Securities, Units of UTI/ Mutual Fund specified u/s 10(23D), Zero-coupon bonds, 3 years for other capital assets
Exempt Amount	The amount of gain or, the cost of new asset, whichever is less	Lower of the Capital Gain or the Cost of acquisition	Lower of the Capital Gain or the amount invested in the bonds subject to maximum of Rs. 50 lac	Refer Note No. 5
Other requirements	See Notes 1 & 2	Assessee or his parents must have used the land for preceding two years for agricultural purpose.	See Notes 1 and 2. Deduction u/s. 80C not to be granted for the same investment. New Asset must be retained a period of 3 years.	See Notes 2 & 3. Must not own more than 1 residential house other than the new property on the date of transfer of original asset.

Notes

1. *In case a new asset is transferred before 3 years from date of purchase/ construction, the Capital Gains exempted earlier will be chargeable to tax in the year of transfer.*
2. *In order to avail the exemption, gains are to be reinvested, before the due date of filing the return of income. If the amount is not so reinvested, it is to be deposited on or before that date in account of specified bank/institution and it should be utilized within specified time limit for purchase/ construction of New Asset.*

3. *U/s 54F Capital Gains exempted earlier shall be chargeable to tax — if a) If the assessee purchases within 2 years or constructs within 3 years any residential house other than the one in which reinvestment is made & b) If the new asset is transferred within a period of 3 years from the date of its purchase/ construction.*
4. *If cost of new house is more than the net consideration of original asset, the whole of the gains. If cost of specified asset is less than net consideration, the proportionate amount of the gains will be exempt.*

INCOME FROM OTHER SOURCES

This is the residuary head of income and sweeps in, all such taxable income, profits and gains that fall outside the other specific heads viz. Salaries, Income from house property, Profit and Gains of Business or Profession, Capital Gains.

Chargeability & nature of income

Any item of income which is not covered in any of the earlier heads of income is included under this head. The Act enumerates the following types of income which would be chargeable to Tax under this head:

a. Dividends (excluding Dividend income referred to in section 115-O which is exempt);
b. Winning from lotteries, crossword puzzles, races, card games and other games, gambling or betting etc.);
c. Any sum received from employees by way of contribution to any P.F, ESIC or superannuation fund;
d. Any sum received under a Keyman insurance policy including amount allocated by way of bonus on such policy, if not chargeable under the earlier heads;
e. Interest on securities if not chargeable under the head business income;
f. Income from letting of machineries, plants or furniture belonging to assessee, if not chargeable under the head business income;
g. Income from letting of machineries, plants or furniture belonging to assessee and also building, where letting of building is not separable from letting of such machineries etc. then entire income there from, if not chargeable to Tax under the head profit and gains of business and profession;
h. Deemed gifts (discussed separately).

Deemed gifts
In terms of clause (vii) to section 56(2) of the Act, specified gifts received by an individual or HUF is chargeable to Tax, subject to certain exclusions. The deemed gifts covered by the provision are as follows:

- Any sum of money received without consideration from persons in excess of Rs. 50,000 during a given year, the whole of such aggregate sum;
- Any immovable property without consideration the stamp duty value of which exceeds Rs. 50,000, the stamp duty value of such property;
- Any movable property without consideration, the aggregate fair market value of which exceeds, Rs. 50,000, the whole of such fair market value;
- Any movable property for an inadequate consideration, the difference between the fair market value and the consideration, provided the difference is greater than Rs. 50,000;

Property means capital assets of the assessee in the nature of land or building or both, shares & securities, jewellery, bullion, paintings, drawings, archaeological collections, sculptures or any art work.

Exclusions
The above provision would not be applicable to the money or property received:
a. from any relative[5]
b. on the occasion of marriage of the recipient
c. under a will or inheritance
d. in contemplation of death of the payer
e. Amount received from any local authority
f. Amount received from any fund or foundation or university or other educational institution or hospital or other medical institution or any trust or institution
g. Any amount received from any trust or institution

Deductions
Any expenditure (not being in nature of capital expenditure or personal expenditure) laid out or expended wholly and exclusively for the purpose of making or earning income chargeable under the head 'Income from Other Sources', is deductible.

[5] Relative means spouse of the individual, brother or sister of the individual, brother or sister of the spouse of the individual, brother or sister of either of the parents of the individual, any lineal ascendant or descendants of the individual, any lineal ascendants or descendants of the spouse of the individual, and spouse of the persons referred to hereinbefore.

However, in case of income in the nature of winning from lotteries, cross word puzzles, races including horse race and games of any sorts, etc, no deduction are allowed for expenses or allowances incurred in connection with such income. Further, in case of pension received by the family of a deceased employee from the employer the deduction available would be lower of 1/3rd of such pension or Rs.15,000.

CLUBBING OF INCOME

Sometimes an assessee can transfer his property or income to other related people in such a manner so as to keep the Tax liability to minimum or even avoid paying Taxes. Such transfers are nothing but attempts to reduce Tax liability by transferring income or sources of income to people, who are either not paying any Tax currently or are subject to lower Tax rates than the transferor. In order to curb such practices, the Act has included provisions for "clubbing of income". Any income arising to a person out of any money or assets transferred to him/her by any other person without adequate consideration, then such income shall be clubbed and assessed as income in the hands of the transferor.

The various provisions that have been covered in the Act under "Clubbing of Income" have been summarized in the table below:

Section	Nature of Transfer of Income/ Assets	Clubbed in the hands of	Conditions/ Exceptions
64(1)(ii)	Any Salary, Commission, Fees or remuneration paid to spouse from a concern in which an individual has substantial interest	Spouse whose total income (excluding the referred salary income to be clubbed) is greater.	Clubbing provisions not applicable if: Spouse possesses technical or professional qualification; and remuneration is solely attributable to application of that knowledge/ qualification.
64(1)(iv)	Income from assets transferred directly or indirectly to the spouse without adequate consideration.	Individual transferring the asset.	Clubbing not applicable if the assets are transferred: 1. Under an agreement to live apart. 2. Before marriage. 3. Income earned when relation of husband-wife does not exist.

Section	Nature of Transfer of Income/ Assets	Clubbed in the hands of	Conditions/ Exceptions
64(1)(vi)	Income from the assets transferred to son's wife.	Individual transferring the Asset.	Condition: The transfer should be without adequate consideration.
64(1)(vii)	Transfer of assets by an individual to a person for the immediate or deferred benefit of his Spouse	Individual transferring the Asset.	Condition: The transfer should be without adequate consideration.
64(1)(viii)	Transfer of assets by an individual to a person for the immediate or deferred benefit of his Son's wife.	Individual transferring the Asset.	Condition: The transfer should be without adequate consideration.
64(1A)	Income of a minor child	1. If the marriage subsists, in the hands of the parent whose total income is greater; 2. If the marriage does not subsist, in the hands of the person who maintains the minor child. 3. Income once included in the total income of either of parents, it shall continue to be included in the hands of same parent in the subsequent year unless the Assessing Officer is satisfied that it is necessary to do so (after giving that parent opportunity of being heard)	Clubbing not applicable for: 1. Income of a minor child suffering from any specified disability 2. Income on account of manual work done by the minor child. 3. Income on account of any activity involving application of skills, talent or specialized knowledge and experience.
64(2)	Income of HUF from property converted by the individual into HUF property.	Income is included in the hands of individual & not in the hands of HUF.	

SET OFF & CARRY FORWARD OF LOSSES

An assessee may also earn losses during a previous year. The losses that an assessee incurs under any head of income, is allowed to be set off against other incomes under that head of income or even other heads of income, subject to certain exceptions. In case the assessee has inadequate or no profits, against which the losses can be set-off, then the unabsorbed losses may be carried forward to the subsequent years for setting off against the profits in that year.

The scheme of setting off of losses and their carry forward has been covered in the table below:

Losses under the head 'Income from House Property'
These losses can be set-off against income from other house properties as well as income under any other heads in the same year. The losses can be carried forward for a further period of 8 assessment years.

Losses under the head 'Business / Profession'
The losses under this head can be set-off against income from any other businesses under the same head or from income under any other head except for 'Income from Salaries'. The unabsorbed losses can be carried forward for 8 assessment years. Business losses, arising on account of depreciation (also referred to as unabsorbed depreciation) however can be carried forward without any limitation of time.

The Act also makes a distinction between speculative and non-speculative business profits and losses. As per the provisions of the Act, losses arising from speculative businesses can be set-off only against profits arising from speculative businesses and not against any other income. Any unabsorbed speculative losses can be carried forward for a period of 4 assessment years only.

Losses under the head 'Capital Gains'
Any losses arising out of the transfer of short term capital assets can be set-off only against short-term capital gains and long-term capital gains, if any, during the relevant previous year. Long-term capital losses, however, can be set-off against long-term capital gains and not against any short-term capital gains. Any unabsorbed long-term and short-term capital losses can be carried forward for a further period of 8 assessment years.

Any long-term capital losses, arising out of the sale of equity shares, through a recognized stock exchange or from the redemption of units of equity oriented mutual funds cannot be set-off against any capital gains. This rule is an application of a fundamental rule in Income-tax which says that no losses/ expenditure can be claimed in respect of income that is exempt. Section 10(38) of the Act has exempted the long-term capital gains arising in both these occasions exempt.

Losses under the head 'Income from Other Sources'

Any losses arising under this head can be set-off against income under any other head, but any unabsorbed losses are not allowed to be carried forward.

A specific source of income covered under this head – profits/ losses from the activity of owning and maintaining race horses needs a special mention here. Any losses from this activity can be set-off only against the income from the same activity and not against any other income under any other head. The unabsorbed losses from the referred activity can be carried forward for a period of 4 assessment years.

In terms of section 80 of the Act, the unabsorbed losses as discussed above, other than depreciation & house property loss, can be carried forward only if the assessee has filed the return within the time prescribed under section 139(1) of the Act.

Dividend stripping provisions

As per section 94(7) of the Act, if any person;

i. buys units of mutual funds/securities within the period of 3 months prior to record date for dividend; and
ii. transfers/ sells such securities within 3 months of such record date or transfers/sells units within period of 9 months of such record date, then the loss arising to the extent of the amount of dividend received or receivable (which is exempt under the prescribed provisions of the Act) shall be ignored for the computation of his total income.

Bonus Stripping provisions

As per section 94(8) of the Act, if any person;

i. buys units of mutual funds or UTI within the period of 3 months prior to record date for issue of bonus units and receives bonus units on such date
ii. transfers/ sells all or any of the original units within period of 9 months of such record date while continuing to hold all or any of the bonus units.
then the loss arising in respect of such purchase & sale transaction shall be ignored while computing his total income. However loss so ignored shall be deemed to be the cost of purchase or acquisition of such additional units as are held on the date of sale or transfer.

