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National Institute of Securities Markets

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Workbook for

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

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This workbook has been developed to assist candidates in preparing for the National Institute of Securities Markets (NISM) Level 1 Certification Examination for Investment Advisers.

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Foreword

NISM is a leading provider of high end professional education, certifications, training and research in financial markets. NISM engages in capacity building among stakeholders in the securities markets through professional education, financial literacy, enhancing governance standards and fostering policy research. NISM works closely with all financial sector regulators in the area of financial education.

NISM Certification programs aim to enhance the quality and standards of professionals employed in various segments of the financial services sector. NISM's School for Certification of Intermediaries (SCI) develops and conducts certification examinations and Continuing Professional Education (CPE) programs that aim to ensure that professionals meet the defined minimum common knowledge benchmark for various critical market functions.

NISM certification examinations and educational programs cater to different segments of intermediaries focusing on varied product lines and functional areas. NISM Certifications have established knowledge benchmarks for various market products and functions such as Equities, Mutual Funds, Derivatives, Compliance, Operations, Advisory and Research.

NISM certification examinations and training programs provide a structured learning plan and career path to students and job aspirants who wish to make a professional career in the Securities markets. Till May 2015, NISM has certified nearly 4 lakh individuals through its Certification Examinations and CPE Programs.

NISM supports candidates by providing lucid and focused workbooks that assist them in understanding the subject and preparing for NISM Examinations. The book covers all important topics to enhance the quality of investment advisory and related services in the financial services industry. It covers topics related to the basics of investment advisory, steps in the advisory process, making and implementation of a financial plan and evaluation of different products. This course teaches financial planning as an approach to investing, insurance, retirement planning and an aid for advisers to develop long term relationships with their clients. The book also discusses the concept of Income tax, Wealth tax and legalities of Estate planning in personal finance, and regulatory aspects underlying advisory. It will be immensely useful to all those who want to learn about the various aspects of investment advisory domain.

Sandip Ghose
Director

Disclaimer

The contents of this publication do not necessarily constitute or imply its endorsement, recommendation, or favoring by the National Institute of Securities Market (NISM) or the Securities and Exchange Board of India (SEBI). This publication is meant for general reading and educational purpose only.

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While the NISM Certification examination will be largely based on material in this workbook, NISM does not guarantee that all questions in the examination will be from material covered herein.

Acknowledgement

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NISM gratefully acknowledges the contribution of the Examination Committee for NISM-Series-X-A: Investment Adviser (Level 1) Certification Examination consisting of representatives of industry, educators, trainers and SEBI officials.

About NISM

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

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

Towards accomplishing the desire of Government of India and vision of SEBI, NISM delivers 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 to the educational needs of various constituencies such as investors, issuers, intermediaries, regulatory staff, policy makers, academia and future professionals of securities markets.

NISM is mandated to implement Certification Examinations for professionals employed in various segments of the Indian securities markets.

NISM also conducts numerous training programs and brings out various publications on securities markets with a view to enhance knowledge levels of participants in the securities industry.

About NISM Certifications

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

The skills, expertise and ethics of professionals in the securities markets are crucial in providing effective intermediation to investors and in increasing the investor confidence in market systems and processes. The School for Certification of Intermediaries (SCI) seeks to ensure that market intermediaries meet defined minimum common benchmark of required functional knowledge through Certification Examinations and Continuing Professional Education Programmes on Mutual Funds, Equities, Derivatives Securities Operations, Compliance, Research Analysis, Investment Advice and many more.

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

About the Workbook

This workbook has been developed to assist candidates in preparing for the National Institute of Securities Markets (NISM) Level 1 Certification Examination for Investment Advisers. NISM-Series-X-A: Investment Adviser (Level 1) Certification Examination along with the NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination seeks to create a common minimum knowledge benchmark for all associated persons registered as an investment adviser and partners and representatives of investment advisers under SEBI (Investment Advisers) Regulations, 2013 and offering investment advisory services.

The book covers all important topics to enhance the quality of investment advisory and related services in the financial services industry. It covers topics related to the basics of investment advisory, steps in the advisory process, making and implementation of a financial plan and evaluation of different products. This course teaches financial planning as an approach to investing, insurance, retirement planning and an aid for advisers to develop long term relationships with their clients. The book also discusses the concept of Income tax, Wealth tax and legalities of Estate planning in personal finance, and regulatory aspects underlying advisory.

About the Level 1 Certification Examination for Investment Adviser

The examination seeks to create a common minimum knowledge benchmark for all associated persons registered as an investment adviser and partners and representatives of investment advisers under SEBI (Investment Advisers) Regulations, 2013 and offering investment advisory services.

NISM-Series-X-A: Investment Adviser (Level 1) Certification Examination is the level 1 examination and NISM has also launched the NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination.

An associated person is required to pass both the levels (i.e. NISM-Series-X-A: Investment Adviser (Level 1) Certification Examination and NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination) to fulfill the requirements under Regulation 7(2) of the SEBI (Investment Advisers) Regulations, 2013.

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

Examination Objectives

On successful completion of the examination, the candidate should:

- Know the basics of investment 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 advisers to develop long term relationships with their clients.

Assessment Structure

The examination consists of 100 questions of 1 mark each and should be completed in 2 hours. The passing score on the examination is 60%. There shall be negative marking of 25% of the marks assigned to a question.

How to register and take the examination

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

CONTENTS

CHAPTER 1: INTRODUCTION TO INDIAN FINANCIAL MARKET	11
1.1 The Indian Economy	11
1.2 The Indian Financial Markets	11
1.3 Structure of Financial Markets in India	13
1.4 Role of Participants in the Financial Markets	20
1.5 Regulators of Financial Markets.....	22
CHAPTER 2: SECURITIES MARKET SEGMENTS	27
2.1 Nature and Definition of Primary Markets	27
2.2 Role and Function of the Secondary Market	42
2.3 Corporate Actions	53
CHAPTER 3: MUTUAL FUNDS	59
3.1 Meaning and features of Mutual Fund	59
3.2 Concepts and Terms Related to Mutual Funds.....	60
3.3 Regulatory Framework of Mutual Funds	63
3.4 Mutual Fund Products.....	65
3.5 Taxation of Mutual Fund Products.....	75
3.6 Mutual Fund Investment Options	78
3.7 Process associated with Investment in Mutual Funds.....	78
3.8 Systematic Transactions.....	88
3.9 Benefits of Investing in Mutual Funds	92
CHAPTER 4: INVESTMENT PRODUCTS	95
4.1. Small Saving Instruments	95
4.2. Fixed Income Instruments.....	103
4.3. Alternate Investments.....	107
4.4. Direct Equity	119
CHAPTER 5: MANAGING INVESTMENT RISK	129
5.1. Risk	129
5.2. Common Types of Risk	130
5.3. Measuring Risk	136
CHAPTER 6: MEASURING INVESTMENT RETURNS.....	141
6.1. Understanding Return.....	141
6.2. Understanding Return Concepts.....	142
6.3. The Concept of Compounding	146

6.4.	Real Rate of Return vs. Nominal Rate of Return	160
6.5.	Tax Adjusted Return	161
6.6.	Risk Adjusted Returns	162
CHAPTER 7: CONCEPT OF FINANCIAL PLANNING		165
7.1.	Financial Planning.....	165
7.2.	Need for Financial Advisory Services	166
7.3.	Scope of Financial Planning Services.....	167
7.4.	Financial Advisory and Execution	170
7.5.	Assets, Liabilities and Networth.....	172
7.6.	Preparation of Budget	174
7.7.	Financial Planning Delivery Process	175
CHAPTER 8: ASSET ALLOCATION AND INVESTMENT STRATEGIES		187
8.1.	Asset Classes.....	187
8.2.	Portfolio Construction	191
8.3.	Practical Asset Allocation and Rebalancing Strategies	195
8.4.	Portfolio Monitoring and Re-balancing.....	199
CHAPTER 9: INSURANCE PLANNING		203
9.1.	Need for Insurance	203
9.2.	Requirements of an Insurable risk	204
9.3.	Role of Insurance in Personal Finance	204
9.4.	Steps in Insurance Planning	205
9.5.	Insurance Products.....	207
9.6.	Life Insurance Products	207
9.7.	Non- Life Insurance	213
9.8.	Life Insurance Needs Analysis	215
CHAPTER 10: RETIREMENT PLANNING		221
10.1.	Introduction to retirement planning process	221
10.2.	Estimating the Retirement Corpus.....	223
10.3.	Determining the Retirement Corpus.....	226
10.4.	Retirement Products	233
CHAPTER 11: TAX AND ESTATE PLANNING		251
11.1.	Understand Income tax principles	251
11.2.	Tax aspects of investment products	261
11.3.	Wealth Tax Act and its implication for clients	269
11.4.	Estate Planning.....	269

CHAPTER 12: REGULATORY ENVIRONMENT AND ETHICAL ISSUES	277
12.1. Regulation for Investment Advisers.....	277
12.2. Regulatory System and Environment.....	284
12.3. Role of Regulators	285
12.4. Role of Self-Regulatory Organizations (SRO)	290
12.5. Prevention of Money-Laundering Act, 2002	291
12.6. Code of Conduct and Ethics	292
12.7. Ethical Issues in providing Financial Advice	298
12.8. Investor Complaint redressal systems	299

CHAPTER 1: INTRODUCTION TO INDIAN FINANCIAL MARKET

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Structure of Indian Financial Markets
- Participants in Financial Markets and their role
- Regulators of Indian Financial Markets

1.1 The Indian Economy

The Indian economy has gone through phases of growth and change that has transformed it from being a primarily agriculture-oriented economy to one where services and manufacturing contribute to 3/4th of its gross domestic product. The economy requires the financial system to support growth by enabling access to resources, both financial as well as real resources. The banking sector provides credit at efficient costs, secure systems for transactions and transfer of funds and the means to channelize savings of the economy in productive ways. Securities markets allow wider access to investors for businesses seeking funds by issuing securities with features that cater to the risk and return requirements of different types of investors. The foreign exchange markets determine the costs of import of funds and commodities essential for production. A well- developed foreign exchange market helps to hedge the risks of price movements for companies dependent upon imports as well as the earnings of export-oriented organisation. Similarly, the commodity markets enable mitigating the risk of adverse price movements in commodities to producers and users. Ensuring adequate insurance cover for people will ensure that they are protected from emergencies of large expenses or loss of income. It will enable higher savings and investments. All these markets need to be well developed in systems and regulations to enable economic growth.

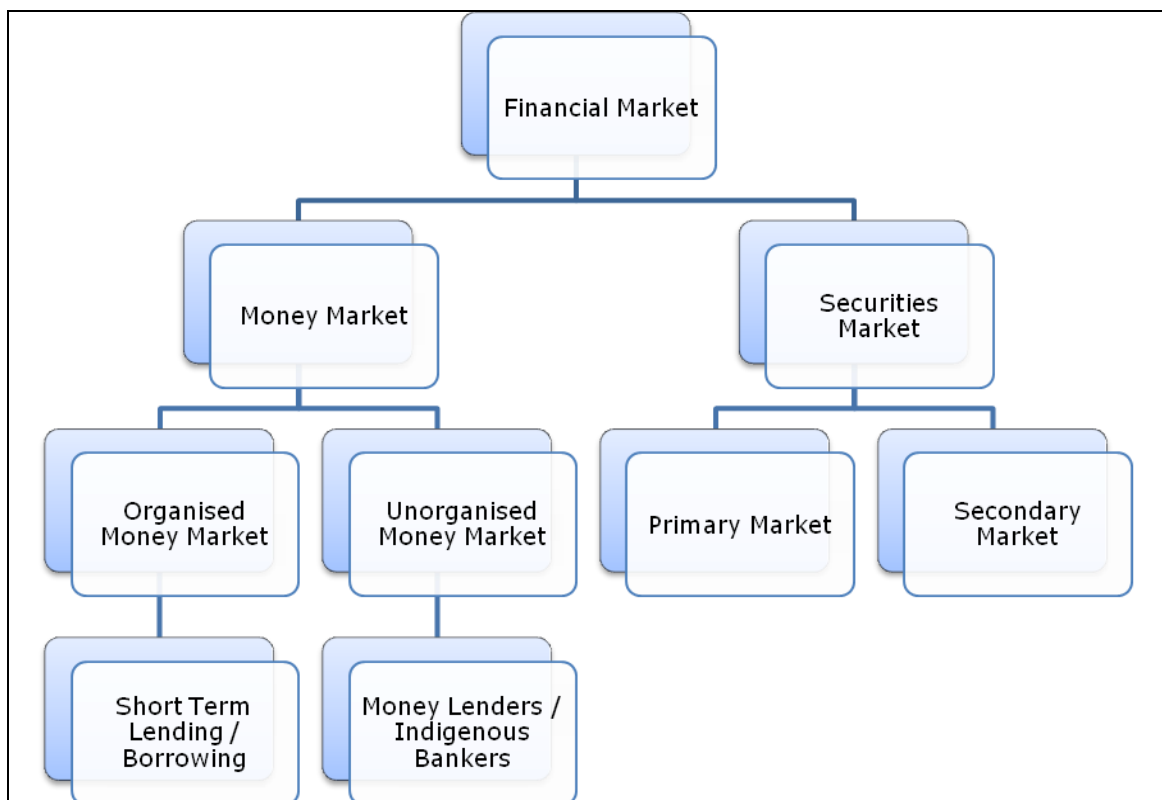
1.2 The Indian Financial Markets

1.2.1 Key Features

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

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

The Indian financial market can be illustrated in the figure below:



The financial market comprises of the money markets that deal with the short-term lending and borrowing of funds and the securities or capital markets that enable longer term transfer of funds using debt and equity instruments. The allocation and re-allocation of resources may happen in the primary markets where securities are issued by the borrowing institutions

directly to the lenders or investors or in the secondary markets which provides investors the options to exit or reallocate their resources by dealing amongst themselves.

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

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

1.3 Structure of Financial Markets in India

1.3.1 Banking System

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

The Indian banking has a multi-tier structure. The Reserve Bank of India is the regulator of the banking system and the monetary authority. Its functions include licensing banks and putting in place regulations for a strong and stable banking system, be the note-issuing authority and banker to the government and act as a lender of last resort to the other banks by providing accommodation in the form of advances. It also acts as a controller of credit in the monetary system by effecting changes in the Statutory Liquidity Ratio (SLR), Cash Reserve Ratio (CRR) and other selective credit controls, transact and regulate the foreign exchange market.

Other apex regulators in the banking system include specialist institutions that cater to the credit and financial needs of specific groups. For example, the EXIM bank fosters the growth

of export and import activities. NABARD caters to the need of rural based development and the National Housing Bank (NHB) regulates the housing sector of the economy.

Commercial banks may be scheduled commercial banks which include public sector banks, private sector banks, foreign banks and regional rural banks or non-scheduled commercial banks that include local area banks. Apart from commercial banks, there are co-operative credit institutions such as the urban co-operative banks and state and district level co-operative banks that cover rural area needs. Payment banks have been notified by the RBI to encourage financial inclusion to low income households, small business and others by providing small savings accounts and payment/remittance services. Their activities include accepting deposits not exceeding Rs. 100,000, issuing ATM/Debit cards but not credit cards and providing payment and remittance services. The bank cannot undertake any lending activities. Small Finance Banks are another category of banks approved by RBI to provide a savings vehicle, banking facilities and to supply credit to small businesses, marginal farmers, micro and small industries and other entities in the unorganized sector. The capital requirements, functions and obligations and regulatory provisions of each category are defined by the RBI.

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

1.3.2 Securities Market

The securities market provides an institutional structure that enables a more efficient flow of capital in the system. If a household has some savings, such savings can be deployed to fund the capital requirement of a business enterprise, through the securities markets. The business issues securities, raises the money from the household through a regulated contract, lists the securities on a stock exchange to ensure that the security is liquid (can be sold when needed) and provides information about its activities and financial performance to the household. This basic arrangement in the securities markets enables flow of capital from households to business, in a regulated institutionalised framework.

A security represents the terms of exchange of money between two parties. Securities are issued by companies, financial institutions or the government. They are purchased by

investors who have money to invest. Security ownership allows investors to convert their savings into financial assets which provide a return. Security issuance allows borrowers to raise money at a reasonable cost. The broader universe of savers with surplus to invest is available to issuers of securities; a universe of wider options is available to savers to invest their money in. Thus the objectives of the issuer and the investor are complementary and the securities market provides a vehicle to mutually satisfy their goals.

The issuer of the security provides the terms on which the capital is being raised. The investor in the security has a claim to the rights represented by the securities. These rights may involve ownership, participation in management or claims on assets. The specific terms of issue and their implications for the investor and the issuer are discussed in detail in the workbook of the NISM-Series-XII: Securities Market Foundation Certification Examination.

The market in which securities are issued, purchased by investors and subsequently transferred among investors is called the securities market. The securities market has two interdependent and inseparable segments, viz., the primary market and secondary market. The primary market, also called the new issue market, is where issuers raise capital by issuing securities to investors. The secondary market, also called the stock exchange, facilitates trade in already-issued securities, thereby enabling investors to exit from an investment or to accumulate more, if it meets their expectations. The risk in a security investment is transferred from one investor (seller) to another (buyer) in the secondary markets. The primary market creates financial assets and the secondary market makes them marketable.

Investors and issuers are the primary participants in the securities market. Investors are individuals or organisations with surplus funds that can be used to purchase securities. The chief objective of investors is to convert their surpluses and savings into financial assets that earn a return. Investors are divided into two categories based on the size of their investment and sophistication of their investing strategies – retail investors and institutional investors.

Retail investors are individual investors who invest money on their personal account. Institutional investors are organizations that invest large volumes and have specialized knowledge and skills in investing. Institutional investors are companies, banks, government organisations, mutual funds, insurance companies, pension trusts and funds, associations, endowments, societies and such organisations that may have surplus funds to invest.

Issuers supply securities and create a demand for capital, whereas investors buy the securities and provide the supply of capital. Issuers may have short-term and long-term need for capital and they issue securities based on their need, their ability to service the securities and meet the obligations to investors, and the cost they are willing to pay for the use of funds. Interaction between investors and borrowers is facilitated through financial

intermediaries; intermediaries form the third component of the market. The entire process of issuance, subscription and transaction in securities is subject to regulatory control and supervision.

There are several major players in the primary market. These include the merchant bankers, mutual funds, financial institutions, foreign institutional investors (FIIs), individual investors; the issuers including companies, bodies corporate; bankers to the issue, brokers, and depository participants. The stock exchanges are involved to the extent of listing of the securities. In the secondary market, there are the stock exchanges, stock brokers (who are members of the stock exchanges), the mutual funds / asset management companies (AMCs), financial institutions, FIIs, investment companies, individual investors, depository participants and banks. The Registrars and Transfer Agents, Custodians and Depositories are capital market intermediaries, which provide important infrastructure services to both the primary and secondary markets.

1.3.3 Commodities Market

A commodity market facilitates transactions between buyers and sellers of commodities. These could be agriculture based commodities, commodities for industrial use such as metals and minerals, gas and oil for consumption or production and precious metals for investment or industrial use. Commodities can be traded in the cash market for immediate delivery and payment between the buyer and the seller. Or, transactions in commodities can be done in the forward or futures market for settlement at a future point in time at prices determined at the time of entering the contract. A forward transaction is one where the terms of the transaction, such as the quantity, quality, price and terms of delivery are customized to the requirements of the persons involved. In a futures contract, the terms of the contract are determined by the exchange which initiates the contract. The price is determined by the parties to the contract. A futures contract is standardized as to quantity, quality and delivery terms. An exchange traded commodity futures contract minimizes the counter-party risk of default that exists in forward contracts. The commodity exchanges adopt risk management measures such as margin system and settlement guarantee funds to protect the interest of the participants. Forwards and futures in commodities help producers and consumers of the commodity to hedge against the risk of adverse price movements in the future. It helps them streamline and accurately estimate the demand and supply of commodities.

There are three national commodity exchanges for trading in commodity futures. They are the Multi Commodity Exchange of India Limited, the National Commodity and Derivative Exchange Limited and the National Multi Commodity Exchange of India Limited. These exchanges follow established practices in trading, clearing and settlement and processes and structure. Apart from these, there are commodity trading associations registered with the regulator. The commodity markets in India was regulated by the Forward Markets

Commission (FMC). With effect from September 28, 2015, the FMC has merged with SEBI and it will be the regulator for the commodity markets going forward.

The commodity exchanges design or standardize contracts and provide an electronic trading platform for the trades to be put through by members registered with the exchange. Investors who trade in commodity markets are entities who need to hedge their exposure to the commodity such as farmers, oil companies, manufacturers and others. Arbitrageurs, who try to exploit price differences in different markets, also participate in the markets as do speculators who expect to benefit from an anticipated price movement.

The clearing house of the exchange determines the settlement obligations arising from trades conducted. The clearing house may also stand novation i.e. become the counter party to all trades done on the exchange so that investors are protected from the risk of default. The clearing house collects margins such as initial and mark to market margins and trade and settlement guarantee funds contributed by the members to fulfil their guarantee obligations.

Trades on commodity exchanges may be settled by cash or delivery of the commodity, depending upon the terms of the contract. If delivery is indicated, then the seller has to provide warehouse receipts of designated warehouses as well as quality certificate for the assayer. Delivery is received at delivery centres designated by the exchange.

The clearing banks empanelled by the exchange offer banking services to the members.

The FMC was the regulator of commodity futures and forward transactions in India. It is the registering and regulating authority of commodity exchanges in India. The FMC was merged with SEBI with effect from 28th September, 2015 and it will now be the regulator of the commodity derivative markets.

1.3.4 Foreign Exchange Market

The growth of international trade made it necessary to be able to determine the relative value of currencies given the differences in their purchasing power. The need for exchanging one currency to another for settling trades in goods and services brought about the term foreign exchange. Since the foreign exchange is the value of a currency relative to other currencies, its value will differ for each combination of currency, called a currency pair. For example, USDINR is the currency pair of US dollars and Indian rupee. The currency quoted first in the currency pair is called the base currency and the currency quoted next is called the quoting currency. The practice in the market is to quote the price of the base currency in terms of the quoting currency. If there is a PRICE quote for USDINR as 61, it means one unit of USD has a value of 61 INR.

The Indian foreign exchange market has a spot market and a forward market. The spot market has an interbank segment and a merchant segment. In the interbank segment, banks make

market by giving two-way quotes for buying and selling a currency. In the merchant segment, the merchants are price takers who buy or sell currency based on the price given by the banks. The participants in the spot markets are the banks, the dealers and brokers, businesses, government and retail customers. The quotes offered for different currencies will depend upon the interbank rate available to the bank for different currencies. For large value transactions a bank quotes a price that is close to the interbank rate available to it and this varies marginally among banks and also as the rates change during the day. Each bank also publishes standard rates called the card rate. This is the rate available for retail transactions and does not change during the day unless there is a significant movement in the exchange rates.

The RBI publishes a reference rate for each currency pair based on the bid and offer rates of a set of banks. The reference rate is available for every week day.

The settlement of spot market trades happens with actual delivery and receipt of currency on gross settlement basis on the value date. The value date is the second business day after trade date i.e. T+2 day.

The forward market in currency can be the OTC market or the exchange traded futures market. The forward market can give quotes for any maturity but maturity less than one year has higher liquidity. RBI rules require the existence of an underlying trade contract which creates exposure to foreign exchange before taking a position in the forward market.

The exchange traded derivative market in currency consists of futures, options, and swaps. Hedgers, speculators and arbitrageurs trade in the derivatives market. Hedgers face risk associated with the price of an underlying asset and they use derivative markets to reduce or eliminate this risk. Speculators wish to bet on future movements in the price of an underlying asset. Derivatives give them an ability to buy the underlying without paying for it fully or to sell it without owning it or delivering it immediately. In the process, the potential gains and losses are amplified. Arbitrageurs are in business to take advantage of a discrepancy between prices in two different markets. If, for example, they see the futures price of an asset getting out of line with the cash price, they will take offsetting positions in the two markets to lock in a profit. Trading systems are provided by the exchanges that allow currency derivative trading such as the National Stock Exchange (NSE) and the Bombay Stock Exchange (BSE). Settlement happens on the last working day (excluding Saturday) of the month and the settlement price for a contract is the RBI reference rate.