GROSS TOTAL INCOME

The Gross total income (GTI) of an assessee is arrived at by aggregating the income computed under the five heads of income and after giving effect to the provisions of clubbing and set-off (as described above). The GTI plays a very crucial part in the computation of income, as the liability for the assessee to file his/ her return of income is determined on the basis of the GTI. As per the provisions of section 139(1) of the Act, if any individual's GTI exceeds the basic limit not chargeable to tax, he/ she is liable to file the return of income, even if the tax liability is nil.

DEDUCTIONS UNDER Unit VI-A

In computing the total income of an assessee, deductions specified under sections 80C to 80U will be allowed from his Gross Total Income. All the deductions under these sections are grouped under Unit VI-A of the Act. However, the aggregate amount of deductions under this unit shall not, in any case, exceed the gross total income of the assessee.

The deductions under this Unit are allowed for certain specified expenditures & payments made by the assessee during the previous year.

Some of the important deductions are discussed in the foregoing paragraphs:

SECTION 80C	**DEDUCTION IN RESPECT OF LIFE INSURANCE PREMIA, CONTRIBUTIONS TO PROVIDENT FUND, ETC.**
Persons Covered Eligible Amount	***Individual /HUF.*** Any sums paid or deposited in the previous year by the assessee towards any or all of the following is allowed as a deduction under section 80C: 1. **Life Insurance premiums for self**, spouse and any child in case of individual and any member, in case of HUF. 2. Payment towards a **deferred annuity contract** on life of self, spouse and any child in case of individual. 3. Contributions towards **Statutory Provident Fund or Recognized Provident Funds or Approved Superannuation funds;** 4. Contributions to **Public Provident Fund** scheme, 1968, in the name of self, spouse and any child in case of individual and any member in case of HUF. 5. Any sum deposited in a **10 year or 15 year account under the Post Office Savings Bank (CTD) Rules, 1959,** 6. Subscription to the NSC (VIII issue).

7. Subscription to any units of **any Mutual Fund referred u/s. 10(23D) (Equity Linked Saving Schemes).**
8. Contribution by an individual to any **pension fund** set up by any Mutual Fund referred u/s 10(23D).
9. Subscription to any such deposit scheme of **National Housing Bank (NHB)**, or as a contribution to any such pension fund set up by NHB as notified by Central Government.
10. Subscription to **notified deposit schemes** of (a) Public sector company providing long-term finance for purchase/construction of residential houses in India or (b) Any authority constituted in India for the purposes of housing or planning, development or improvement of cities, towns and villages.
11. **Tuition fees** (excluding any payment towards any development fees or donation or payment of similar nature), to any university, college, school or other educational institution situated within India for the purpose of full-time education of any two children of individual.
12. Towards the cost of **purchase or construction of a residential house property** (including the repayment of loans taken from Government, bank, LIC, NHB, specified assessee's employer etc., and also the stamp duty, registration fees and other expenses for transfer of such house property to the assessee). The income from such house property should be chargeable to Tax under the head "Income from house property".
13. Subscription to **equity shares or debentures** forming part of any eligible issue of capital of public company or any public financial institution **approved by Board.**
14. Term Deposit (Fixed Deposit) **for 5 years or more with Scheduled Bank** in accordance with a scheme framed and notified by the Central Government.
15. Subscription to any notified bonds of National Bank for Agriculture and Rural Development (NABARD) (applicable from the assessment year 2008-09).
16. Account under the **Senior Citizen Savings Schemes Rules, 2004.**
17. **Five year term deposit** in an account under the **Post Office Time deposit Rules, 1981.**

Relevant Conditions/ Points

1. **No deduction shall be allowed to assessee in the previous year of happening of following events** (referred henceforth as "such previous year") and the aggregate amount of deductions of income so allowed in respect of the previous years preceding such previous year shall be **deemed to be the income** of the assessee of such previous year and shall be liable to Tax in the assessment year relevant to such previous year; i.e., If the assessee:—
   (a) **Terminates the contract of life insurance**, by notice to that effect

	or if the contract ceases to be in force by reason of failure to pay any premium, by not reviving the contract of insurance, in case of any single premium policy, within 2 years or in any other case before the premiums have been paid for 2 years. (b) **Terminates the participation in any ULIP plan** by notice to that effect or ceases to participate by reason of failure to pay any contribution, by not reviving his participation, before contributions in respect of such participation has been paid for 5 years. (c) **Transfers his house property before the expiry of 5 years** from the end of the financial year in which possession of such property is obtained or receives back, whether by way of refund or otherwise any sum specified in that clause. (d) **Sales or transfers any equity shares or debentures** to any person at any time within a period of 3 years from the date of their acquisition (i.e., date on which assessee's name is entered in the register of members or debenture holders). (e) **Withdraw any amount from the bank deposit or the Post Office deposits before the expiry of the period of five years from the date of deposit** 2. Any sum paid or deposited as above need not be out of current year's income but should not exceed the total income of the relevant previous year.
Extent of Deduction	100% of the amount invested or Rs. 1,00,000/- whichever is less. However, as per Section 80CCE, the total deduction the assessee can claim u/ss. 80C, 80CCC and 80CCD shall be restricted in aggregate to Rs. 1,00,000/-.
SECTION 80CCC	**DEDUCTION IN RESPECT OF CONTRIBUTION TO CERTAIN Pension Funds**
Persons Covered	***Individual.***
Eligible Amount	Deposit or payment made to LIC or any other insurer in the approved annuity plan for receiving pension.
Extent of Deduction	Least of amount paid or Rs. 1,00,000/- . Refer Note on extent of deduction in Section 80C.
SECTION 80CCD	**DEDUCTION IN RESPECT OF CONTRIBUTION TO PENSION SCHEME OF CENTRAL GOVERNMENT**

Persons Covered	Individual in the employment of Central Government or any other employer on or after 1-1-2004 or any other assessee being an individual.
Eligible Amount	Deposit or payment made by the employee and Central Government or individual under a pension scheme notified by the Central Government.
Extent of Deduction	A) Aggregate of (a) Amount paid or deposited by the employee and (b) Amount paid or deposited by the Central Government. The total deduction shall be restricted to maximum 10% of salary. B) Amount deposited by individual, subject to 10% of total income, in a previous year
SECTION 80D	**DEDUCTION IN RESPECT OF MEDICAL INSURANCE PREMIA**
Persons Covered	***Individual/ HUF.***
Eligible Amount	Premium paid on Mediclaim Policy issued by GIC or any other insurer approved by IRDA (Insurance Regulatory and Development Authority). 1. The amount should be paid by any mode other than cash out of Taxable income. 2. (a) Insurance on the health of the self, spouse, parents or children of the assessee in the case of Individual; or (b) Insurance on the health of any member if the assessee is HUF. For Individual
Extent of Deduction	A. For Taxpayer his/her spouse and dependent children: 100% of premium paid subject to ceiling of (a) Rs. 20,000/- in the case of premium paid in respect of senior citizen (who has attained the age of 65 years or more) and (b) Rs. 15,000/- in other cases. B. Additional deduction for parents of the Taxpayer whether dependent or not 100% of premium paid subject to ceiling of (a) Rs. 20,000/- in the case of premium paid in respect of senior citizen (who has attained the age of 65 years or more) and (b) Rs. 15,000/- in other cases.
SECTION 80DD	**DEDUCTION IN RESPECT OF MAINTENANCE INCLUDING MEDICAL TREATMENT OF HANDICAPPED DEPENDANT**
Persons Covered	***Resident Individual/ HUF.***
Eligible Amount	(a) Expenditure incurred on medical treatment [including nursing], training and rehabilitation of a disabled dependant, or (b) Any payment or deposit made under a scheme framed by LIC or any other insurer

	or the administrator or the specified company and approved by the Board for payment of lump sum amount or annuity for the benefit of dependant with disability.
Relevant Conditions/ Points	Dependant means (a) in case of an individual, the spouse, children, parents, brothers and sisters of such individual and (b) in the case of a Hindu Undivided Family, any member of HUF; and who is dependant wholly or mainly on such individual or HUF for support and maintenance and who has not claimed deduction under section 80U for the assessment year relating to previous year.
Extent of Deduction	(a) Rs. 50,000/- in case of normal disability or (b) Rs. 75,000/- in case of severe disability. With effect from 1st day of April, 2010 Rs.1,00,000/- shall be substituted in case of severe disability

SECTION 80DDB	**DEDUCTION IN RESPECT OF MEDICAL TREATMENT, ETC.**
Persons Covered	Resident Individual/ HUF.
Eligible Amount	Expenditure actually incurred for the medical treatment of such diseases or ailments specified in Rule 11DD (some of the diseases are Parkinson disease, malignant cancers, full blown AIDS, chronic renal failure, thalassaemia etc.) for self or dependant relative (spouse, children, parents, brothers and sisters) in case of individual or any member of HUF in case of HUF.
Relevant Conditions/ Points	The deduction under this section shall be reduced by the amount received under insurance from an insurer or reimbursed by an employer, for the medical treatment of the concerned person.
Extent of Deduction	100% of the expenses incurred subject to ceiling of (a) Rs. 60,000/- in the case of expenses incurred for senior citizen (who has attained the age of 65 years or more) and (b) Rs. 40,000/- in other cases.

SECTION 80E	**DEDUCTION IN RESPECT OF INTEREST ON LOAN TAKEN FOR HIGHER EDUCATION**
Persons Covered	***Individual.***
Eligible Amount	Any amount paid by way of interest on loan taken from any financial institution or any approved charitable institution for his/her higher education or for the purpose of higher education of his/her spouse and children.

Relevant Conditions/ Points	1. Amount should be paid out of income chargeable to tax. 2. Higher education means full time studies for any graduate or post-graduate course in engineering, medicine, management or for post-graduate course in applied sciences or pure sciences including mathematics and statistics. With effect from 1st day of April, 2010 Higher education shall be substituted as any course of study pursued after passing the Senior secondary examination or its equivalent from any school, board or university recognized by the central govt. or state govt. or local authority or by any other authority authorized by the central govt. or state govt. or local authority to do so. 3. The deduction is allowed in the initial assessment year (i.e., the assessment year relevant to the previous year, in which the assessee starts paying the interest on loan) and 7 assessment years immediately succeeding the initial assessment year or until the interest is paid in full whichever is earlier.
Extent of Deduction	Entire amount of interest.