1.3.5 Insurance Market

The Indian insurance market consists of the life insurance segment and the general insurance segment. The life insurance sector was opened to private providers in 2001. Currently, there

is one public sector insurance provider, namely the Life Insurance Company and 24 private insurers.

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

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

The non-life insurance or general insurance segment covers motor, health insurance, travel, fire and personal accident, among others. There are 28 insurers in this segment.

The Insurance Regulatory and Development Authority of India (IRDAI) regulates the insurance sector including registering insurance companies, clearing insurance products, licensing and establishing norms for the intermediaries and protecting policy holders' interest. Other entities involved in the insurance sector include insurance brokers, who are licensed to offer policies from any insurance company and are paid a brokerage by the company whose policy is sold. Individual agents are certified and licensed by IRDAI and can sell policies of life insurance and general insurance companies or both. Corporate agents include institutions such as banks, and they offer the insurance products to their clients. Agents typically represent one life insurer, one general insurer and one standalone health insurance company. Surveyors and loss assessors are used by general insurance companies to assess a claim and quantum of loss. Third party administrators are used to process health insurance claims.

Insurance penetration in India continues to be much below that of comparable economies. Insurance continues to be taken for tax benefits, as in the case of life insurance, or for regulatory compliance, as in the case of motor insurance or on the insistence of financiers. Low financial awareness combined with inefficient distribution lines that are unable to convey the benefits of insurance have continued to keep much of the population without adequate insurance cover.

1.3.6 Pension Market

A growing elderly population and a large unorganized employment market are two primary factors that define the pension industry in India. Much of the Indian population is still outside the formal retirement benefit cover provided by the government and its associated organisations, and companies covered under the Employees Provident Fund Organisation (EPFO) rules. The government's pension plan has moved from defined benefit structure, where all retired employees of a particular rank get the same pension with no contributions by the employee, to a defined contribution structure, where the employee and the employer contribute to the pension fund and the pension received on retirement will depend upon the fund accumulated. The private sector is covered by the Employee Provident Fund and the Employee Pension scheme or funds managed by establishments allowed to do so by the EPFO.

The National Pension System (NPS) is a defined contribution pension scheme now applicable to government employees, where the employee and the government make matching contributions to a fund of the employee's choice, managed by licensed fund managers. The NPS is also available for the general public to voluntarily contribute periodically and create a retirement corpus. Other voluntary retirement plans available include the Public Provident Fund and retirement plans offered by insurance companies and mutual funds.

On retirement, the corpus accumulated in the NPS is used to buy an annuity offered by insurance companies. The annuity provides a pension to the annuity holder according to the terms of the annuity selected.

The Pension Fund Regulatory and Development Authority (PFRDA) is the regulator of the pension market.

1.4 Role of Participants in the Financial Markets

Intermediaries in the financial markets are responsible for coordinating between investors and borrowers, and organizing the transfer of funds between them. Without the services provided by intermediaries, it would be quite difficult for investors and issuers to locate each other and carry out transactions efficiently and cost-effectively. The role and responsibilities of intermediaries are laid down in the acts and regulations governing them.

1.4.1 Stock Exchanges provide the infrastructure for trading in securities that have been issued at prices that reflect its current value. The existence of the system allows the valuation of their investment and to realize its value when they require funds encourage investors to invest when issuers raise funds. Stock markets such as the NSE, BSE and the Metropolitan Stock Exchange of India Ltd (MSEI) are national exchanges with provide nation-wide broker networks. Trading happens on electronic trading terminals which

feature anonymous order matching. Stock exchanges also appoint clearing and settlement agencies and clearing banks that manage the funds and securities settlement that arise out of these trades.

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

1.4.3 Custodians typically work with institutional investors, holding securities and bank accounts on their behalf. They manage the transactions pertaining to delivery of securities and money after a trade is made through the broker, and also keeps the accounts of securities and money. They may also account for expenses and value the portfolio of institutional investors. Custodians are usually large banks.

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

1.4.5 Investment Banks are financial entities that provide strategic advice to companies, governments and others on their capital requirements and investment decisions and arrange raising such funds on terms that are most suitable to the company. Their activities include advisory services for business expansions, project financing, mergers and acquisition, investment valuation, among others. They charge a fee for their services. Investment banks also deal with large investors and help them manage their portfolios across asset classes, products and geographies.

1.4.6 Commercial Banks provide banking services of taking deposits, providing credit and enable payment services. They provide efficient cash management for businesses and meet their short-term financing needs through facilities such as over drafts and bills discounting. They also provide term financing for projects. For individuals and households, banks provide

a secure infrastructure for holding their excess funds, making payments, accessing credit and financing facilities.

1.4.7 Insurance Companies provide service of insuring life, property and income against unexpected and large charge. Life insurance companies deal with insuring the life of individuals while general insurance covers health, motor, travel and other areas, where a sudden large expense can derail the financial situation of a household or business. Insurance companies use channels such as individual and corporate agents, brokers and banks to sell their products. Given the large resources mobilized by insurance companies by way of premiums, they are an important source of long-term funding for governments and businesses.

1.4.8 Pension Funds are intermediaries who are authorized to take contributions from eligible individuals and invest these funds according to the directions of the contributors to create a retirement corpus. These funds provide different options for investment of the contribution, such as debt, equity or a combination. Investors select the type of fund depending upon their ability to take risk and their requirement for returns.

1.4.9 Asset Management Companies and Portfolio Managers are investment specialists who offer their services in selecting and managing a portfolio of securities ('Portfolio' is the collective noun for securities. A portfolio holds multiple securities). Asset management companies are permitted to offer securities (called 'units') that represent participation in a pool of money, which is used to create the portfolio of a mutual fund. Portfolio managers do not offer any security and are not permitted to pool the money collected from investors. They act on behalf of the investor in creating and managing a portfolio. Both asset managers and portfolio managers charge the investor a fee for their services, and may engage other security market intermediaries such as brokers, registrars, and custodians in conducting their functions.

1.4.10 Investment Advisers and distributors work with investors to help them make a choice of securities that they can buy, based on an assessment of their needs, time horizon return expectation and ability to bear risk. They may also be involved in creating financial plans for investors, where they define the goals for which investors need to save money and propose appropriate investment strategies to meet the defined goals.

1.5 Regulators of Financial Markets

1.5.1 Ministry of Finance

The Ministry of Finance through its Department of Financial Services regulates and oversees the activities of the banking system, insurance and pension sectors. The Department of

Economic Affairs regulates the capital markets and its participants. The ministry initiates discussions on reforms and oversees the implementation of law.

1.5.2 Ministry of Corporate Affairs

The Ministry of Corporate Affairs regulates the functioning of the corporate sector. The Companies Act, 2013 is the primary regulation which defines the setting up of companies, their functioning and audit and control. The issuance of securities by companies is also subject to provisions of the Companies Act.

1.5.3 Registrar of Companies

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

1.5.4 The Reserve Bank of India (RBI)

The Reserve Bank of India regulates the money market segment of securities market. As the manager of the government's borrowing program, RBI is the issue manager for the government. It controls and regulates the government securities market. RBI is also the regulator of the Indian banking system and ensures that banks follow prudential norms in their operations. RBI also conducts the monetary, forex and credit policies, and its actions in these markets influence the supply of money and credit in the system, which in turn impact the interest rates and borrowing costs of banks, government and other issuers of debt securities.

1.5.5 Securities and Exchange Board of India (SEBI)

The Securities and Exchange Board of India (SEBI), a statutory body appointed by an Act of Parliament (SEBI Act, 1992), is the chief regulator of securities markets in India. The main objective of SEBI is to facilitate growth and development of the capital markets and to ensure that the interests of investors are protected. SEBI has codified and notified regulations that cover all activities and intermediaries in the securities markets including stock brokers and sub brokers, merchant bankers, registrars to an issue, share transfer agents, underwriters, portfolio managers, depository participants, custodians, investment advisers and others. SEBI also registers and regulates the working of institutions such as depositories, credit rating agencies, foreign institutional investors, mutual funds, venture capital funds, self-regulatory organisations and others. The Securities Contracts Regulation Act, 1956 and the Depositories Act, 1996 is administered by SEBI.

SEBI also oversees the functioning of primary markets. Eligibility norms and rules to be followed for a public issue of securities are detailed in the SEBI (Issuance of Capital Disclosures and Requirements) Regulations, 2009. The SEBI (ICDR) Regulations lay down

general conditions for capital market issuances like public and rights issuances and private placement of securities. The Regulations define the eligibility requirements, general obligations of the issuer and intermediaries, nature and format of disclosures required and the process of making the issue, among others. The listing agreement that companies enter into with the stock exchange has clauses for continuous and timely flow of relevant information to the investors, corporate governance and investor protection.

SEBI has been assigned the powers of recognizing and regulating the functions of stock exchanges. 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. 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 monitor the activities of stock exchanges, brokers, depository, R&T agents, custodians and clearing agents and identify unfair trade practices.

SEBI makes routine inspections of the intermediaries functioning in the securities markets to ensure that they comply 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.

SEBI has the powers to call for information, summon persons for interrogation and examine witnesses. 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 has laid down regulations to prohibit insider trading i.e. trading by persons connected with a company having material information that is not publicly available. SEBI Regulations require companies to have a comprehensive code of conduct to prevent insider trading. This includes appointing a compliance officer to enforce regulations, 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 through SEBI's investigations, the penalties include monetary penalties, criminal prosecution, prohibiting persons from securities markets and declaring transactions as void.

SEBI merged with the Forward Markets Commission on September 28, 2015 and now regulates the commodities markets in India. It is the regulatory body that oversees regulating and promoting forward and futures trading in commodities. The regulator's role includes monitoring the trading conditions in the forward markets, including demand and supply and prices, and take necessary action to streamline the functioning of the market. It advises the

government on granting and withdrawing recognition to associations and undertakes inspection of the associations.

It prescribes regulatory measures for limits on open positions of clients and members, circuit filters to control price volatility, managing risk through margins and specifying regulations for physical delivery of contracts and penalty for defaults.

1.5.6 Insurance Regulatory and Development Authority of India (IRDAI)

IRDAI regulates the insurance sector in India in accordance with the terms of the IRDA Act of 1999. IRDAI is the licensing authority for insurance companies and defines the capital and networth requirements for insurance companies. It ensure the adherence of insurance products to the rules laid down and defines the rules for the terms and conditions of insurance contracts such as sum assured, surrender value, settlement of claims, nomination and assignment, insurable interest and others. It regulates the distribution of insurance products by laying down the qualification and training requirements of intermediaries and the payment of commission to distributors. IRDAI supervises the functioning of the Tariff Advisory Committee that determines the rates for general insurance products. It also lays down the modalities for investment of funds by insurance companies.

1.5.7 Pension Fund Regulatory and Development Authority (PFRDA)

The PFRDA is the authority entrusted to act as a regulator of the pension sector in India under the PFRDA Act, 2013. The PFRDA has been assigned the responsibility of designing the structure of funds and constituents in the National Pension System (NPS). It is responsible for registering the various constituents such as the fund managers, custodians, Central record keeping agency and trustee banks and to define the parameters of their roles and responsibilities.