SECTION 80G	**DEDUCTION IN RESPECT OF DONATIONS TO CERTAIN FUNDS, CHARITABLE INSTITUTIONS, ETC.**
Persons Covered	***All assessee's***
Eligible Amount	Any sums paid in the previous year as Donations to certain funds, charitable institutions etc. specified u/s. 80G(2).
Relevant Conditions/ Points	Donation in kind is not eligible for deduction.
Extent of Deduction	(a) **100% of donation if donation given to** National Defence Fund set up by the Central Government; Prime Minister's National Relief Fund; Prime Minister's Armenia Earthquake Relief Fund; Africa (Public Contributions — India) Fund; National Foundation for Communal Harmony; An approved university/educational institution of National eminence; The Maharashtra Chief Minister's Relief Fund during October 1, 1993 and October 6,1993; Chief Minister's Earthquake Relief Fund, Maharashtra; Any fund set up by the State Government of Gujarat exclusively for providing relief to the victims of earthquake in Gujarat; any Zila Saksharta Samiti constituted in any district under the

chairmanship of the Collector of that district; National Blood Transfusion Council or to any State Blood Transfusion Council; any fund set up by a State Government for the medical relief to the poor; the Army Central Welfare Fund or the Indian Naval Benevolent Fund or the Air Force Central Welfare Fund, Andhra Pradesh Chief Minister's Cyclone Relief Fund, 1996; National Illness Assistance Fund; Chief Minister's Relief Fund or Lieutenant Governor's Relief Fund in respect of any State or Union Territory; National Sports Fund; National Cultural Fund; Fund for Technology Development and Application; National Trust for Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities; Any trust, institution or fund to which Section 80G(5C) applies for providing relief to the victims of earthquake in Gujarat (contribution made during January 26, 2001 and September 30, 2001) or

(b) **50% of donation if donation given to** Jawaharlal Nehru Memorial Fund; Prime Minister's Drought Relief Fund; National Children's Fund; Indira Gandhi Memorial Trust; Rajiv Gandhi Foundation.

With ceiling of 10% of adjusted Gross Total Income [6] :— Where the aggregate of sums exceed 10% of adjusted gross total income, then such excess amount is ignored for computing such aggregate.

(a) **100% of qualifying amount, if donation given to** Government or any approved local authority, institution or association to be utilized for the purpose of promoting family planning; Donation by a Company to the Indian Olympic Association or to any other notified association or institution established in India for the development of infrastructure for sports and games in India or the sponsorship of sports and games in India.

(b) **50% of qualifying amount if donation given to** any other fund or any institution which satisfies conditions mentioned in Section 80G(5); Government or any local authority to be utilized for any charitable purpose other than the purpose of promoting family planning, Any authority constituted in India for the purpose of dealing with and satisfying the need for housing accommodation or for the purpose of planning, development or improvement of cities, towns, villages or both; Any corporation referred in Section 10(26BB) for promoting interest of minority community; For repairs or renovation of any notified temple, mosque, gurudwara, church or other place.

[6] Adjusted GTI means the GTI excluding:

a. All the deductions u/s 80-C to 80-U except donation u/s 80-G;
b. Long-term capital gains;
c. Short-term capital gains which is subject to tax @ 15%

SECTION 80GG	DEDUCTION IN RESPECT OF RENT PAID
Persons Covered	***Any assessee not receiving House Rent Allowance.***
Eligible Amount	Any expenditure incurred by him on payment of rent (by whatever name called) in respect of any furnished or unfurnished accommodation in excess of 10% of his total income, before making any deduction under this section.
Relevant Conditions/ Points	1. Such accommodation is occupied by him for his own residence. 2. This section shall not apply to an assessee if residential accommodation is, (a) owned by the assessee or by his spouse or minor child or where such assessee is member of HUF, by such family, at the place where he ordinarily resides or performs duties of his office or employment or carries on his business or profession. OR (b) owned by the assessee at any other place, being accommodation in the occupation of the assessee
Extent of Deduction	Lower of (a) Rs. 2,000 per month, or (b) 25% of the total income (after allowing all deductions except under this section), or (c) Expenditure incurred in excess of 10% of the total income (after allowing all deductions except under this section).

SECTION 80U	DEDUCTION IN CASE OF A PERSON WITH DISABILITY
Persons Covered	***Individual resident in India.***
Extent of Deduction	(a) Rs. 50,000/- in case of normal disability or (b) Rs. 1,00,000/- in case of severe disability

TAXATION OF NON RESIDENTS

The rules for determining the residential status of an individual has already been discussed in the foregoing paragraphs. Under the current scheme of taxation, non-residents enjoy certain privileges/ concessions in the matter of Taxation under various provisions.

Taxation for non-residents is a very important topic for a financial advisor in this era of globalization. With increasing number of Indians settling abroad for short-term and long-term assignments, understanding non-resident taxation is indispensable.

Exempt income (section 10)

The following incomes are deemed exempt exclusively for a non-resident, in addition to the incomes exempt under section 10 (as elaborated in the earlier sections of this book):

i. Interest earned on NRE accounts [Section 10(4)]
ii. Interest earned on FCNR and RFC deposits paid by a scheduled bank to a non-resident or not-ordinarily resident [Section 10(15)].

Special Tax rates for non-resident Indians (NRIs)

Unit XIIA of the Act covers the Taxability of the any income earned by a Non-resident Indian (NRI) from a foreign exchange asset. For the purposes of this Unit, a NRI is defined as an individual being a citizen of India or a PIO[7] , who is not a 'resident'. A foreign exchange asset means any of the following assets acquired by NRI out of convertible foreign exchange:

i. Shares in an Indian company (public or private);
ii. Debentures issued by an Indian company, which is not a private, company
iii. Deposits with an Indian company, which is not a private company
iv. Any security of the Central Government (NSC VI/VIII issue) (Ref Note)
v. Any other assets as specified by the Central Government (no asset notified till date)

However, a NRI may elect not to be governed by the provision of this unit and to be assessed under the normal provisions of the Act by giving a declaration to that effect along with his return of income. Accordingly, the unit shall not apply to him w. e. f. the said assessment year.

This Unit offers certain sops on the Taxability of investment income (defined as income earned from foreign exchange assets other than exempt company dividends) as follows:

a. Any income from investment or income from long- term capital gains from assets other than specified assets — 20%
b. Income by way of long-term capital gains from specified assets — 10%

If the NRI opts to be governed by these special provisions, then no deduction shall be permissible under Unit VIA for these incomes. The indexation benefits are also not available while computing the capital gains. Any deductions for expenditure in relation to earning these incomes are also not permissible for such NRIs.

[7]**PIO** — a person is deemed to be of Indian origin if he or either of his parents or any of the grandparents was born in undivided India.

Further, it is not necessary to file the India return of income where the total income for the NRI includes only the above two types of income whereon Tax has been duly deducted. However where a NRI has other income; i.e., income other than foreign exchange asset, NRI is required to file his Return of Income and it shall be assessed as per the normal provisions of the Act.

Exemption from Long-term Capital Gains Taxes

Capital gains arising on transfer of foreign exchange asset shall be exempt in case the Net Consideration is reinvested within a period of six months in any other specified asset (as referred above)

However where the new asset is transferred or converted to money within a period of three years from the date of its acquisition, the capital gains claimed exempt as above shall be taxable under the head “Capital Gains” along with the Gains arising on transfer of the new asset purchased.

Applicability of the Special Unit after becoming resident

NRI can continue to be assessed under these special provisions with respect of income from specified assets. A declaration has to be furnished along with his return of income to the Assessing Officer that the provision of this Unit may continue to apply to him with respect to the said investment income. Accordingly, he shall be assessed under the said provision for specified income till the conversion of such asset into money or other asset.

SPECIAL PROVISION FOR CALCULATION OF CAPITAL GAINS OF SHARES & DEBENTURES

The provisions for calculating the capital gains on transfer of shares/ debentures of Indian company (private or public) vary from the normal mode of computation of capital gains. In such cases, capital gains shall be computed by conversion of sales consideration and transfer expenses into the same foreign currency which was utilized for purchase of such shares/ debentures. The capital gain so arrived at is reconverted into Indian rupees as per the rates specified below:

Particulars	***Exchange rate to be applied***
Sales consideration	Average exchange rate on date of transfer
Cost of acquisition	Average exchange rate on date of purchase
Expenditure on sale	Average exchange rate on date of transfer
Capital Gains	Buying rate on date of transfer

The exchange rates to be considered above shall be the telegraphic transfer buying/selling rates as adopted by State Bank of India for purchasing or selling such currency.

RETURN FILING PROCEDURES

Permanent Account Number

In terms of section 139A of the ITA every person whose total income exceeds the basic exemption limit should apply for allotment of a Permanent Account Number (PAN). However, a person whose income is not liable to tax may also apply for a PAN.

PAN represents a unique number containing ten alpha numeric characters issued by the Income-tax department on a laminated card. It is the duty of every assessee to quote the PAN in the Tax returns, challans and all other correspondences with the Income Tax department.

Tax payments

The Tax liability of an assessee for a previous year has to be discharged during the relevant year itself. The ITA provides for the following modes for collection of taxes:

Tax Deducted at Source (TDS)

Certain items of income (namely commission, interest, professional fees, rent, contractors' payments etc.) are liable for Tax deduction at the prescribed rates at the time of payment thereof. In other words, the payers of such amount are responsible for deducting Tax in respect of such payments and deposit the same in the Government treasury while the recipient avails of the credit for the Tax so deducted against his/ her Tax liability.

Advance Tax

Every assessee should compute his/ her estimated Taxable income for the year and discharge the Tax liability thereon (after considering the TDS credit, if any) in specified proportions, by way of advance Tax payable on specified due dates. The due dates for payment of advance Tax in case of non-corporate assessee's are as follows:

Due Date	***Total amount payable***
15 September	At least 30% of the total estimated Tax liability for the year
15 December	At least 60% of the total estimated Tax liability for the year
15 March	Entire Tax liability for the year

Default in payment of advance tax attracts interest liability.

Self-assessment Tax

Where any tax is payable by the assessee on the total taxable income after taking into account the TDS and advance tax, the same has to be paid by way of self-assessment, along with interest, if any.

Return filing procedures

Section 139(1) of the ITA provides that every person shall furnish, on or before the due date, a return of income in the prescribed form and manner. Due date for the purpose of filing the return of income is as follows:

Assessee	*Due date*
Companies	30 September of the assessment year
Non-corporate under audit	30 September of the assessment year
Non-corporate, non-audit	31 July of the assessment year

Thus, for the financial year 2010-11 the due dates would be September 30, 2011 or July 31, 2011, as the case may be.

Belated return

In case the return is not filed within due date, a belated return can be filed at any time before the expiry of 1 year from the end of the relevant assessment year.

Revised return

In case of any error or omission, the assessee is entitled to revise the return, provided the return has been filed within the aforementioned due date.

Signing of return

The relevant provisions in relation to signing of a return are summarized below:

- In case of an individual's return, by the individual himself/ herself; however in case s/he is absent from India, by some person duly authorized in this behalf.
- In case of a HUF, by the karta and in his absence by any other adult member
- In case of a firm, by the managing partner and in his absence by any other partner not being a minor
- In case of a company, by the managing director and in his absence by any other director

8.2 Wealth Tax Act and its implication for clients

Income-tax being a charge on the income earned by an assessee, there also exists a charge on the wealth of a person. Wealth Taxes are governed by the provisions of the Wealth Tax Act, 1957. This Act is also applicable to the whole of India.

CHARGEABILITY

Wealth Tax is charged for every assessment year in respect of net wealth of the corresponding valuation date of every individual, HUF and company, at the rate of 1% on the amount by which the net wealth exceeds Rs. 30,00,000/-.

DEFINITIONS

Net Wealth — The difference between aggregate value of assets and the value of all the debts owed by the assessee on the valuation date which have been incurred in relation to the said assets.

Assets — Section 2(ea) means —

1. House — any building or land appurtenant thereto, whether used for residential or commercial purposes or for the purpose of maintaining a guest house or a farm house in an urban area.
   Exceptions — Houses which are:
   a. Meant exclusively for residential purposes and which is allotted by a company to a whole time employee (including officer or director in whole time employment), having gross annual salary of less than Rs. 5 lac.
   b. Stock-in-trade.
   c. Occupied for business or profession of the assessee.
   d. Residential property and which is let out for a minimum period of 300 days in the previous year.
   e. Commercial establishments or complexes.

2. Motor cars — except those used in the hiring business or as stock-in-trade.
3. Jewellery — except that which is used as stock-in-trade.
4. Yachts, boats and aircrafts — other than those used for commercial purposes.
5. Urban land — any land situated in urban area.

Exceptions —

a. Land on which construction of a building is not permissible under any law.
b. Land occupied by any building which has been constructed with the approval of the appropriate authority.
c. Unused land held for industrial purposes up to 2 years.
d. Land held as stock-in-trade up to 10 years.

6. Cash in hand — for individuals and HUFs, in excess of Rs. 50,000/- and in the case of any other person, any amount not recorded in the books of account.

Valuation date means the last day of the previous year.

CLUBBING OF ASSETS (SECTION 4)

Section 4(1)(a) — Analogous to Section 64 of the IT Act.

i. Assets transferred by the assessee to the spouse otherwise than for adequate consideration Assets transferred in consideration or in connection with agreement to live apart is excluded.
ii. Assets held by minor child other than minor married daughter or child suffering from disability specified under section 80U of the IT Act. Assets acquired by minor child out of income not clubbed under Proviso to Section 64(1A) to be excluded.
iii. Assets transferred to a person or an AOP for the immediate or deferred benefit of the transferor, his or her spouse otherwise than for adequate consideration.
iv. Assets transferred under revocable transfers.
v. Assets transferred to son's wife for inadequate consideration.
vi. Section 4(1)(b) — Partner of a firm or a member of an AOP — Value of interest in the assets of the firm or AOP computed in the manner laid down in Schedule III.
vii. Section 4(1A) — Analogous to Section 64(2) of the I.T. Act — Separate assets converted by a member of an HUF into the property of the HUF.
viii. Section 4(5) — Assets transferred under an irrevocable transfer, would be included when power to revoke arises.
ix. Section 4(6) — Holder of an impartible estate.
x. Section 4(7)/(8) — Analogous to Sections 27(iii)/(iiia) and (iiib) of the I.T. Act — Deemed owner of a house

— Member of a co-operative society, company and AOP.

— Property in possession of a person as referred to in Sec. 53A of Transfer of Property Act, 1882 under part performance.

— Lessee other than month-to-month lessee and as referred to in clause (f) of Section 269UA of the I.T. Act.

EXEMPTIONS IN RESPECT OF ASSETS (SECTION 5)

1. Property held under trust for public purpose or a charitable or religious nature in India.
2. Interest in the Coparcenary property of an HUF of which he is a member.
3. Any one building occupied by a Ruler.
4. Jewellery in possession of a Ruler, recognized as his heirloom.
5. Assets acquired out of the moneys brought in by a non-resident Indian, who has returned to India with an intention to permanently reside in India. The exemption is for 7 successive assessment years.
6. One house or part of a house or a plot of land not exceeding 500 sq. mtrs. belonging to an individual or a Hindu undivided family
7. A plot of land comprising an area of 500 square metres or less.

Valuation of Assets (Section 7)

Value of assets other than Cash shall be as determined in the manner laid down in Schedule III to the Wealth Tax Act.

8.3. Estate Planning

Estate planning is an integral part of the process of financial planning. The concept of estate planning is best understood as a process of making proper arrangement for the Protection, Preservation and Provision of a person's total assets for the benefit of his or her family and loved ones. Estate for the purpose of estate planning can be simplified to mean all the property and the property rights that a person owns.

Estate planning acts as a very important tool for an estate owner in an efficient transfer of wealth across generations. Reduction of Tax liability is not necessarily the primary goal of estate planning, but effective Tax planning is something that the estate owner should consider in order to reduce Tax liabilities on the estate which could take the form of Income Taxes, capital gains Taxes, stamp duties, etc.

Estate Planning & Hindu Succession Act

The estate owner who wishes to pass on his estate to his legal heirs is called as the 'Testator'. If the testator dies without leaving a valid will behind, he/ she is said to have died intestate. The Hindu Succession Act, 1956 (the HS Act) was enacted to reform and codify the Hindu law of intestate succession. The HS Act defines a person to have died intestate in respect of that property of which he or she has not made a testamentary disposition capable of taking effect. Upon interpretation of this definition, it can be interpreted that if a will made by a Hindu is found to be invalid, then such a person is also deemed to have died intestate.

Wills

A will is explained as a legal declaration made in writing by a person who clearly sets out the manner in which he/ she would like his or her property (movable or immovable) wherever situated to be distributed after his death. A will therefore is a document which comes into effect the moment its maker dies. Therefore till the time a will comes into force, it can be cancelled, revoked and varied to suit the maker's circumstances.

The various concepts/ terms that are associated with Wills are explained below:

Codicil is an instrument made in relation to a Will explaining, altering or adding to its dispositions and is deemed to be a part of the will.

Testator is the person who makes the will. Testatrix is used to refer to a female making a will.

Probate is a copy of the will certified under the seal of a component Court.

Beneficiary is a person who inherits the property under a will.

Executor is the legal representative for all purposes of the deceased person and all property under the will vests in him.

Types of Wills

Individual Will – One of the most common and accepted form of will, where the will is individually written.

Holographic will – a will which is wholly in the handwriting of the testator.

Conditional will – a will that is expressed to take effect only in the event of happening of some contingency.

Joint Will – when 2 or more persons make a joint declaration regarding their properties in one document and the document is executed in accordance with the formalities laid down by the law.

Living wills – a written statement made by a person directing the doctor who may be treating him to discontinue treatment if the treatment is only to artificially prolong his life in a terminal illness situation.

Oral wills – wills that are not documented and is made orally. Such wills are mostly prevalent in the defence services.

Mutation

A property when acquired by a person and on becoming the rightful owner of the property should ensure that all the titles of the property are transferred in his name. Mutation refers to a significant alteration or substitution of the name of a person by the name of another in relation to the record showing the right or title to the property. Mutation helps in proper updation of the revenue records to ensure proper collection of revenue from the person who is in possession of the property.

Power of Attorney

A Power of Attorney (POA) is an instrument by which a person may formally authorize another person to act on his behalf or as his agent on all matter or for a specific transaction or particular types of transactions. There are two parties to a POA – Donor and the Donee. Both the parties to the POA should have attained majority, be of sound mind and competent to contract.

Types of POA

i. General POA – Enables the donee to act on all matters for the donor. The general list of matters covered in this category include management of bank accounts, sale of property, attending dealings in court, etc.
ii. Specific POA – restricts the donee's authority to act only on a specific transaction, e.g. POA granted to a person to deal with the renting out of an apartment only.

TRUSTS

A trust is created where the absolute owner of property (known as the Settlor) passes the legal title in that property to a person (the Trustee) to hold on trust for the benefit of another person (the beneficiary) in accordance with the terms set out by the Settlor.

Trusts are often used as vehicles to hold property for present or future needs of dependents and family members, and sometimes also used to reduce the burden of Taxes. Common example of a trust is one that provides for accumulation of income and capital for specified children. Retirement trusts are commonly set up by the employers to provide retirement benefits to employees.

Purposes of a Trust

i. Benefits the settlor – frees the settlor from managing the trust property.
ii. Handle & accumulate wealth – Settlor’s wealth is protected from creditors & does form part of the Settlor’s estate.
iii. Obtain competent professional management of property – Investment of the Trust property is made with expertise resulting in professional management.
iv. After death management – Settlor can specify the conditions & timing of the distributions post his death.
v. Provides skills which the Settlor may not possess – Settlor may lack business acumen to properly handle & invest the trust property; a trust provides a substitute for this vacuum.
vi. Secure property of Beneficiary – Trust vehicle not only ensures protection of the trust property but also helps in smooth transmission of the same to the beneficiaries.

Types of Trusts

Public Charitable or Religious Trusts

Income from these trusts is applied to charitable or religious purposes.

Private trusts

Income from such trusts is available to specified beneficiaries and not the public at large. In some cases, the shares of the individual beneficiaries are fixed according to the provisions of the trust deed. In some others, the trustees have the power to distribute the income among the various beneficiaries in proportions determined entirely at the trustee’s discretion.

Review Questions

Questions to assess your learning:

1. Wealth tax will be levied on which of the following cases?

a) Net Wealth exceeds Rs. 30,00,000
b) Net Wealth exceeds Rs. 15,00,000
c) Net Wealth exceeds Rs. 50,00,000
d) Net Wealth exceeds Rs. 10,00,000

2. A will certified by court is called_______.

a) Codicil
b) Probate
c) Will
d) None of the above

3. Which of the following is taxable under income tax Act 1961?

a) Income in cash
b) Income in kind
c) Illegal Income
d) All of the above

4. Losses from the activity of owning and maintaining race horses can be set off against ______.

a) Income from lotteries
b) Income from the activity of owning and maintaining race horses
c) Income from card games
d) Income from house property

5. Belated return can be submitted __________.

a) till the last day of relevant assessment year
b) within one year from expiry of relevant assessment year
c) within 6 months of due date
d) within 12 months of due date of filing of return

Unit 9: *Need for Regulation*

Learning Goals

Regulatory Environment and Ethical Issues

- Framework of the Regulatory System: Government Regulation, Self Regulation, Interface with the Judicial System
- Role of the Ministry of Finance (MOF); Ministry of Company Affairs (MCA);
- Roles of regulators: SEBI, RBI, IRDA, PFRDA
- Key Acts and Key Acts, Statutes and Regulations of Financial Markets: SEBI Act, IRDA Act, SCRA and SCR Rules, Companies Act, Contract Act, PMLA, FEMA
- Ethical Issues in providing Financial Advice
- Codes of Conduct: SEBI, IRDA, Professional Bodies

Regulatory System and Environment

Regulation of the Securities 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 engage such financial transactions. This implies that the entities issuing securities and units ought to furnish adequate disclosures on all relevant facts and the intermediaries selling/advising/distributing such products execute the financial transactions in the most efficient manner while charging a fair and appropriate cost of transaction.

There are many other issues which warrant regulation. For example, deliberately engineered speculative activities in the stock market or insider trading are undesirable as they can hurt investors at large. Similarly, some mutual funds may take excessive risks, while some issuers of debt securities may not care to provide adequate collateral. There are many instances of unethical activities which can be detrimental to investors in general. These, if allowed to go unchecked, will lead to a drying up of investment activity, which is the lifeblood of capital formation in any economy.