Sample Questions

- 1. Financial markets enable economic growth by**
 - a. Creating demand and supply for goods and services
 - b. Providing access to funds for productive enterprise**
 - c. Enabling appreciation in the price of securities
 - d. None of the above

- 2. Which of the following markets is directly influenced by the policies of the RBI?**
 - a. Forex markets**
 - b. Commodities markets
 - c. Insurance market
 - d. Pension market

- 3. The terms on which a security is issued is primarily decided by**
 - a. Regulators
 - b. Government
 - c. Investors
 - d. Issuers**

- 4. The market for trading in securities already issued is called**
 - a. Future market
 - b. Follow on market
 - c. Secondary market**
 - d. Forward market

CHAPTER 2: SECURITIES MARKET SEGMENTS

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Meaning of primary and secondary Markets and its functions
- Types of issues/instruments in primary market
- Participants in secondary market
- Risk Management in secondary markets
- Different types of corporate actions

2.1 Nature and Definition of Primary Markets

The capital of a company is brought in by the promoters and their associates in the initial stages. As the requirement for additional funds go up, it may be necessary to source funds from a wider group of investors. The primary market refers to the market where equity or debt funds are raised by companies from 'outside' investors through an offer of securities. 'Outside' investors refer to investors who are not associated with the promoters. They may be individual investors or institutional investors. It is called the primary market because investors purchase the security directly from the issuer. It is also called the "new issue market" since these securities are issued for the first time by the company. The process of expanding the ability of an issuer to raise capital from public investors, who may not have been associated with the initial stages of the business, is also known as "going public." The issuance of securities in the primary markets expands the reach of an issuer and makes long-term capital available to the issuer from a larger number of investors.

Raising capital for a company may also be conducted through a syndicate of institutional investors who buy equity or debt securities through a private placement. This is also a primary market activity but the investors in these securities are a few pre-identified institutional investors. These investors may also seek sale of their holdings, conversion of debt to equity, or may offload their holdings in a public issue on a later date. Private placement of debt is similar to private equity or venture capital deals, except that the security issued is debt in the former and equity in the latter case.

The ability of a company to raise funds from external sources will depend upon the performance of the company in the past and the expected performance in the future. Outside investors will require protection against a possible default on getting their dues or their rights getting diluted. This protection is available to them when they fund the company through investing in securities rather than one-on-one agreement with the promoters. This is because securities are issued under regulatory overview, which also imposes obligations on the issuer of securities, to honour the commitments made at the time of raising funds.

Investors may also require the flexibility to review their investment and exit the investment if need be. A security provides this facility as it may be listed on the exchanges, where key information about the company has to be periodically disclosed. The expectation for its performance tends to reflect in the prices at which its securities trade.

2.1.1 Functions of the Primary Market

The primary markets serve the following functions:

a. Wider Investor Participation:

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

b. Foster Competitive Processes

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

c. Diversify Ownership

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

d. Better Disclosures

A business that seeks to raise capital from new investors, who may not be familiar with the history and working of the enterprise, has to meet higher standards of disclosure and transparency. Regulations that govern primary markets prescribe the nature and periodicity

of disclosures that have to be made. Investors will need adequate, relevant, accurate and verifiable financial and other information about the business to be able to buy the securities being offered.

e. Evaluation by Investors

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

f. Exit for Early Investors

Primary markets provide an exit option for promoters, private and inside investors who subscribed to the initial capital and early requirements for capital of a business. Such investors will be able to realize the value of the investment made by offering their shares, fully or partly, when the company makes an issue in the primary market. It provides them the opportunity to exit their investments at a profit. A vibrant primary market is thus an incentive for such investors who invest in early-stage business with the intent to nurture the business to a level at which public and other investors would be interested.

g. Liquidity for Securities

When capital is held by a few inside investors, the equity and debt securities held are not liquid, unless sold in a chunk to another set of interested investors. A primary market issue distributes the securities to a large number of investors and it is mandatory to list a public issue of securities in the stock exchange. This opens up the secondary market where the securities can be bought and sold between investors, without impacting the capital raised and used by the business.

h. Regulatory Supervision

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

2.1.2 Types of Issues

All primary market issues need not be public issues. A primary issue of securities is made to promoters when a company is set up and equity shares are issued to them; if bonds are issued to institutions that lend to a company, that is also a primary issue, but issued privately only to a select set of investors. It is not uncommon for companies in early stages to issue equity capital to venture capitalists and private equity investors, who help the business to grow in size and scale. When an issuer does not choose any specific group of investors, but offers securities inviting anyone interested in buying the securities of the business, we have a public issue.

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

a. Public issue

Securities are issued to the members of the public, and anyone eligible to invest can participate in the issue. This is primarily retail issue of securities.

b. Private placement

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

c. Preferential issue

A private placement of securities by a listed company is called a preferential issue. Securities are issued to an identified set of investors, on preferential terms, along with or independent of a public issue. This may include promoters, strategic investors, employees and such specified preferential groups.

d. Qualified Institutional Placement (QIP)

A private placement of securities by a listed company to a set of institutional investors termed as qualified institutional buyers is a QIP. Qualified institutional buyers include institutions such as mutual funds.

e. Rights and Bonus issues

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

2.1.3 Issuers

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

a. Central, State and Local Governments

They raise funds to meet their fiscal deficits by issuing bonds called government securities (G-secs) and treasury bills. The central government alone issues treasury bills for different maturities such as 91 days, 182 days and 364 days. G-secs have tenors ranging from one year to 30 years. Bonds issued by the government carry a government guarantee. These securities are issued only in the Indian markets. They are not equity issuances by the government.

b. Public Sector Units

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

c. Private Sector Companies

They raise equity and debt funds from the markets by issuing securities. They may issue ordinary equity shares, preference shares and convertible instruments. Corporate bonds are issued to raise long-term debt while commercial papers and securitized papers are issued to raise funds for less than one year. For this category of issuers, the securities market is the principal source of funds. They can access funds from domestic and international markets.

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

They raise funds by issuing equity shares, preference shares, bonds, convertible bonds, commercial paper, certificates of deposits and securitized paper. Deposit taking institutions like banks have access to low cost funds from the public and therefore not dependent too much on the securities markets. However, financial institutions and NBFCs raise short term and long term capital through the issue of securities. They have access to domestic and international markets.

e. Mutual Funds

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

The primary markets are regulated by the Companies Act, 2013, Securities and Contract Regulation Act, 1956, SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2009 for issue of equity and debt securities by companies. Government securities are issued by RBI on behalf of the government, and are subsequently listed on stock exchanges. The primary issue of government securities is governed by the Government Securities Act, 2000. Instruments such as certificates of deposit and commercial paper are money market securities, whose issuance is also governed by RBI.

The provisions of these Acts regulate the following with respect to public issues:

- Eligibility to make public issue
- Information to be provided to the public and regulators
- Reservation for different categories of investors
- Methods of making the offer to investors
- Timelines for the issue process
- Usage of funds raised in issues
- Continued involvement and accountability of promoters and other inside investors in case of equity issuances
- Provision for investors to continuously evaluate the investment and execute investment and exit decisions.

2.1.4 Types of Investors

Both retail and institutional investors participate in primary market issues. The following are the various categories of investors who buy securities in the primary markets:

- Resident individuals

- Hindu undivided family (HUF)
- Minors through guardians
- Registered societies and clubs
- Non-resident Indians (NRI)
- Persons of Indian Origin (PIO)
- Qualified Foreign investors (QFI)
- Banks
- Financial institutions
- Association of persons
- Companies
- Partnership firms
- Trusts
- Foreign institutional investors (FIIs)
- Limited Liability Partnerships (LLP)

Individual investors are further categorized based on the amount invested as retail, who invests less than Rs.2 lakhs in a single issue and non-institutional buyers (NIBs), who invest more than Rs. 2 lakhs in a single issue. The other categories of investors are classified as institutional investors and are also known as qualified institutional buyers (QIBs)

Some securities may be available only to specific categories of investors. The information about who can purchase securities being offered is provided in the offer document.

Investors require a PAN card issued by the Income Tax authorities to be able to apply in a primary market issue of securities. If the securities are to be issued in only dematerialized form, then the investor needs to mention the demat account details in the application form.

2.1.5 Types of Public Issue of Equity Shares

Public issue of equity shares can be categorized as follows:

a. Initial Public Offer (IPO)

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

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

Example

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

- A. The company decides to make a fresh issue of 500 shares.
- B. The company decides to offer 250 shares of each promoter to the public.

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

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

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

- The capital of the company will remain at 1000 shares with a face value of Rs.10 each.
- The holding of the promoters will decrease to 250 shares each from 500 shares each pre-issue. They now hold 25% each of the share capital; 50% is held by the public.
- The money raised in the IPO will go to the promoters who have sold the shares and not to the company.

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

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

b. Follow-on Public Offer

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

2.1.6 Pricing a Public Issue of Shares

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

a. Fixed Price Issue

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

b. Book Built Issue

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

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

Price	No. of Shares	Total Demand
Rs 144	1000	1000
Rs 140	1500	2500
Rs 135	2500	5000
Rs 130	1000	6000
Rs 120	500	6500

The offer is filled up at the cut-off price of Rs 135. All investors who bid at this price and higher are eligible for allotment in their respective categories. The company may decide the cut-off price at a price lower than the price at which the issue is subscribed for the benefit of the investors. Book built issues may also have a clause which allows allotment to retail investors at a price that is at a discount to the cut off price which cannot however exceed 10% of the price at which shares are allotted to the other category of investors.

In a book built offer, not more than 50% shall be offered to the QIBs of which 5% shall be reserved for mutual funds, not less than 15% to non-institutional investors and not less than 35% to the retail investors.

For fixed price offers, a minimum of 50% of the net offer of securities to the public shall be initially made for allotment to retail individual investors and the balance to HNIs and other investors.

2.1.7 Regulatory Norms for Public Issue of Shares

A public issue will be open for a minimum of three working days and a maximum of 10 working days in the case of fixed price issues. For book built issues, the offer will be open for a period between 3 to 7 days extendable by 3 days in case of a revision in price band. Investors can make applications during this period. In a book built issue investors can also revise bids in this period. SEBI's regulations requires a company making a public issue of shares to enter into an agreement with all the depositories to dematerialize its shares so that investors can be given the option of holding the shares in dematerialized form. If the issue size is equal to ten crores or more, then the securities will be issued only in dematerialized form.

Companies making a public offer of shares may choose to get the IPO graded by a credit rating agency registered with SEBI. The grading is done based on the prospects of the industry, the competitive strength of the company and risks in the business. It is not

mandatory for companies to do so. The grade assigned based on the evaluation is an assessment of the fundamentals of the issuer and is not a commentary on the issue price or a recommendation to subscribe to the issue. The grade ranges from 1 to 5, with 5 indicating strong fundamentals and 1 poor fundamentals.

2.1.8 Applying to a Public Issue

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

A public issue is open for subscription during a limited period as notified by the company. The date on which the issue will open for subscription and the earliest closing date are mentioned in the announcements about the issue. Investors have to make their application during this period. The application forms are available with the brokers and syndicate members and with collection banks appointed as constituents to the issue.

The NSE, BSE and MSEI feature an online bidding network that enables conducting online bidding for IPOs offered using the book building route. It is a screen based system in which investors through the trading terminals of broker-members can enter bids. This is a lower cost option to reaching a large number of investors electronically. This segment is called the IPO market and is operated from 10 am to 5pm during the IPO period. The lead manager can seek an extension of bidding time on the closing date.

From 2013, all public issues will provide the e-IPO facility under which investors can bid for IPOs using the electronic trading facility of any broker of the exchange, whether or not the broker is appointed as such for the issue. The price band is announced at least 5 days before the issue opens. This enables investors to evaluate the issue and decide the price they are willing to bid for. With effect from January 1, 2016, Depository participants, Registrar and Transfer Agents shall also be allowed to accept both physical as well as online applications and make bids on the stock exchange platform, in addition to the banks and stock brokers where such facilities are currently available.

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

Investors who bid a price can revise their bid at any time using the revision form attached to the application form. They can also modify their bids online. This has to be done before the issue closing date.

With effect from January 1, 2016 payment for applications made in a public issue must be made only using the ASBA (application supported by blocked amount) facility. ASBA is an application for subscription to an issue containing an authorization to the investors' bank to block the application money in the bank account and release funds only on allotment.

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

The issue may be over-subscribed, which means that the bids made at the cut-off price and higher were for a higher number of shares than what was offered. In an over-subscribed issue, the shares will be allotted to an investor on a proportionate basis. There will be a refund made to the extent that the shares allotted are lower than the shares applied for. If subscriptions are lower than the offered number of shares, it is undersubscribed and all applying investors, at or above the cut-off price will receive allotments. The issuer credits the shares to the beneficiary demat account of the successful applicants, and refunds for partial or non-allotment. With effect from January 1, 2016, the post-issue activities will be completed within 6 working days of the closing date of the issue.