The Central Government has created separate entities to regulate different sectors of the financial system. For instance, the Reserve Bank of India (RBI) regulates commercial banks, the Securities and Exchange Board of India (SEBI) regulates securities markets, the Insurance Regulatory and Development Authority (IRDA) regulates insurance companies, while the Forward Markets Commission (FMC) regulates the commodities futures sector. The Central Government exercises a certain level of oversight on these and other regulatory institutions.

Additionally, intermediaries representing some segment of the Securities Markets may form a Self-Regulatory Organization (SRO). For recognition as an SRO by SEBI, certain conditions have to be met as spelt out under the Securities and Exchange Board of India (Self Regulatory Organizations) Regulations, 2004. Ideally, an SRO will seek to uphold investors' interest by laying and maintaining high ethical and professional standards of conduct and encouraging best practices among its members.

The ruling given by a regulator may be challenged by petitioning the prescribed authority. In the case of SEBI, for example, the appellate authority is the Securities Appellate Tribunal (SAT). Rulings of the SAT can be challenged in the Supreme Court of India. Importantly, no civil court shall entertain any suit or proceeding relating to a matter which an adjudicating officer appointed under the SEBI Act, or under a duly constituted SAT, is empowered under the said Act to decide upon. Further, no injunction can be granted by any court or any other authority with regard to any action taken or to be taken pursuant to any power conferred by the SEBI Act.

Role of Ministry of Finance and its Departments

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. Other responsibilities include the mobilization of external resources and issuance of bank notes and coins.

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:

   (i) Public sector banks.
   (ii) Term-lending financial institutions.
   (iii) Life Insurance and General Insurance.
   (iv) Pension Reforms.

e. **Department of Disinvestment 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.

f. **The Ministry of Corporate Affairs** is mainly concerned with the administration of the Companies Act, 1956 and other allied acts, rules and regulations pertaining to the corporate sector. The Ministry is also responsible for administering the Competition Act 2002 which is to replace the Monopolies and Restrictive Trade Practices Act, 1969. The Ministry also supervises three professional bodies, viz., the Institute of Chartered Accountants of India, the Institute of Company Secretaries of India and the Institute of Cost and Works Accountants of India. The Ministry of Corporate Affairs is also vested with the responsibility of administering the Partnership Act, 1932, hthe Companies (Donations to National Funds) Act, 1951 and Societies Registration Act, 1980.

Role of Regulators

Besides the Ministry of Finance, the financial sector in India is regulated by several regulatory organizations. The Reserve Bank of India (RBI) as the manager of Public debt, is responsible for the primary issue of Government securities, all contracts involving such securities and money market instruments The Securities Exchange Board of India (SEBI), is the apex regulator of the securities market and also responsible for its orderly growth and protection of the investor's interests. Other regulators such as the Insurance Regulatory Development Authority (IRDA) and the Pension Fund Regulatory and Development Authority (PFRDA) have been set up with the specific mandate to regulate the functioning and growth of particular industries.

1. Reserve Bank of India (RBI)

RBI is the central bank of the country and is vested with the responsibility of administering the monetary policy. Therefore, its key concern is to ensure the adequate growth of money supply in the economy so that economic growth and financial transactions are facilitated, but not so rapidly which may precipitate inflationary trends. This is borne out in its Preamble, in which the basic functions of the Bank are thus defined: "…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". In addition to the primary responsibility of administering India's monetary policy, RBI has other onerous responsibilities, such as financial supervision.

RBI's functions are governed by the Reserve Bank of India Act 1934, whereas the financial sector is governed by the Banking Regulation Act 1949. The main functions of RBI are:

1. **As the monetary authority**: to formulate, implement and monitor the monetary policy in a manner as to maintain price stability while ensuring an adequate flow of credit to productive sectors of the economy.

2. **As the regulator and supervisor of the financial system:** To prescribe broad parameters of banking operations within which India's banking and financial system functions. The objective here is to maintain public confidence in the system, protect depositors' interest and facilitate cost-effective banking services to the public.

3. **As the manager of Foreign Exchange:** To administer the Foreign Exchange Management Act 1999, in a manner as to facilitate external trade and payment and promote orderly development and maintenance of the foreign exchange market in India.

4. **As the issuer of currency:** To issue currency and coins and to exchange or destroy the same when not fit for circulation. The objective that guides RBI here is to ensure the circulation of an adequate quantity of currency notes and coins of good quality.

5. **Developmental role:** To perform a wide range of promotional functions to support national objectives.

6. **Banking functions:**
   a) It acts as a banker to the Government and manages issuances of Central and State Government Securities.
   b) It acts as a banker to the banks by maintaining the banking accounts of all scheduled banks.

The general superintendence and direction of RBI's affairs are looked after by a Central Board of Directors (BoD) which is appointed by the Government of India. Further, each of the four regions in the country is served by a Local Board which advises the Central Board on local issues and represents territorial and economic interests of local co-operative and indigenous banks. The Local Boards will also perform other functions as delegated by the Central Board.

RBI performs the important function of financial supervision under the guidance of the Board for Financial Supervision (BFS) which was constituted in 1994 as a committee of the Central Board of Directors. The primary objective of the BFS is to carry out consolidated supervision of the financial sector consisting of commercial banks, financial institutions and non-banking finance companies. The BFS oversees the functioning of the Department of Banking Supervision, the Department of Non-Banking Supervision and Financial Institutions Division and issues directions on regulatory and supervisory issues. Some of the initiatives undertaken by the BFS are:

- A restructuring of the system of bank inspections
- Introduction of offsite surveillance
- Strengthening the role of statutory auditors
- Strengthening the internal defences of supervised institutions

Currently, the BFS is focused on:

- Supervision of financial institutions
- Consolidated accounting
- Legal issues in bank frauds
- Divergence in assessments of non-performing assets
- Supervisory rating model for banks

2. Securities and Exchange Board of India (SEBI)

SEBI was constituted in 1988 and the relevant legislation was enacted in 1992. It was set up to protect the interests of investors in securities by regulating and developing the Securities Market.

Section 11(1) of the SEBI Act, 1992, lays down that subject to the provisions of the SEBI Act, 1992, it shall be the duty of the Board to protect the interests of investors in securities and to promote the development of, and to regulate the securities market, by such measures as it thinks fit. Further, SEBI is also empowered to enforce disclosure of information or to furnish information to agencies as may be deemed necessary.

SEBI regulates mutual funds, depositories, custodians and Registrars & Transfer agents in the country. The applicable guidelines for mutual funds are set out in SEBI (Mutual Funds) Regulations, 1996, as amended till date. Some aspects of these regulations are discussed in various sections of this Workbook. An updated and comprehensive list of circulars issued by SEBI can be found in the Mutual Funds section of SEBI's website www.sebi.gov.in. A useful download is a Master Circular, which captures the essence of various circulars issued up to January 1, 2010.

Some segments of the financial markets have their own independent regulatory bodies. Wherever applicable, mutual funds need to comply with these other regulators also. For instance, RBI regulates the money market and foreign exchange market in the country. Therefore, mutual funds need to comply with RBI's regulations regarding investment in the money market, investments outside the country, investments from people other than Indians resident in India, remittances (inward and outward) of foreign currency etc.

Stock Exchanges are regulated by SEBI. Every stock exchange has its own listing, trading and margining rules. Mutual Funds need to comply with the rules of the exchanges with which they choose to have a business relationship.

The existence of an efficient and stable financial system is essential to make the securities market vibrant, wide reaching and effective. An efficient capital market ensures that resources are priced and allocated correctly in an economy. Institutions and mechanisms that enable this must be supported by regulatory structures that will streamline and enable the proper functioning of the securities markets. The purpose of securities regulation should be to develop markets that are fair, transparent and efficient, and ensure protection of the investor's interests.

SEBI's Role

The preamble of SEBI provides 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." The objective of SEBI is therefore to facilitate the growth and development of the capital markets in terms of mechanisms, participants and securities and to ensure the protection of the investors in the securities market.

The SEBI Act entrusts the responsibility of inspection, investigation and enforcement of the activities, systems and mechanisms of the institutions and intermediaries of the securities market. SEBI has been assigned the powers of recognizing and regulating the functions of a stock market under the Securities Contracts Regulation Act (SCRA).

The requirements for granting recognition to a stock exchange include representation of SEBI on the board of the stock exchange and an undertaking to make and amend their rules only with the prior approval of SEBI. The stock exchanges have to furnish periodic reports to the regulator and submit bye-laws for SEBI's approval. Stock exchanges are required to send monitoring reports daily and for every settlement. SEBI has set up surveillance mechanisms, both internal and at stock exchanges, to deal with unfair trade practices. Measures such as circuit filters, price bands and caps have led to enhanced safety in the market.

An integrated surveillance mechanism which tracks the activities of the stock exchanges, the brokers, depository, Registrar and Transfer Agents, custodians and clearing agents aim at timely identification of fraudulent activities. SEBI and the central government have over-riding powers under the SCRA in all matters relating to the stock markets.

Regulating market intermediaries through registration and supervision is a primary function of the securities market regulator. Market intermediaries such as brokers, sub-brokers, Registrar and Transfer agents, depositories, custodians, bankers, merchant bankers, portfolio managers and underwriters have to get themselves registered under the respective regulations of SEBI.

The regulations specify the net worth, experience, infrastructure and other requirements necessary for an intermediary to be eligible for registration. The registration given, if found eligible, has been made permanent subject to certain conditions under the Securities and Exchange Board of India (Intermediaries) Regulations, 2008 discussed later in this unit.

SEBI makes routine inspections of the intermediaries functioning in the securities markets to ensure compliance with prescribed standards. It can also order investigations into the operations of any of the constituents of the securities market for activities such as price manipulation, artificial volume creation, insider trading, violation of the takeover code or any other regulation, public issue related malpractice or other unfair practices. Investigation is based on SEBI's surveillance activities or those of the stock exchange. A preliminary probe is conducted after which, if necessary, a full-fledged investigation is undertaken.

SEBI has the powers to call for information, summon persons for interrogation, examine witnesses and conduct search and seizure. If the investigations so require, SEBI is also empowered to penalize violators. The penalty could take the form of suspension, monetary penalties and prosecution.

SEBI also has the mandate to ensure the streamlined functioning of the primary markets. It has laid out the eligibility, norms and rules to be followed for the public issue of securities in the Disclosure and Investor Protection (DIP) Guidelines.*

The guidelines specify the minimum net worth requirements for an issuer, the minimum public holding to be maintained and the lock-in on the holdings of the promoters. SEBI has also specified the roles and responsibilities of intermediaries in the primary markets such as the merchant bankers, underwriters, R&T Agents and brokers in the guidelines for each intermediary. These guidelines impose minimum disclosure requirements on the issuer to ensure that investors have all the relevant information before making the investment. The listing agreement that companies enter into with the

* DIP guidelines have been rescinded in 2009 and the SEBI ICDR regulations have been brought into effect.

stock exchange has clauses for continuous and timely flow of relevant information to the investors, corporate governance and investor protection. SEBI investigates and penalizes the non-conformance to the guidelines by the issuers and intermediaries.

SEBI has laid down regulations to prevent insider trading and unfair trade practices which are detrimental to the interests of the investor. Insider trading refers to the dealing in securities by persons connected with a company having material information that is not available to the public.

Such persons include the directors and employees of the company, associates such as bankers and tax consultants or government employees who get sensitive information. The SEBI (Prohibition of Insider Trading Regulations), 1992 seeks to prevent insider trading which erodes the confidence of the common investor in the securities markets. SEBI's guidelines require companies to have comprehensive code of conduct to prevent such activity. This includes appointing a compliance officer to enforce it, ensuring periodic disclosure of holding by all persons considered as insiders and ensuring data confidentiality and adherence to the requirements of the listing agreement on flow of price sensitive information.

If an insider trading charge is proved pursuant to SEBI's investigation, the penalties include monetary penalties, criminal prosecution, prohibiting persons from securities markets and declaring transactions as void.

3. Insurance Regulatory and Development Authority (IRDA)

IRDA's mission is to regulate, promote and ensure orderly growth of the insurance sector, including the re-insurance business, while ensuring protection of the interests of insurance policyholders. IRDA was constituted by an act of parliament and according to Section 4 of the IRDA Act 1999 the Authority comprises ten members who are all government appointees.

The powers and functions of the authority include the following:

1. Issuing a certificate of registration or renewing, modifying, withdrawing, suspending or cancelling such registration
2. Protecting the interests of policyholders in matters relating to assignment of policy, nomination by policyholders, insurable interest, settlement of insurance claim, surrender value of policy and other clauses of insurance contracts
3. Spelling out the required qualifications, code of conduct and practical training for intermediaries including insurance intermediaries and agents

4. Specifying the code of conduct for surveyors and loss assessors
5. Seeking information, undertaking inspection, conducting inquiries and investigations including audit of the insurer, intermediaries and others
6. To control and regulate the rates and terms and conditions that may be offered by insurers with regard to general insurance, which are not covered by the Tariff Advisory Committee
7. Regulating the investment of funds by insurance companies

4. Pension Fund Regulatory and Development Authority (PFRDA)

PFRDA was first constituted by the Government of India in October 2003 with the following responsibilities:

1. To promote old age income security by establishing, developing and regulating Pension Funds
2. To protect the interests of subscribers to schemes of Pension Funds and related matters

It is an interim body, under the administrative control of the Ministry of Finance, pending enactment of a comprehensive legislation. The Authority is to consist of a Chairperson and up to five members.

The new pension system will be based on defined contributions. It will also offer a menu of investment choices and Fund Managers. Though the new system is voluntary, it would be mandatory for new recruits to the Central Government, except the armed forces. It will also be available on a voluntary basis to all persons including self-employed professionals and others in the unorganized sector. However, mandatory programmes under the Employees Provident Fund Organization and other special provident funds will continue to operate according to the existing system, under the Employees Provident Fund and Miscellaneous Provisions Act 1952 and other special acts governing these funds.

Subject to the overall directions and guidelines of the government, the PFRDA shall:

a. Deal with all matters relating to the promotion and orderly growth of the pension market
b. Propose appropriate legislation for the purpose indicated above
c. Carry out such other functions as may be delegated to the authority

The PFRDA shall be free to determine its own procedures and will have powers to call for records and other material relevant to its working, from official and non-official bodies and will also hold discussions with them.

The PFRDA will also submit periodical reports to the government on various aspects of the pension sector and on matters required by the government.

5. Registrar of Companies

Pursuant to Section 609(1) of the Companies Act, 1956, the Central Government has appointed Registrars at different places to discharge the function of registration of companies as provided in Section 33. Registrars of Companies (ROC) cover the various States and Union Territories and are vested with the primary duty of registering companies created in the respective states and the Union Territories and ensuring that such companies comply with statutory requirements under the Act. These offices function as registry of records, relating to the companies registered with them, which are available for inspection by members of public on payment of the prescribed fee. The Central Government exercises administrative control over these offices through the respective Regional Directors.

The Registrar also undertakes other important duties, some of which are given below:

Under Section 130, the Registrar is to maintain a register containing particulars of all charges in respect of each company. An example of a charge would be one created for the benefit of holders of debentures.

Under Section 139, the Registrar on being given satisfactory evidence with respect to any registered charges that:

a) The debt for which the charge was created has been paid or satisfied wholly or partly, or
b) The part of the property or undertaking charged has been released from the charge or has ceased to form a part of the company's property or undertaking; the Registrar may enter in the Register of Charges a memorandum of satisfaction in whole or in part or about the fact that a part of the property or undertaking has been released from the charge or no longer forms a part of the company's property or undertaking as the case may be, even if no intimation is received by him from the company.

6. Economic Offences Wing (EOW)

The EOW in the Central Bureau of Investigation was created in 1964 to deal with offences under various sections of the Indian Penal Code and notified Special Acts mainly relating to serious frauds in banks, stock exchanges, financial institutions, joint stock companies, public limited companies, misappropriation of public funds, criminal breach of trust, violation of Customs Act, counterfeiting of currency, narcotics, drug trafficking, arms peddling and offences relating to adulteration, black-marketing and others.

Following the securities and stock market scam of 1992, it was deemed desirable to strengthen and expand the EOW and accordingly, a full-fledged ***Economic Offences Division (EOD)*** was formed in 1994. The EOD has four zones of which one focuses exclusively on large and complicated security and bank frauds.

The areas currently covered by the EOD are:

1. Frauds relating to foreign trade
2. Banking frauds
3. Insurance frauds
4. Foreign exchange frauds
5. Frauds involving manipulation of share prices, insider trading and others
6. Smuggling of narcotics and psychotropic substances
7. Forgery of travel documents, identity papers and overseas job rackets
8. Counterfeit currency and fake Government stamps and paper
9. Smuggling of antiques, arts and treasures
10. Cyber crimes
11. Violation of Intellectual Property Rights, audio and video piracy and software piracy
12. Wildlife and environmental offences

7. Financial Intelligence Unit - India (FIU-I)

FIU-I was set up by the Government of India in 2004 as the central national agency responsible for receiving, processing, analyzing and disseminating information regarding suspicious financial transactions in order to support anti-money laundering efforts. FIU-I is an independent body reporting directly to the Economic Intelligence Council headed by the Finance Minister. More specifically, the functions of FIU-I are:

1. To serve as the nerve centre for receiving reports on cash and other suspicious transactions
2. To analyze the information collected to trace patterns of transactions which could involve money laundering and other crimes
3. To share information on suspicious transactions with its counterparts and regulatory bodies in other countries
4. To establish and maintain a database on cash and suspicious transactions

5. To co-ordinate and strengthen collection and sharing of financial intelligence through an effective national, regional and global network to fight money laundering and related crimes
6. To undertake research and analysis in order to monitor and identify strategic areas on money laundering trends and other such developments

Certain exclusive and concurrent powers under the PMLA are conferred on the Director, FIU-I. For instance, under Section 13(2) of the PMLA, the Director may impose a fine on any banking company, financial institution or intermediary for failing to comply with obligations of maintenance of records or in furnishing information or in verifying the identities of clients. For the purposes of Section 13, the Director shall have the same powers as are vested in a civil court under the Court of Civil Procedure 1908, while trying a suit, such as discovery and inspection, compelling the production of records and so on. Under Section 66 of the PMLA, the Director or a specified authority may furnish or cause to be furnished any information received or obtained, to any officer, authority or body, if it is deemed to be in the public interest.

MCA's Role - Investor Education and Protection Fund (IEPF)

The IEPF is a fund created by the Ministry of Corporate Affairs for promoting investors' awareness and protecting their interests. The fund is created out of contributions from the central government, state government, companies and institutions.

Apart from this, unpaid dividends, matured debentures and deposits, application and call money due for refund and interest on them shall form part of the fund provided such money has remained unpaid and unclaimed for a period of seven years from the date they were due for payment.

The fund shall conduct investor education programs through the media and seminars. It will fund investor education projects of institutions and organizations engaged in the same and which applies for resources to conduct such programs.

Self Regulatory Organizations (SRO)

In the developed world, it is common for market players to create Self Regulatory Organizations, whose prime responsibility is to regulate their own members. Wherever SROs exist, the statutory regulatory bodies set up by the Government (like SEBI in India) only lay down the broad policy framework, and leave the micro-regulation to the SRO.

For instance, the Institute of Chartered Accountants of India (ICAI) regulates its own members.

Mutual Funds in India have not constituted any SRO for themselves. Therefore, they are directly regulated by SEBI.

Key Acts, Statutes and Regulations of Financial Markets

SEBI Act, 1992

The SEBI Act, 1992 is an act to create a Board to protect the interests of investors in securities and to promote the development of, and to regulate, the securities market and related matters. SEBI's regulatory ambit includes stock exchanges, stock brokers, sub-brokers, share transfer agents, bankers to an issue, trustees of trust deeds, registrars to an issue, merchant bankers, underwriters, portfolio managers, investment advisers and other intermediaries associated with the securities market. Further, SEBI is the authority to regulate depositories, custodians, foreign institutional investors, credit rating agencies, mutual funds and venture capital funds. SEBI is also vested with the responsibility of prohibiting fraudulent and unfair trade practices relating to the securities market, including insider trading.

Securities Contracts (Regulation) Act, 1956

The Securities Contracts (Regulation) Act, 1956 is a legislation to prevent undesirable transactions in securities by regulating the business of securities dealing and trading. In pursuance of its objects, the act covers a variety of issues, of which some are listed below:

1. Granting recognition to stock exchanges
2. Corporatization and demutualization of stock exchanges
3. The power of the Central Government to call for periodical returns from stock exchanges
4. The power of SEBI to make or amend bye-laws of recognized stock exchanges
5. The power of the Central Government (exercisable by SEBI also) to supersede the governing body of a recognized stock exchange
6. The power to suspend business of recognized stock exchanges
7. The power to prohibit undesirable speculation

Securities Contracts (Regulation) Rules, 1957

Section 30 of the Securities Contracts (Regulation) Act, 1956 empowers the Central Government to make rules for the purpose of implementing the objects of the said act. Pursuant to the same, the Securities Contracts (Regulation) Rules 1957 have been made. These rules contain specific information and directions on a variety of issues, as for example:

- Formalities to be completed including submission of application for recognition of a stock exchange
- Qualification norms for membership of a recognized stock exchange
- Mode of entering into contracts between members of a recognized stock exchange
- Obligation of the governing body to take disciplinary action against a member, if so directed by the SEBI
- Audit of accounts of members
- Maintaining and preserving books of accounts by every recognized stock exchange and by every member
- Submission of the annual report and of periodical returns by every recognized stock exchange
- Manner of publication of bye-laws for criticism
- Requirements with respect to listing of securities on a recognized stock exchange
- Requirements with respect to the listing of units or any other instrument of a Collective Investment Scheme on a recognized stock exchange

Companies Act, 1956

The Companies Act, 1956 is a legislation to consolidate and amend the law relating to companies and certain other associations. It came into force on April 1, 1956, but has undergone amendments by several subsequent enactments, some of which were warranted by events such as the establishment of depositories owing to dematerialization of shares.