2.1.9 Public Issue of Debt Securities

A company can make a public issue of debt securities, such as, debentures by making an offer through a prospectus. The issue of debt securities is regulated by the provisions of the Companies Act and SEBI (Issue and Listing of Debt Securities) Regulations, 2008. The company will appoint a lead manager who will ensure compliance with all the regulatory requirements for the issue.

A public issue of debt securities is possible by a company registered as a public limited company under the Companies Act, 2013. An unlisted company, in other words a company that has not made an initial public offer of its shares and listed the shares on a stock exchange, can still make a public issue of debentures and list them on a stock exchange. The company files an offer document with SEBI and the Registrar of Companies which gives all the material information of the issue. The final document will be available for download from the website of the stock exchange where the instrument is proposed to be listed prior to the issue opening. If there is a request for a physical copy of the offer document, the lead manager or issuer is required to make the same available. The debentures issued under

a public offer have to mandatorily be listed on a stock exchange. The company has to obtain credit rating from at least one credit rating agency and the rating has to be disclosed in the offer document. If the rating has been obtained from more than one rating agency, all the ratings have to be disclosed. In any public issue of debt securities the base issue will be a minimum of Rs. 100 crores. If the minimum subscription of 75% of base issue is not received then the issuer will have to refund the application money received within 12 days of the closure of the issue. This requirement does not apply to the issue of tax-free bonds as specified by CBDT. Issuers will be allowed to retain a maximum of 100% of the base issue size. In case of issuers filing a shelf prospectus they can retain oversubscription up to the size specified in the shelf prospectus.

a. Dematerialization

The issuer has to enter into an agreement with a depository for dematerialization of the securities proposed to be issued.

b. Coupon Rate

The issuer in consultation with the lead manager may fix the coupon payable on the debenture. The coupon may be determined through a book building process also.

c. Debenture Trustees

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

d. Debenture Redemption Reserve

The company will create Debenture Redemption Reserve and transfer a portion of profits into it each year till the redemption of the debentures.

e. Creation of Security

The Companies Act requires the creation of security in a public issue of debentures. A charge against the assets of the issuer will have to be created. The issue of an unsecured debenture will be treated as deposits raised by the company and will require adherence to the Companies (Acceptance of Deposits) Rules.

2.1.10 Private Placements in Equity and Debt

A private placement of securities is an offer made by a company to a select group of investors such as financial institutions, banks and mutual funds. The advantage of private placement as a way to issue securities and raise funds comes from the following

- Investors are better informed and there are less regulatory compliances in issuances to them
- Issuing securities are less time consuming and cost-efficient since there are fewer procedures to be followed.

According to Section 67(3) of the Companies Act of 2013, an offer to subscribe to securities is made to less than 50 persons is called private placement of securities. The requirements of SEBI's regulations with respect to a public issue will not apply to a private placement. A privately placed security can seek listing on a stock exchange provided it meets the listing requirements of SEBI and the stock exchange. A private placement of securities can be done by a company irrespective of whether it has made a public offer of shares or not.

A private placement of shares or of securities that can be converted into shares at a future date, such as fully convertible and partly convertible debentures and warrants, made by a listed company is called a preferential allotment of securities.

- Preferential allotment requires a resolution to be passed by the existing shareholders
- Pricing of the securities will be done according to the formula laid down by SEBI
- The shares will be locked-in for a period of one year

These regulations aim at ensuring that promoters and large investor groups do not take any action that may be detrimental to the interests of the public investors.

Qualified Institutional Placement

Qualified institutional placement (QIP) is a private placement of shares made by a listed company to certain identified categories of investors known as Qualified Institutional Buyers (QIBs). To be eligible to make such a placement the shares of the company should have been listed on the stock exchange for a period at least one year before the notice of such issue is given. QIBs include financial institutions, mutual funds and banks among others.

QIPs are made at a price derived from the share prices according to the formula prescribed by SEBI. Shares allotted in a QIP can be sold only on a recognized stock exchange if the sale happens within one year of allotment.

Institutional Placement Program (IPP)

An Institutional Placement Program is an issuance of fresh shares by a company or an offer for sale by a promoter or promoter group to QIBs to meet the minimum shareholding requirement specified by stock exchanges in their listing requirements. As prescribed by SEBI, private companies listed on the NSE, BSE and MCX-SX have to adhere to the listing requirement of a minimum public shareholding of 25%. For certain companies, such as

government-owned PSEs the limit is 10%. The company will specify a floor price or a price band for the bidding at least one day before the offer opens. The issue will remain open for a minimum period of one day and a maximum of two days. SEBI has prescribed restrictions on the transferability of shares acquired through an IPP for a period of one year.

Issue of Specified Securities by Small and Medium Enterprises (SME)

The issue of shares by entities identified as small and medium enterprises is governed by SEBI's Regulations for the same. A small and medium enterprise is defined as an issuer whose post issue face value capital does not exceed Rs.10 crore and issuers whose capital exceeds Rs. 10 crore but not Rs. 25 crores.

Such entities are not required to file a draft prospectus with SEBI. Instead a copy of the offer document will be filed with SEBI along with the SME exchange where the shares are proposed to be listed and the Registrar of Companies. The offer document will be available on the websites of SEBI, the stock exchange, the issuer and the merchant banker. The issue will be 100% underwritten by the merchant and nominated investors such as venture capital funds and private equity funds. The minimum application size shall not be less than Rs. 1 lakh.

The securities issued under the provisions of these guidelines will list on an SME Exchange. If the issuer who makes an issue in accordance with these guidelines has shares listed on any other national stock exchange, such shares shall also migrate to the SME Exchange. A company whose shares are listed on a stock exchange and whose post-issue face value capital does not exceed Rs.25 crores may migrate the shares to an SME exchange after passing a special resolution to this effect. Similarly, a company whose shares are listed on an SME Exchange may choose to migrate to a national exchange by passing a resolution to this effect or if the face value of its capital is likely to increase beyond Rs.25 crore. The company will have to meet the eligibility norms laid down by the exchange to which it intends migrating its shares.

The merchant banker will arrange for compulsory market making for at least three years from the date of listing or migration of securities to the SME exchange, through the brokers of the exchange.

Institutional Trading Platform (ITP)

The ITP has been introduced to provide a platform for capital raising by companies with intensive use of technology, information technology, nano technology, data analytics, bio technology and such other companies where at least 25% of the pre-issue capital is held by QIBs. It is also available for other categories of companies where at least 50% of the pre-issue capital is held by QIBs. The company is required to disclose only broad objects of the issue and there will be no restriction on the capital raised for general corporate purposes. The entire pre-issue capital will be locked-in for a uniform 6 months. The investors who can invest

through the ITP include institutional investors with a networth of more than Rs. 500 crores and Non-Institutional Investors other than retail individual investors. The minimum application size in an issue will be Rs. 10 lakhs and the minimum trading lot will be Rs. 10 lakhs. Companies will have the option to migrate to the main exchange after 3 years provided they meet the eligibility norms of the stock exchange.

2.2 Role and Function of the Secondary Market

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

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

2.2.1 Functions of Secondary Markets

a. Liquidity

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

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

b. Price Discovery

Secondary markets enable price discovery of traded securities. The price at which investors undertake buy or sell transaction reflects the individual assessment of investors about the fundamental worth of the security. The collective opinions of various investors are reflected

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

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

c. Information Signalling

Market prices provide instant information about issuing companies to all market participants. This information-signalling function of prices works like a continuous monitor of issuing companies, and in turn forces issuers to improve profitability and performance. Efficient markets are those in which market prices of securities reflect all available information about the security. A large number of players trying to buy and sell based on information about the listed security tend to create a noisy and chaotic movement in prices, but also efficiently incorporate all relevant information into the price. As new information becomes available, prices change to reflect it.

d. Indicating Economic Activity

Secondary market trading data is used to generate benchmark indices that are widely tracked in the country. A market index is generated from market prices of a representative basket of equity shares. Movements in the index represent the overall market direction. The BSE-Sensex, MSEI-SX40 and the NSE-Nifty are the most popularly watched indices in India. A stock market index is viewed as a barometer of economic performance. A sustained rise in key market indices indicates healthy revenues, profitability, capital investment and expansion in large listed companies, which in turn implies that the economy is growing strongly. A continuous decline or poor returns on indices is a signal of weakening economic activity.

e. Market for Corporate Control

Stock markets function as markets for efficient governance by facilitating changes in corporate control. If management is inefficient, a company could end up performing below

its potential. Market forces will push down shares prices of underperforming companies, leading to their undervaluation. Such companies can become takeover targets. Potential acquirers could acquire a significant portion of the target firm's shares in the market, take over its board of directors, and improve its market value by providing better governance. An actual takeover need not happen; even the possibility of a takeover can be an effective mechanism to ensure better governance.

2.2.2 Market Structure and Participants

The secondary market consists of the following participants:

- Stock exchanges – entities which provide infrastructure for trading in securities
- Investors – individuals and institutions that buy and sell securities
- Issuers - companies that issue securities
- Financial intermediaries – firms that facilitate secondary market activity
- Regulator – authority that oversees activities of all participants in the market

a. Stock Exchange

The core component of any secondary market is the stock exchange. The stock exchange provides a platform for investors to buy and sell securities from each other in an organized and regulated manner. Stock exchanges stipulate rules for members who are permitted to transact on the exchange, and for listing companies whose securities are permitted to be traded. The two leading stock exchanges in India are the BSE and the NSE. MSEI is the third national level stock exchange which commenced operation in 2013. The trading terminals of these exchanges are present across the country.

b. Members

Investors can trade in the secondary markets only through members of a stock exchange. The trading members of stock exchanges are also called stock brokers; and their affiliates-called sub-brokers. They bring the buyers and sellers to the stock exchange platform, thus enabling trading in securities. Members will be admitted to an exchange only if they fulfil minimum requirements for capital, qualification, net worth and other criteria for admission. Stock exchange members can be trading members, or clearing members, or play both roles. Stock exchanges monitor members for their positions, capital, and compliance. Members' obligations towards their clients (investors) are also clearly laid down.

c. Investors

If investors buy and sell shares among themselves, such trades are called "off-market" and do not enjoy the benefits of regulatory and redressal provisions of the law. In order to get a competitive price and a liquid markets in which transactions can be completed efficiently, investors come to the stock exchange through their brokers. Investors complete a KYC

(know your customer) process with a registered broker-member and receive a unique client code (UCC). Institutional investors are supported by a distinct arm of the broker-member since they transact in large volumes. Banks, insurance companies, mutual funds, foreign institutional investors are all large investors who may have their own dealers interacting with member brokers who put their transactions through on the exchange. Brokers also support investors with market information, updates, research reports, analytical tools and other facilities that help in buying and selling securities.

d. Issuers

Issuers are companies and other entities that seek admission for their securities to be listed on the stock exchange. Equity shares, corporate bonds and debentures as well as securities issued by the government (G-secs and treasury bills) are admitted to trade on stock exchanges. There are specific eligibility criteria to list securities on the stock market. These can be in terms of size, extent of public shareholding, credit rating, ownership pattern, etc. Issuers have to pay a listing fee and also comply with requirement for disclosure of information that may have a bearing on the trading prices of the listed securities.

e. Trading, Clearing and Settlement

Secondary market transactions have three distinct phases: trading, clearing and settlement. To trade in shares is to buy and sell them through the stock exchanges. Stock exchanges in India feature an electronic order-matching system that facilitates efficient and speedy execution of trades.

After the trade is executed, the buyer has a payment obligation and the seller has a delivery obligation. In order to facilitate efficient trading, the execution of trades and the settlement of obligation are separated in modern stock exchanges.