This Act, for the first time, introduced a uniform law pertaining to companies across India. The legislation applies to all trading corporations and to those non-trading corporations whose objects extend to more than one State of India. Further, other entities not covered by the scope of the act are corporations whose objects are confined to one state, universities, co-operative societies and unincorporated trading, literary scientific and other societies and associations mentioned in item 32 of the State List in the Seventh Schedule of the Constitution of India. With some exceptions relating to Jammu & Kashmir, Goa, Daman and Diu and Sikkim, the act applies to the whole of India.

Indian Contract Act, 1872

The Indian Contract Act came into force in September 1872. It lays down general principles with regard to contracts and applies to the whole of India, except the state of Jammu & Kashmir.

The law of contracts represents the most important branch of mercantile law and rests at the foundation of trade and commerce. It is pervasive as it affects us in our daily lives, often without our realizing it. Whether it is buying a pouch of milk or a loaf of bread in the morning, or travelling by the suburban train to work or buying a ticket to watch a play or asking a tailor to stitch a shirt or even borrowing a book from our neighbour, we are entering into contracts that give rise to legal rights and obligations. Thus, the main purpose of the law is to impart credibility about the fulfilment of obligations in mercantile transactions. The contracts become enforceable through the courts of law.

The sections of the Act relate to matters such as:

1. Essentials of a valid contract
2. Classification of contracts
3. Offer, acceptance and communication of offer, acceptance and revocation of either
4. Capacity of the parties to a contract
5. Free consent
6. Consideration
7. Legality of object and consideration
8. Performance of a contract
9. Remedies for breach of contract
10. Indemnity and guarantee
11. Bailment and pledge
12. Law of agency

From the perspective of the securities market, the law of agency is especially important and it governs the relationship between an investor (principal) and a broker (agent). The function of a broker is to establish privity of contract between two parties to a transaction for which he earns a commission, i.e., brokerage. When an agent engages in certain actions, it is as if the principal is doing so. Accordingly, section 226 makes it clear that contracts entered into through an agent and the resulting obligations may be enforced in the same manner and will have the same legal consequences as if the contracts had been entered into and the acts performed by the principal in person.

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. Unit II, section 3 describes the offence of money-laundering thus: Whoever 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 and projecting it as untainted property shall be guilty of the offence of money-laundering.

The offences are classified under Part A, Part B and Part C of the Schedule. Under Part A, offences include counterfeiting currency notes under the Indian Penal Code to punishment for unlawful activities under the Unlawful Activities (Prevention) Act, 1967. Under Part B, offences are considered as money laundering if the total value of such offences is Rs 30 lac or more. Such offences include dishonestly receiving stolen property under the Indian Penal Code to breaching of confidentiality and privacy under the Information Technology Act, 2000. Part C includes all offences under Part A and Part B (without the threshold) that has cross-border implications.

Section 6 of the PMLA confers powers on the Central Government to appoint Adjudicating Authorities to exercise jurisdiction, powers and authority conferred by or under the Act. According to section 9, in the event of an order of confiscation being made by an Adjudicating Authority (AA) in respect of any property of a person, all the rights and title in such property shall vest absolutely in the Central Government without any encumbrances.

Section 11 of the Act makes it clear that the Adjudicating Authority shall have the same powers as are vested in a civil court under the Code of Civil Procedure while trying a suit, with regard to the following matters:
a) Discovery and inspection
b) Enforcing the attendance of any person, including any officer of a banking company or a financial institution or a company and examining him on oath
c) Compelling the production of records
d) Receiving evidence on affidavits
e) Issuing commissions for examination of witnesses and documents
f) Any other matter which may be prescribed

All the persons summoned as mentioned above shall be bound to attend the proceedings in person or through authorized agents and shall be bound to state the truth and produce such documents as may be required. Further, every proceeding under the section shall be deemed to be a judicial proceeding within the meaning of sections 193 and 228 of the IPC.
Section 12 of PMLA stipulates that every banking company, financial institution and intermediary shall maintain a record of all transactions, the nature and value of which may be prescribed, whether such transactions comprise a single transaction or a series of transactions integrally connected to each other, and where such series of transactions take place within a month and furnish information of transactions and verify and maintain the records of the identity of all its clients

Provided that where the principal officer of a banking company or financial institution or intermediary, as the case may be, has reason to believe that a single transaction or series of transactions integrally connected to each other have been valued below the prescribed value so as to defeat the provisions of this section, such officer shall furnish information in respect of such transactions to the Director within the prescribed time

(2) The records referred to in sub-section (1) shall be maintained for a period of ten years from the date of cessation of the transactions between the clients and the banking company or financial institution or intermediary, as the case may be.

Sections 16 and 17 lay down the powers of the authorities to carry out surveys, searches and seizures. Section 24 makes it clear that when a person is accused of having engaged in money-laundering, the burden of proving that the proceeds of the alleged crime are untainted shall be on the accused. Sections 25 and 26 relate to the establishment of an Appellate Tribunal and the procedures for filing an appeal to the same. Section 42 deals with appeals against any decision or order of the Appellate Tribunal. Section 43 empowers the Central Government to designate Courts of Session as Special Courts for the trial of the offence of money-laundering.

The offence of money laundering is punishable with rigorous imprisonment for a term which shall not be less than 3 years but which may extend to 7 years and shall also be liable to fine which may extend to Rs. 5 lacs

Anti Money Laundering (AML) Measures

There are several ways to check money laundering. Given below are some of the measures that a stock broking firm can adopt for anti money laundering:

- Organizing training programs on anti money laundering for the staff , especially personnel engaged in KYC, settlement, demat and account opening process
- Verifying documents of clients during the account opening process
- Personally interviewing clients who have declared wealth above Rs 10 lac or intend to trade (intraday) above Rs 2 crore in a month or who have given initial margin of Rs 4 to 5 lac and above in the form of monies or securities
- Interviewing clients who are NRIs or corporate/trust who promote NRIs
- Gauging the risk appetite of the client, as it helps in finding out any suspicious trading or transactions in the future
- Scrutinizing documents including income documents of the employee involved in maintaining and updating critical information about the transactions of the client and also of the employees who facilitate transactions of the clients like dealers, settlement officers

Foreign Exchange Management Act, 1999

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. As a consequence of this enactment, its predecessor, The Foreign Exchange Regulation Act (FERA), 1973 was repealed. 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. For illustrative purposes, some sections of the Act are discussed below.

Section 3 states that except as provided in FEMA and allied rules and regulations or under permission of RBI, no person shall:

a) Deal in or transfer any foreign exchange or foreign security to any person not being an authorized person
b) Make any payment to or for the credit of any person resident outside India in any manner
c) Receive otherwise through an authorized person, any payment by order or on behalf of any person resident outside India in any manner
d) Enter into any financial transaction in India, as consideration for or in association with the acquisition or creation or transfer of a right to acquire any asset outside India by any person

Section 4 lays down that except as otherwise provided in FEMA, no person resident in India shall acquire, hold, own, possess or transfer any foreign exchange, foreign security or any immovable property situated outside India. Section 5 relates to Current Account transactions, while section 6 pertains to Capital Account transactions.
Section 10 empowers RBI to authorize any person, on any application made to it, to deal in foreign exchange or in foreign securities as an authorized dealer, money changer or offshore banking unit or in any other manner as it considers fit. Further, sub-section (5) stipulates that an authorized person shall, before undertaking any transaction in foreign exchange on behalf of any person, require that person to make such declaration and to give such information as will reasonably satisfy him that the transaction will not involve and is not meant to contravene or evade any provisions of the FEMA or of any rule, regulation, notification, direction or order made under the legislation. If the person refuses to comply with any requirement or performs unsatisfactory compliance, the authorized person shall furnish written refusal to undertake the transaction and shall report the matter to RBI, if he has reason to suspect that any violation or evasion is being contemplated by the person.

FEMA empowers the Central Government to appoint Adjudicating Authorities, Special Directors (Appeals) and an Appellate Tribunal. The latter two shall have for the purposes of discharging their functions under the Act, the same powers as are vested in a civil court under the Code of Civil Procedure, 1908 while trying a suit. Examples of some powers are:

a) Summoning and enforcing the attendance of any person and examining him on oath
b) Requiring the discovery and production of documents
c) Receiving evidence on affidavits
d) Subject to the provisions of sections 123 and 124 of the Indian Evidence Act, 1872, requisitioning any public record or document or copy of such record or document from any office
e) Issuing commissions for the examination of witnesses or documents

Section 34 stipulates that no civil court shall have jurisdiction to entertain any suit or proceeding in respect of any matter which an Adjudicating Authority or the Appellate Tribunal or the Special Director (Appeals) is empowered under the FEMA to determine. Further, no injunction shall be granted by any Court or other authority in respect of any action taken or to be taken in pursuance of any powers conferred by the Act. Section 35 pertains to appeal against any decision or order of the Appellate Tribunal, to the High Court.

Securities and Exchange Board of India (Intermediaries) Regulations, 2008
Excerpts from the Code of Conduct

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 standard s 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

a. 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

a. 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.
b. An intermediary shall not make any misrepresentation and ensure that the information provided to the clients/investors is not misleading.
c. 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.
d. 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.

AMFI Code of conduct - Code of Conduct for Intermediaries

As specified in ***AMFI Guidelines & Norms for Intermediaries (AGNI)***

3.1 Take necessary steps to ensure that the clients' interest is protected.

3.2 Adhere to SEBI Mutual Fund Regulations and guidelines issued from time to time related to selling, distribution and advertising practices. Be fully conversant with the key provisions of the Scheme Information Document (SID), Statement of Additional Information (SAI) and Key Information Memorandum (KIM) as well as the operational requirements of various schemes.

3.3 Provide full and latest information of schemes to investors in the form of SID, performance reports, fact sheets, portfolio disclosures and brochures and recommend schemes appropriate for the client's situation and needs.

3.4 Highlight risk factors of each scheme, avoid misrepresentation and exaggeration and urge investors to go through SID/KIM before deciding to make investments.

3.5 Disclose to the investors all material information including all the commissions (in the form of trail or any other mode) received for the different competing schemes of various Mutual Funds from amongst which the scheme is being recommended to the investors.

3.6 Abstain from indicating or assuring returns in any type of scheme, unless the SID is explicit in this regard.

3.7 Maintain necessary infrastructure to support the AMCs in maintaining high service standards to investors and ensure that critical operations such as forwarding forms and cheques to AMCs/registrars and despatch of statement of account and redemption cheques to investors are done within the time frame prescribed in the SID/SAI and SEBI Mutual Fund Regulations.

3.8 Avoid colluding with clients in faulty business practices such as bouncing cheques, wrong claiming of dividend/ redemption cheques, etc.

3.9 Avoid commission driven malpractices such as:
  (a) Recommending inappropriate products solely because the intermediary is getting higher commissions therefrom.
  (b) encouraging over transacting and churning of Mutual fund investments to earn higher commissions, even if they mean higher transaction costs and tax for investors.

3.10 Avoid making negative statements about any AMC or scheme and ensure that comparisons, if any, are made with similar and comparable products.

3.11 Ensure that all investor related statutory communications (such as changes in fundamental attributes, load, exit options and other material aspects) are sent to investors reliably and on time. Members and their key personnel, in the conduct of their business shall observe high standards of integrity and fairness in all dealings with investors, issuers, market intermediaries, other members and regulatory and other government authorities.

3.12 Maintain confidentiality of all investor deals and transactions.

3.13 When marketing various schemes, remember that a client's interest and suitability to their financial needs is paramount, and that extra commission or incentive earned should never form the basis for recommending a scheme to the client.

3.14 Intermediaries will not rebate commissions back to investors and avoid attracting clients through temptation of rebates / gifts etc.

3.15 A focus on financial planning and advisory services ensure correct selling, and also reduces the trend towards investors asking for pass back of commission.

3.16 All employees engaged in sales and marketing should obtain AMFI Certification. Employees in other functional areas should also be encouraged to obtain the same certification.

Ethical Issues in providing Financial Advice

Financial Intermediary – a Perspective

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 while on the other hand he helps the investor obtain

a reasonable return on his investment. In the Indian financial market place 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.
he 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 with in a time frame. While doing this sometimes the suitability of the product to the investor is lost sight of. The investor should be center 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 so as to provide appropriate advice.
2. Advisors' lack of understanding of the financial product which he is selling
3. Advisors' lack of information about overall market and other available financial products
4. Adopting wrong practices like frequent switching from one product to another just for the same of commissions.
5. Not educating/informing the investor about risks; uncertainties about financial products that are sold, while highlighting only the good features of the product.
6. Poor after sales service

Solved Miscellaneous Examples:

1. Mr. A opened his PPF A/c. on 28th March 2005 and has a balance of Rs. 4,15,478 as on 31st March, 2010. He will contribute maximum permissible investment limit in PPF A/c. in the beginning of April every year for all the years to the maturity of his account, beginning with April 2010. You find out the following, assuming that the current PPF A/c. regime continues for the whole period:

a) Number of Years he can contribute amount in his PPF A/c. _____ (1)
[10 years; from April 2010 to April 2019 as the account matures on 1st April 2020, the period being 15 years from the end of FY in which the account is opened]

b) Total amount to be contributed in the remaining period _____ (1)
[Rs. 70,000*10 = Rs. 7 Lac]

c) Maturity value of PPF A/c. ______ (2)
[Rs. 19,92,170; FV(rate, nper, pmt, pv, type) FV(8%, 10, -70000, -415478, 1)]

2. Mrs. B wants to invest regularly Rs. 50,000 p.a. for the next 10 years in National Saving Certificate (NSC). He would reinvest the maturity amount (rounded to lower Rs. 100 multiple) of each NSC when due along with fresh investments as proposed till the 10th year in the NSC. You find out the following, ignoring taxes and charges if applicable:

a) The effective rate of interest obtained on NSC ______ (1)
[8.16% p.a.; the rate is 8% p.a. with interest compounded half-yearly]

b) The maturity amount received of each NSC of Rs. 50,000 will be (1)
[Rs. 80,052; FV(8.16%, 6, 0, -50000, 1)]

c) The amount accumulated with the last maturity of NSC, if the matured amounts after the 10th year are not invested anywhere, will be (2)
[Rs. 16,32,846; Amount reinvested in the beginning of 7th to 10th year will be Rs. 80,000 along with fresh investment of Rs. 50,000]

3. Dr. C is of age 40 years and wishes to retire at 60. He starts investing from today to build his retirement corpus through a monthly SIP in a Balanced Mutual Fund scheme which is expected to give a return of 9% p.a. His current expenses are Rs. 30,000 per month and he requires an inflation adjusted monthly stream of income for 20 years post-retirement by investing the accumulated corpus in an investment yielding 6.5% p.a.

You compute the following, considering an inflation of 5% p.a. during this period:

a) The retirement corpus to be accumulated to sustain the required income stream post-retirement is ______ (2)
[1.66 crore; PV(rate, nper, pmt, FV, Type) = PV('r', 20*12, 30000*(1+5%)^20,0,1), where 'r' is monthly effective real rate of return given by R=(1+6.5%)/(1+5%)-1 %p.a. reduced to r=(1+R%)^(1/12)-1 % p.m.]

b) The monthly SIP in Balanced MF scheme to achieve the desired corpus is _____ (2)
[Rs. 25,865; PMT(rate, nper, PV, FV, Type) = PMT((1+9%)^(1/12)-1, 20*12, 0, 16642840, 1)]

4. Mr. X is of age 42 years and will retire at 60. She wants to buy a house by availing a loan to the extent of Rs. 30 Lac from a housing finance company for a term of 15 years at 10% p.a. on reducing monthly balance basis. You compute the following:

a) Equated Monthly Instalment (EMI) comes to _______ (2)
[Rs. 32,238; PMT(10%/12,15*12,-3000000,0,0)]

b) If she cannot afford to pay EMI in excess of Rs. 30,000 p.m., what increase in pay-back period will she have to accept? (2)
[3 years; NPER(rate, pmt, PV, FV, Type) = NPER(10%/12, 30000, -3000000, 0,0)]

Note: As the rate charged is on monthly reducing balance basis, the effective rate becomes 10%/12, and as the EMI is paid at the end of every period, the type taken is '0'

5. Mr. Y wants to invest systematically in a Balanced MF scheme giving a return of 9% p.a., for the higher education of his children Raman, who is 10 years of age and Suhaani, who is 7 years old. The higher education would begin at their respective age of 18 years and would continue for 4 years. The cost of higher education today is Rs. 3 Lac per year and is escalating at the rate of 7% p.a. You compute the following:

a) The corpus required for both children's higher education when Raman completes 18 years of age will be _______ (2)
[Rs. 39 Lac; take the individual year's education expenses inflated @7% and discounted @9% to the first year of withdrawal]

b) The monthly investment required up to the period of first withdrawal in order to accumulate he corpus is ________ (2)
[Rs. 28,139; PMT((1+9%)^(1/12)-1, 8*12, 0, 3903138, 1)]

6. Mr. A and Mrs. B who are respectively 35 and 32 years of age today start investing on a monthly basis in a Balanced Mutual Fund scheme yielding 9% p.a. till Mr. A's retirement at age 60. Post-retirement, they would invest the corpus in an investment yielding 7% p.a. They would require Rs. 1 lac in the first month of retirement and then inflation-adjusted on a monthly basis till Mrs. B's expected life of 85 years. Mr. A's life expectancy is 82 years. You compute the following, assuming inflation of 5% p.a.:

a) For how many years post-retirement, they require the corpus to last? (1)
[28 years; Mrs. B will be of 57 years when Mr. A retires and she will live up to 85 years]

b) Corpus required on retirement age of Mr. A is ______ (1)
[Rs. 2.61 crore; PV((1+((1+7%)/(1+5%)-1))^(1/12)-1,28*12,-100000,0,1)]

c) Monthly investments required in Balanced MF scheme till retirement is _____ (2)
[Rs. 24,520; PMT((1+9%)^(1/12)-1, 25*12, 0, 26121439, 1)]

7. Mr. Z wants to cover for the expenses of his family, in case of his untimely death, to the extent of 60% of family's expenses inflation-linked till his wife's expected life time of 80 years. His monthly expenses are Rs. 40,000 of which he consumes 8% exclusively on self. He has no insurance. His wife's current age is 31 years. It is assumed that the cover proceeds shall be invested in a Debt MF scheme yielding 7% p.a. You compute the following, assuming inflation of 5% p.a.:

a) Monthly expenses required by Mr. Z's family in any eventuality now are _____ (1)
[Rs. 2,64,960; pmt=12*40000*(1-8%)*60%]

b) Real rate of return from debt scheme shall be _____ (1)
[1.90%; r=(1+7%)/(1+5%)-1]

c) The insurance cover required by Mr. Z is ______ (2)
[Rs. 85.5 Lac; PV(r, nper, pmt, fv, 1) =PV(1.90%, 80-31, -264960,0,1)]

8. Mr. A wants to avail of a loan from a bank for purchasing a car worth Rs. 7.8 Lac. The bank charges a fixed rate of interest of 10% p.a. on monthly reducing balance basis to sanction a loan which is 80% of the cost of vehicle as cumulated by 1% upfront loan processing fees in the loan amount. The loan is taken for 4 years. You compute the following:

a) The amount of loan sanctioned by the bank is ______ (1)
[Rs 6,30,303; (780000*0.8)/(0.99)]

b) The Equated Monthly Instalment (EMI) of loan is ______ (1)
[Rs. 15,986; PMT(rate, nper, PV, fv, type) PMT=(10%/12,48,-630303,0,0)]

c) The effective rate of interest of the loan on the cost of car paid by Mr. A is _____ (2)
[11.05%; Rate(nper, pmt, PV, FV, type) i.e. (18,-15986,630303,0,0) = 0.8333% p.m. effective , Annual Effective Rate of Interest = (1+0.8333%)^12-1]

9. Mr. R's current annual income is Rs. 8.75 Lac which is expected to increase by 8% p.a. till he retires at 60 years of age. His current age is 36 years. Mr. R consumes 20% of his income on self and his professional upgrades. He wants to buy an insurance cover which shall provide for the loss of income to his family in case of any eventuality with his life today. If the claim proceeds are invested in an investment instruments returning 9% p.a., You compute the following:

a) Income required to sustain his family in the first year, in case of his death is _____ (1)
[Rs. 7 Lac; 875000*(1-20%)]

b) The differential growth rate of the investment instrument to generate a growing annual income stream to sustain his family is ______ (1)
[0.93% p.a.; (1+9%)/(1+8%)-1]

c) The insurance cover needed by Mr. R to replace the income needs of his family in case of his death is _____ (2)
[Rs. 1.51 crore; PV(rate, nper, pmt, FV, type) =PV(0.93%, 24, -700000, 0, 1)]

10. Mr. J wants to accumulate funds for his family's vacation expenses so that they would spend Rs. 2 lac p.a. at current prices for 15 years starting from 11 years from now. They want to invest a fixed amount immediately and then every year in the same month for the next 10 years

in an Equity Mutual Fund returning 12% p.a. They would withdraw the required amount annually from the corpus after 11 years to meet their goal. You compute the following, assuming inflation of 5% p.a.:

a) The cost of the trip in the first year of the 15-year period is expected to be _____ [Rs. 3,42,068; 200000*(1+5%)^11] (1)

b) The corpus in order to meet the vacation trips for 15 years as desired will be _____
[Rs. 33.94 Lac; PV((1+12%)/(1+5%)-1, 15, 342068, 0, 1)] (1)

c) The annual investment required till a year prior to starting trips is (2)
[Rs. 1,46,730; PMT(12%, 11, 0, 3394340, 1)]

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