Clearing is the process of identifying what is owed to the buyer and seller in a trading transaction; and settlement is the mechanism of settling the obligations of counter parties in a trade. All stock exchanges in India follow a common settlement system. Most trades that take place on a particular day (say, T) are settled after two business days (say, T+2).

f. Clearing Corporations

In the modern structure of secondary markets, clearing corporations (also known as clearing houses) are set up as independent fully-owned subsidiaries of stock exchanges. They function as counter-parties for all trades executed on the exchange they are affiliated with. So all buyers pay funds to the clearinghouse, and all sellers deliver securities to the clearinghouse. Specialised intermediaries called clearing members complete these transactions. The clearinghouse completes the other leg of the settlement by paying funds sellers and delivering securities to buyers. The National Securities Clearing Corporation Ltd (NSCCL) is the clearinghouse for trades done on the NSE; the Indian Clearing Corporation

Ltd (ICCL) is the clearinghouse for BSE and Metropolitan Clearing Corporation of India Ltd. (MCCIL) is the clearing house for MSEI.

g. Depositories and Depository Participants

In order for a security to be eligible to trade in the secondary markets, it should be held in electronic or dematerialised form. Issuers get their securities admitted to the depositories, where they are held as electronic entries against investor names, without any paper certificate. National Securities Depository Ltd (NSDL) and Central Depository Services Ltd (CDSL) are the two depositories in India.

Investors have to open demat accounts with depository participants (DPs), who are banks, brokers or other institutional providers of this service, to be able to trade in their securities. Demat accounts are similar to bank accounts in securities. Since the entries are electronic, transfer of securities from buyer to seller is easily completed by paper or electronic instruction to the DP. Settlement of securities transactions is done through the demat account held with the DP, who in turn notifies the depositories of the change in ownership of the securities. Payments are made and received through specifically identified clearing banks.

Depositories enable a single point for electronic holding of financial assets. This includes equities, warrants, preference shares, mutual funds held in demat form, corporate bonds, money market instruments, government securities, securitized instruments and postal savings schemes. SEBI has directed that investors should be sent a consolidated account statement (CAS) detailing their holding in the demat account as well as mutual funds units held in physical form in a mutual fund folio as the first step towards consolidating all investments in a single statement. The consolidation will be done on the basis of PAN of the first holder and holding pattern.

h. Custodians

Custodians are institutional intermediaries, who are authorised to hold funds and securities on behalf of large institutional investors such as banks, insurance companies, mutual funds, and foreign institutional investors (FIIs). They settle the secondary market trades for institutional investors. Several custodians are also clearing members and clearing banks of the exchange and manage both funds and security settlements.

i. Regulation

Secondary markets are regulated under the provisions of the Securities Contract Regulations Act, 1956 and SCR (Rules), 1957. SEBI is authorised by law to implement the provisions of this act and its rules. It has empowered stock exchanges to administer portions of the regulation pertaining to trading, membership and listing. All the intermediaries in

the secondary markets are subject to regulatory overview of SEBI and are required to register and comply with the rules as may be stipulated.

2.2.3 Market Information

a. Market Capitalisation

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

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

In terms of return performance, large cap stocks tend to be less volatile than mid-cap stocks. In bull markets, mid-caps tend to run ahead of large caps, and in bear markets, they tend to fall more than large caps. If large cap stocks represent liquidity and stability, mid-caps represent momentum and opportunity.

There is no specific size for the cut-off of large, mid or small stocks. Market cap is a number that is influenced by the market price of shares, a dynamically changing number. It is therefore common to consider the top 50 stocks by market capitalisation as large cap, the next 200 as mid cap, and the next 500 as small cap stocks.

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

b. Market Turnover

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

Trading activity is measured in two ways-traded values in rupees and traded volume in number of trades. It is usual for large cap stocks to have a high traded value; high volume of trades can occur across stocks. Sometimes due to specific events or news, certain stocks may also show a high traded volume.

The percentage of stocks traded for delivery indicates how much of trading activity resulted in settlement and therefore might have been bought by investors rather than traders or speculators.

c. Market Indices

A market index tracks the market movement by using the prices of a small number of shares chosen as a representative sample. Most leading indices are weighted by market capitalisation to take into account the fact that more the number of shares issued, greater the number of portfolios in which they may be held. Stocks included in an index are also quite liquid, making it possible for investors to replicate the index at a low cost. Narrow indices are usually made up of the most actively traded equity shares in that exchange. Other indices to track sectors or market cap categories are also in use.

The most widely tracked indices in India are the BSE Sensitive Index (Sensex), the MSEI Flagship Index (SX40) and the CNX Nifty (Nifty). The Sensex has been computed as the market cap weighted index of 30 chosen stocks on the BSE.

The CNX Nifty is composed of 50 most representative stocks listed on the National Stock Exchange. The shares included in Nifty are chosen on the basis of factors such as liquidity, availability of floating stock and size of market capitalization.

The SX40 is composed of 40 most representative stocks listed on MSEI. SX40 is a free float based index consisting of 40 large cap liquid stocks representing diversified sectors of the economy.

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

Some of the other common indices in India are listed below:

- CNX Nifty Junior
- CNX 100
- CNX 500
- BSE-100
- BSE- 500
- BSE-Midcap
- BSE-Small Cap
- MSEI-SX 40 Index

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

A stock market index has several uses:

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

d. Reading Market Prices

When the market is live, prices of traded stocks and updated value of indices run as a ticker tape. This tape shows the last traded price and the change in price in comparison with the previous day's closing price. A green upward arrow shows that the stock price has moved up compared to previous day's closing; a red downward arrow shows that the price has fallen compared to previous day's closing. The ticker tapes can be seen on television channels, billboards, websites or any other media that subscribe to this information from the exchange.

During market hours, a live snapshot of trading activity is available for listed stocks, which shows the summary of market activity. Before making a decision to buy or sell a share, investors may like to look up this information to get more detail about the stock they like to transact in.

2.2.4 Risk Management Systems in the Secondary Markets

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

a. Capital Adequacy Norms

In order to be eligible to be trading and clearing members, individual and corporate entities have to meet and maintain minimum paid-up capital and net worth norms prescribed under the regulations. Members of a stock exchange have to deposit and maintain liquid assets

with the stock exchange and the clearing corporation. Total liquid assets of members are divided into Base Minimum Capital (BMC) and additional capital. BMC is fixed by the concerned exchange and is not available for margin payments. SEBI norms stipulate a BMC of Rs. 10 lakhs under normal conditions. Additional capital is brought in over and above the BMC has to be adequate to cover all margin payments.

b. Margins

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

Suppose an investor purchases 100 shares of Company X at Rs. 100 each on January 1, 2014. He has to pay in Rs. 10,000 by January 3, 2014. The risks in this transaction are that:

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

In order to minimise this default risk, both buyers and sellers of equity are required to pay a percentage of their dues upfront at the time of placing their order. This payment is known as margin. For example, if the margin is set at 17%, the buyer would pay Rs.1700 in advance. Margins are collected by brokers when the order is placed. Stock exchanges collect margins from brokers when the order is executed.

All securities are not charged margin at the same rate. This is because the tendency to default on funds payment or delivery of shares is higher when share prices vary a lot, rather than when they are less volatile. An equity share whose price shows greater variation in either direction (both up and down) is said to have higher volatility as compared to a share whose prices show less up-and-down movement. Volatility is a measure of riskiness in share prices.

Volatility creates default risk because of the probability that share prices may decline between purchase and pay-in period. Suppose, in the above example, assume that the price of the share falls to Rs. 80 on January 2, 2014. Then the investor has incurred a notional loss of Rs. 2000 on his purchase. He may be less inclined to pay Rs. 10,000 on January 3, 2014. Alternately, if prices go up, the seller may not want to give delivery at the lower price. This means that shares with greater price volatility have higher default risk and therefore higher margin requirements.

The margin on equity shares traded on an exchange is imposed on a daily basis, and is the sum of value at risk margin, extreme loss margin and mark to market margin.

Margins are collected by adjusting payments due against total liquid assets of a member (excluding base minimum capital). In case of shortfall of margins, the terminals of the trading member are immediately de-activated.

c. Circuit Breakers

If there is an abnormal price movement in an index, defined in percentage terms, the exchange can suspend trading. This is called hitting the circuit breaker. Index-based market wide circuit breakers are set daily based on the previous day's close at index movements either way of 10%, 15% and 20%. NSE and BSE are required to compute the market-wide indices the NIFTY and SENSEX, respectively, after each trade in any of their constituent stocks and check for breach of circuit breaker after each computation. In the event of a breach, the exchanges should stop all order matching in order to bring about a trading halt. The period for which trading is suspended depends upon the extent of movement and the time when such move occurred. A 10% move before 1.00 pm halts trading for 1 hour, between 1 pm and 2.30 pm there is a half hour halt and after 2.30 pm there is no suspension of trading. A 15% move in either direction before 1 pm leads to a 2 hour halt, between 1pm and 2pm to a one hour halt and after 2pm trading is suspended for the day. A 20% market movement leads to suspension of trading for the rest of the day.

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

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

The price bands for the securities in the Limited Physical Market are the same as those applicable for the securities in the Normal Market.

d. Pay-in Shortfall Penalties

If the member has a shortfall in the pay-in amount due, and the shortage exceeds the BMC, then his trading facilities are withdrawn and securities pay-out is withheld. The same penalty is levied if the shortage in pay-in funds is greater than 20% of BMC but less than the BMC, but occurs six times in a period of 3 months. The exchange will also levy a penalty equal to at least 0.07% of the shortfall on a daily basis.

e. Settlement Guarantee Mechanism

The clearing house is the counterparty to all trades in the stock exchange. This implies that it assumes counterparty risk completely, by settling all trades even if the trading member defaults on pay-in or pay-out. Some of this counter party risk is managed through the levy

of margins. Any residual risk is funded by a separate pool of funds known as the Trade Guarantee Fund (on BSE) or Settlement Guarantee Fund (on NSE).

Contributions from trading members are used to build up the corpus of this fund. Members contribute a small fixed amount from their BMC and a continuous contribution based on gross turnover. In addition, each member provides a bank guarantee for an amount specified by the clearing corporation from a scheduled commercial or co-operative bank to the corpus of the Fund. The existence of such a fund protects investors from member defaults. The concept of guaranteed settlement gives investors the confidence that settlements will be completed irrespective of defaults by few members.

f. On-line Monitoring

Regular on line monitoring of brokers' transactions and positions is carried out. The system is designed to give alerts if members build up abnormal sale or purchase positions or if margins are inadequate relative to exposure. The clearing house can pro-actively carry out a detailed check of members trading and reduce his open positions, if necessary. Any news or media information that leads to unusually large price/volume movements are also scrutinized and investigated by surveillance officers of the stock exchange.

g. Price Monitoring and Action

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

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

h. Inspection of Books

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

2.3 Corporate Actions

A company conducts several actions, apart from those related to its business, that have a direct implication for the shareholder. These include sharing of surplus with the shareholders in the form of dividend or bonus, changes in the capital structure through the issue of rights shares, buy backs, mergers and acquisitions and delisting. In a company that has made a public issue of shares the interest of the small investors have to be particularly protected. All corporate actions are regulated by the provisions of the Companies Act, 2013, the relevant regulations of SEBI and the terms of the listing agreement entered into with the stock exchange. All corporate actions therefore require notice to be given to the regulators as specified in the applicable clauses.

Corporate benefits and actions apply to all investors who appear in the register of members, if the shares are held in physical form or in the case of dematerialized shares, the names of shareholders that appear in the register of beneficial owners maintained by the depository. In order to determine this, the company announces a record date or book closure period and investors whose names appear on the records on this date are eligible shareholders to receive notice of the action and entitled to benefit from it.

2.3.1 Rights Issue

Whenever a company makes a fresh issue of shares, it has an impact on the existing shareholders since their proportionate holding in the share capital of the company gets diluted. For example, a company may have 10 lakhs shares of Rs.10 each, amounting to an issued and paid-up capital of Rs. 1 crore. If it issues another 10 lakhs shares, to increase its capital, the proportion held by existing shareholders will come down by half, as the issued and paid up capital has doubled. This is called as dilution of holdings. To prevent this, section 81 of the Company's Act requires that a company which wants to raise more capital through an issue of shares must first offer them to the existing shareholders. Such an offer of shares is called a rights issue.

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

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

letter of offer must be dispatched to all investors at least three days before the issue opens. Investors can also apply on a plain paper if they do not receive the application form. The rights issue is kept open for a period not less than 15 days and not exceeding 30 days during which investors subscribe to the shares. The rights entitlements are credited to the demat account of the investor.

Investors can also choose to decline the offer or sell their entitlement to another. This is called renouncing the rights. Rights entitlements are traded on the stock exchange during the period. The entitlement will be traded distinct from the equity share of the company. The trading in the entitlement will cease before the period of the rights issue ends, which gives the investors who bought the entitlement the time to apply for the shares.

2.3.2 Bonus Issue

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

A company has to get the approval of its board of directors for a bonus issue. In some cases, the shareholders of the company also need to approve the issue. Where the shareholders' approval is not required, the bonus issue must be completed within 15 days of the board's approval. Where approval of the shareholders is required, the issue must be completed within two months of receiving the board's approval. A bonus issue once announced cannot be withdrawn. The record date for the bonus issue will be announced and all shareholders as on the record date will be entitled to receive the bonus. The listing agreement entered into by the company with the stock exchange where the shares are listed requires the company to give notice of at least seven working days to the exchange of the book closure or record date for a bonus issue. The company shall also inform the stock exchange of the date on which the bonus shares will be credited/despached.

2.3.3 Dividend

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

A loss-making company cannot therefore pay a dividend to its shareholder. A company which has failed to redeem its preference shares is prohibited from declaring dividends. Dividends

cannot be declared out of the share premium account, revaluation reserve or capital redemption reserve, among others.

SEBI has mandated that listed companies shall declare dividends on a per share basis as against the practice in the past of declaring dividends as a percentage of the face value. This is to avoid confusion among investors. For example, if a 50% dividend was declared by company A whose shares had a face value of Rs.2 and company B whose shares had a face value of Rs.10, an investor in company A will receive Re.1 as dividend as against Rs.5 in the case of company B. The dividends received by the investor are different even though the percentage is the same because the face value of the shares is different. In the interest of the investors company A is now required to declare the dividend as Re.1 per share while company B will declare the dividend payable as Rs.5 per share.

The board of directors of a company will recommend the dividend which will be approved by the shareholders. A company has to pay dividends within 30 days of its declaration.

2.3.4 Stock Split

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

The value of the investor's holding will not change. For example, if the shares were trading at a price of Rs. 1000 per share prior to the split, post the split the price is likely to come down to Rs. 200 per share. The value of the investor's holding was Rs. 10000 (100 shares x Rs. 1000). Post the split the value will remain at Rs. 100000 (500 shares x Rs. 200). The actual price will be around Rs. 200 and will depend on market factors of demand and supply.

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

A stock split has to be proposed by the board of directors of a company and approved by the shareholders. The additional shares on account of the split get credited to the demat account of the shareholder. If the shares are held in physical form it may be necessary to surrender the existing share certificate and receive the new certificates with the lower face value.

2.3.5 Share Buyback

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

The shares can be bought back using the tender method by making an offer to existing shareholders on a proportionate basis or from the open market through a book building process or through the stock exchange or from odd lot holders. The company will pass a special resolution which will specify the maximum price at which the buyback will be made.

In a tender offer, the company will send an offer document which has been approved by SEBI along with the tender form to the existing shareholders who are eligible to participate in the buyback as on the record date announced for this purpose. The offer will remain open for a period of ten working days. The company will accept shares tendered by shareholders based on the entitlement on the record date and payment will be made from a bank account created for the purpose and the shares accepted will be extinguished.

An open market offer cannot buyback 15% or more of the paid up capital and free reserves of the company. An open market offer through a book building process will specify the period over which the bidding can be done, the method of bidding, the bidding centres and the maximum price that will be accepted. The bidding centres will be electronically linked and the final price will be determined based on the bids received. This will be the highest price bid and the price will apply to all the shares bought back.

An open market offer through the stock exchange requires the notice of the buyback to specify the brokers and stock exchanges through which the buyback will be conducted apart from other details such as the maximum price that will be paid. The buyback shall be made through the order matching mechanism of stock exchanges having nation-wide terminals. It will be concluded within six months from the opening of the offer.

All shares bought back will be extinguished within the period specified in the regulations.

2.3.6 Delisting of Shares

Delisting of shares refers to the permanent removal of the shares of a company from being listed on a stock exchange. Delisting may be compulsory or voluntary. In a compulsory delisting, the shares are delisted on account of non-compliance to regulations and the clauses

of the listing agreement by the company. In a voluntary delisting, the company chooses to get the shares delisted by buying back the shares in a reverse book building process. The offer will have a floor price which will be the 26 weeks average traded price on the exchange. There will be no ceiling price. Based on the price that is discovered in the book building process, the shares will be bought back and the promoter can then get the shares delisted from the exchange.

2.3.7 Mergers and Acquisitions

The shareholding pattern of a listed company may change due to a substantial acquisition of shares and voting rights by an acquirer and persons acting in concert with the acquirer. There are SEBI Regulations that provide the opportunity to public shareholders to exit from the company if they choose to do so. The SEBI (Substantial Acquisition of Shares and Takeover) Regulations, 1997, provides for the acquirer to make an open offer to the shareholders of the target company if the shares acquired in a financial year exceed 5% where the acquirer already controls the voting rights to 25% or more but less than the maximum permissible limit for non-public shareholding. The minimum offer to be made in such a case is 10%. A person holding less than 25% of the voting rights may also make an open offer provided the offer is for a minimum of 26% of the share capital.

The Acquirer will appoint a merchant banker to manage the open offer. A letter of offer giving details of the offer in the prescribed format is sent to the shareholders. The offer price will be decided based on the formula prescribed by the regulations which takes into consideration the highest price paid by the acquirer to acquire shares in a defined period and the market price. The offer is kept open for a period of 10 days. The shareholder who intends to accept the offer has to fill in the tender form enclosed with the offer letter and submit it to the registrar to the open offer or the merchant banker. Once an investor tenders the shares, it cannot be withdrawn. If the shares tendered in the offer are less than the offer size, all the shares tendered that are valid are accepted. If the shares tendered are more than the offer size then the acceptance will be made on a proportionate basis. Within 10 days of the closure of the offer, the payment for the accepted shares has to be made to the investors.

Sample Questions

1. An unlisted company cannot make a public issue of debentures. State whether True or False.
 - a. True
 - b. False**

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

3. Payment for a public issue can be made through which of the following modes after Jan1, 2016?
 - a. Cash
 - b. ASBA**
 - c. Local cheque
 - d. All of the above

4. The share capital of a company will NOT increase when there is a
 - a. Fresh issue of shares
 - b. Offer for sale**
 - c. Private placement
 - d. Preferential allotment

CHAPTER 3: MUTUAL FUNDS

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Meaning and features of mutual fund
- Terminology related to mutual funds investing
- Regulatory framework of mutual funds
- Different kinds of mutual funds and investment options in mutual funds
- Systematic transactions in mutual funds

3.1 Meaning and features of Mutual Fund

Mutual funds are investment products available to investors through which they can invest in an asset class of their choice such as equity, debt, gold or real estate. Investors who may not want to invest directly in financial markets may instead get exposure to the same securities through a mutual fund. Similarly, investors can diversify their portfolio holdings even with small amounts, by investing in gold and real estate through mutual funds. Each product offered by a mutual fund is called a scheme or fund. A mutual fund may offer multiple schemes or funds, each catering to a different investment need of the investor.

An investor may choose to invest through a mutual fund to be able to use the services of the fund manager who will make the investment decisions relating to selection of securities, timing of investments, reviewing and rebalancing the portfolio periodically and executing the operational decisions related to the portfolio. These services are provided to the investor by charging a fee.

There are multiple entities involved in the activities of a mutual fund business. All these entities are regulated by SEBI for their eligibility in terms of experience and financial soundness, range of responsibilities and accountability. A mutual fund is set up by a sponsor, who is its promoter. Trustees are appointed to take care of the interests of the investors in the various schemes launched by the mutual fund. An asset management company (AMC) is appointed to manage the activities related to launching a scheme, marketing it, collecting funds, investing the funds according to the scheme's investment objectives and enabling investor transactions. In this, they are assisted by other entities such as banks, registrars to an issue and transfer agents, investor service centres (ISC), brokers or members of stock exchanges, custodians, among others.

For example, the sponsor of the HDFC Mutual Fund is HDFC and Standard Life Investments Ltd and the trustees are the HDFC Trustee Company Ltd. The AMC is HDFC Asset Management Company Ltd.

The AMC creates a product with the approval of the trustees and SEBI. The mutual fund invites subscription from investors by issuing an offer document that gives all details of the proposed fund, including its investment objective, investment pattern in different asset classes to reflect the objective, the strategy of the fund manager to manage the fund, the costs and fees associated with managing the fund and all other information prescribed by SEBI as essential for an investor to make an investment decision. This is the New Fund Offer (NFO) of the scheme and it is kept open for a period not exceeding 15 days. The investor will assess the suitability of the fund for their investment needs and make an investment decision. The application form along with the abridged offer document called the Key Information Memorandum (KIM) is available with the AMC, investor service centres and other distribution points, the details of which are available in the KIM. The units are allotted to investors within 5 business days of the NFO closing and an account statement giving details of the investment is sent to them. The activities related to maintaining investor records and investment details and communicating with the investors is done by the R&T agent of the scheme. The funds collected from multiple investors are invested in a portfolio of securities or assets that reflect the stated investment objective of the fund. This portfolio is owned only by the investors who have contributed the funds, in proportion to their contribution. Investors can invest in the fund even after the NFO. If the fund structure so permits, the scheme will be open for transactions within five business days of the allotment of units in the NFO. The contributions made by the investors need not be equal. The mutual fund will indicate the minimum amount that needs to be invested and the multiples in which investment can be made. The investors participate in the benefits and costs in proportion to the units held by them. The value of the portfolio will depend upon the value of the securities held in it. If the price of the securities goes up, the value of the portfolio will also increase and vice versa. Depending upon the structure of the mutual fund, investors can redeem or withdraw their investment from the mutual fund at any time, and make additional investments into the fund.

3.2 Concepts and Terms Related to Mutual Funds

3.2.1 Investment Objective

An investor's decision to invest in a mutual fund scheme should be determined by the suitability of the scheme to their needs. A mutual fund scheme is defined by its investment objective. The investment objective will state what the scheme intends to achieve. The asset class that the fund will invest in, the type of securities that will be selected and the way the fund will be managed will depend upon the investment objective. The features of the portfolio in terms of the level and type of returns and the risks involved in the fund will also depend upon its investment objective.

3.2.2 Units

Just as an investor's investments in equity of a company is represented in number of shares, or investments in debt is represented in number of bonds or debentures, each investor's holding in a mutual fund is represented in terms of units that is derived from the amount invested. Each unit represents one share of the fund. For example, A & B invests in GTX Equity fund when the price of each unit is Rs.10. A invests Rs.5000 and B Rs.10000. The number of units allotted is calculated as amount invested/price per unit

A : $\text{Rs.5000} / \text{Rs.10} = 500 \text{ units}$

B : $\text{Rs.10000} / \text{Rs.10} = 1000 \text{ units}$

The units are first offered to the investors at the time the scheme is launched through a new fund offer (NFO). Subsequently, depending upon the structure of the scheme, the fund may or may not issue fresh units to investors.

3.2.3 Net Assets

The assets of a mutual fund scheme are the current value of the portfolio of securities held by it. There may be some current assets such as cash and receivables. Together they form the total assets of the scheme. From this, the fees and expenses related to managing the fund such as fund manager's fees, charges paid to constituents, regulatory expenses on advertisements and such are deducted to arrive at the net assets of the scheme. This belongs to the investors in the fund who have been allotted units and no other entity has a claim to it.

The Net assets of a scheme will go up whenever investors buy additional units in the scheme and bring in funds, or when the value of the investments held in the portfolio goes up, or when the securities held in the portfolio earns income such as dividends from shares or interest on bonds held. Similarly, the net assets of the scheme will go down if investors take out their investments from the scheme by redeeming their units or if the securities held in the portfolio fall in value or when expenses related to the scheme are accounted for. The net assets of the scheme are therefore not a fixed value but keep changing with a change in any of the above factors.

3.2.4 Net Asset Value (NAV)

The net asset per unit of a scheme is calculated as Net assets/Number of outstanding units of the scheme. This is the Net asset value (NAV). The NAV of the scheme will change with every change in the Net Assets of the scheme. All investor transactions are conducted at the current NAV of the scheme.

For example, NUM Equity Fund collects Rs. 100000 from investors and allots 10000 units. The funds are invested in a portfolio of securities. Consider the table below.

	Net Assets (Rs) A	Units Outstanding B	NAV (Rs) A/B	Comments
	100000	10000	10	
Value of portfolio goes up	120000	10000	12	An increase in net assets has led to a rise in NAV.
Investor redeems 1000 units when NAV is Rs. 12	108000	9000	12	No change in NAV. A decrease in net assets because of investor redeeming is offset by a decrease in the outstanding units.
Value of portfolio falls	100000	9000	11.11	A decrease in net assets has led to a fall in NAV
Investor buys 1000 units when NAV is Rs. 11.11	111110	1000	11.11	No change in NAV since the addition to net assets brought in by the investor is offset by an increase in units

The value of a mutual fund investor's investment is calculated using the NAV. If an investor has invested 1000 units in the scheme at Rs. 10, the value of the investment is Rs. 10000. When the NAV goes up to Rs. 12, the value of the investment also goes up to Rs. 12000 and when the NAV goes down to Rs. 11.11 the value of the investment comes down to Rs. 11110.

A redemption or additional investment will not directly affect the NAV since the transactions are conducted at the NAV. In the above example, consider the impact if the investor buying 1000 units when the NAV is Rs. 11.11 is allotted units at the face value of Rs. 10. The investor will bring in Rs. 10000 (1000 * Rs. 10). The net assets will go up by this Rs. 10000 to Rs. 110000. The number of units outstanding will go up by 1000 to 10000 units. The NAV post this transaction will be Rs.11. The NAV of the scheme has come down because the units were allotted at a price different from the NAV and will have an impact on all the investors in the scheme. The NAV of a scheme is calculated every business day so that investors can value their portfolio holdings and conduct transactions on this basis.

3.2.5 Mark to Market

The current value of the portfolio forms the base of the net assets of the scheme and therefore the NAV. It means that if the portfolio was to be liquidated, then this would be the value that would be realised and distributed to the investors. Therefore the portfolio has to reflect the current market price of the securities held. This process of valuing the portfolio on a daily basis at current value is called marking to market. The price is taken from the market where the security is traded. If the security is not traded or the price available is stale, then SEBI has laid down the method for valuing such securities.

3.2.6 Open-ended and Closed-end Schemes

Mutual fund schemes can be structured as open-ended or closed-end schemes. An open-ended scheme allows investors to invest in additional units and redeem investment continuously at current NAV. The scheme is for perpetuity unless the investors decide to wind up the scheme. The unit capital of the scheme is not fixed but changes with every investment or redemption made by investors.

A closed-end scheme is for a fixed period or tenor. It offers units to investors only during the new fund offer (NFO). The scheme is closed for transactions with investors after this. The units allotted are redeemed by the fund at the prevalent NAV when the term is over and the fund ceases to exist after this. In the interim, if investors want to exit their investment they can do so by selling the units to other investors on a stock exchange where they are mandatorily listed. The unit capital of a closed end fund does not change over the life of the scheme since transactions between investors on the stock exchange does not affect the fund.

3.2.7 Interval funds

Interval funds are a variant of closed end funds which become open-ended during specified periods. During these periods investors can purchase and redeem units like in an open-ended fund. The specified transaction periods are for a minimum period of two days and there must be a minimum gap of 15 days between two transaction periods. Like closed-ended funds, these funds have to be listed on a stock exchange.

3.3 Regulatory Framework of Mutual Funds

The Securities and Exchange Board of India (SEBI) is the primary regulator of mutual funds in India. SEBI's Regulations called the SEBI (Mutual Funds) Regulations, 1996, along with amendments made from time to time, govern the setting up a mutual fund and its structure, launching a scheme, creating and managing the portfolio, investor protection, investor services and roles and responsibilities of the constituents.

Apart from SEBI, other regulators such as the RBI are also involved for specific areas which involve foreign exchange transactions such as investments in international markets and investments by foreign nationals and the role of the banking system in the mutual funds industry in India.

The Association of Mutual Funds in India (AMFI) is the industry body that oversees the functioning of the industry and recommends best practices to be followed by the industry members. It also represents the industry's requirements to the regulator, government and other stakeholders.

3.3.1 Investor Service Standards

An investor has multiple financial and non-financial transactions with a mutual fund. SEBI has prescribed the turnaround time for the services given to investors. The regulations also define the type of information that mutual funds must mandatorily provide investors and their periodicity.

Transaction/Information	Period
Allotment of Units in NFO	5 days from closing date
Scheme opening for continuous transactions	5 business days from allotment
Despatch of account statement	5 days from request
Despatch of consolidated account statement	End of every month if there is a transaction in the folio. Else every six months
Confirmation of unit allotment by SMS or Email	5 days from purchase application
Despatch of dividend warrants	30 days from dividend declaration
Despatch of redemption proceeds	10 business days from redemption request
Daily NAV of scheme	Available by 9.00 pm on mutual fund and AMFI's website and published in newspapers
Monthly portfolio disclosure	Scheme portfolio at the end of the month made available on the mutual fund's website on or before 10 th of following month.

Unaudited half-yearly financial results and portfolio	Within one month of closure
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3.4 Mutual Fund Products

The primary way of categorizing mutual fund products is on the basis of the asset class in which the scheme will invest. Equity funds, debt funds, hybrid funds, gold funds and real estate funds are types of funds based on this categorization.

3.4.1 Equity Funds

Equity funds invest in a portfolio of equity shares and equity related instruments. Since the portfolio comprises of the equity instruments, the risk and return from the scheme will be similar to directly investing in equity markets. Equity funds can be further categorized on the basis of the strategy adopted by the fund managers to manage the fund

a. Passive & Active Funds

Passive funds invest the money in the companies represented in an index such as Nifty or Sensex in the same proportion as the company's representation in the index. There is no selection of securities or investment decisions taken by the fund manager as to when to invest or how much to invest in each security. Active funds select stocks for the portfolio based on a strategy that is intended to generate higher return than the index. Active funds can be further categorized based on the way the securities for the portfolio are selected.

b. Diversified Equity funds

Diversified equity funds invest across segments, sectors and sizes of companies. Since the portfolio takes exposure to different stocks across sectors and market segments, there is a lower risk in such funds of poor performance of few stocks or sectors.

c. Based on the segment of the market

Equity funds may focus on a particular size of companies to benefit from the features of such companies. Equity stocks may be segmented based on market capitalization as large- cap, mid-cap and small-cap stocks.

- Large- cap funds invest in stocks of large, liquid blue-chip companies with stable performance and returns.
- Mid-cap funds invest in mid-cap companies that have the potential for faster growth and higher returns. These companies are more susceptible to economic downturns and

evaluating and selecting the right companies becomes important. Funds that invest in such companies have a higher risk of the companies selected not being able to withstand the slowdown in revenues and profits. Similarly, the price of the stocks also fall more when markets fall.

- Small-cap funds invest in companies with small market capitalisation with intent of benefitting from the higher gains in the price of stocks. The risks are also higher.

d. Based on Sectors and Industries

Sector funds invest in companies that belong to a particular sector such as technology or banking. The risk is higher because of lesser diversification since such funds are concentrated in a particular sector. Sector performances tend to be cyclical and the return from investing in a sector is never the same across time. For example, Auto sector, does well, when the economy is doing well and more cars, trucks and bikes are bought. It does not do well, when demand goes down. Banking sector does well, when interest rates are low in the market; they don't do well when rates are high. Investments in sector funds have to be timed well. Investment in sector funds should be made when the fund manager expects the related sectors, to do well. They could out-perform the market, if the call on sector performance plays out. In case it doesn't, such funds could underperform the broad market. Reliance Banking Fund, SBI Magnum Sector Funds are examples of sector funds.

e. Based on Themes

Theme-based funds invest in multiple sectors and stocks that form part of a theme. For example, if the theme is infrastructure then companies in the infrastructure sector, construction, cement, banking and logistics will all form part of the theme and be eligible for inclusion in the portfolio. They are more diversified than sector funds but still have a high concentration risks.

f. Based on Investment Style

The strategy adopted by the fund manager to create and manage the fund's portfolio is a basis for categorizing funds. The investment style and strategy adopted can significantly impact the nature of risk and return in the portfolio. Passive fund invests only in the securities included in an index and does not feature selection risks. However, the returns from the fund will also be only in line with the market index. On the other hand, active funds use selection and timing strategies to create portfolios that are expected to generate returns better than the market returns. The risk is higher too since the fund's performance will be affected negatively if the selected stocks do not perform as expected. The type of funds based on strategies and styles for selection of securities include

- Growth Funds portfolios feature companies whose earnings are expected to grow at a rate higher than the average rate. These funds aim at providing capital appreciation to the investors and provide above average returns in bullish markets. The volatility in returns is higher in such funds.
- Value Funds seek to identify companies that are trading at prices below their inherent value with the expectation of benefiting from an increase in price as the market recognizes the true value. Such funds have lower risk. They require a longer investment horizon for the strategy to play out.
- Dividend yield Funds invest in stocks that have a high dividend yield. These stocks pay a large portion of their profits as dividend and these appeals to investors looking for income from their equity investments. The companies typically have high level of stable earnings but do not have much potential for growth or expansion. They therefore pay high dividends while the stock prices remain stable. The stocks are bought for their dividend payout rather than for the potential for capital appreciation.

g. Equity Linked Savings Schemes (ELSS)

ELSS is a special type of equity fund investment which gives the investor tax deduction benefits under section 80C of the Income Tax Act up to a limit of Rs. 1,50,000 per year. An ELSS must hold at least 80% of the portfolio in equity securities. The investment made by the investor is locked-in for a period of three years during which it cannot be redeemed, transferred or pledged.

3.4.2 Debt Funds

Debt funds invest in a portfolio of debt instruments such as government bonds, corporate bonds and money market securities. Debt instruments have a pre-defined coupon or income stream. Fund managers have to manage credit risk, i.e. the risk of default by the issuers of the debt instrument in paying the periodic interest or repayment of principal. The credit rating of the instrument is used to assess the credit risk and higher the credit rating, lower is the perceived risk of default. Debt instruments may also see a change in prices or values in response to changes in interest rates in the market. The degree of change depends upon features of the instrument such as its tenor and instruments with longer tenor exhibit a higher sensitivity to interest rate changes. Fund managers make choices on higher credit risk for higher coupon income and higher interest rate risk for higher capital gains depending upon the nature of the fund and their evaluation of the issuer and macro-economic factors.

Debt funds can be categorized based on the type of securities they hold in the portfolio.

a. Short Term Debt Funds

- **Money Market or Liquid Funds** are very short term maturity. They invest in debt securities with less than 91 days to maturity. However, there is no mark to market for

securities less than 60 days to maturity and this reduces the volatility in these funds. The primary source of return is interest income. Liquid fund is a very short-term fund and seeks to provide safety of principal and superior liquidity. It does this by keeping interest rate and credit risk low by investing in very liquid, short maturity fixed income securities of highest credit quality.

- **Ultra short-term plans** are also known as treasury management funds, or cash management funds. They invest in money market and other short term securities of maturity up to 365 days. The objective is to generate a steady return, mostly coming from accrual of interest income, with minimal NAV volatility.
- **Short Term Plans** combines short term debt securities with a small allocation to longer term debt securities. Short term plans earn interest from short term securities and interest and capital gains from long term securities. Fund managers take a call on the exposure to long term securities based on their view for interest rate movements. If interest rates are expected to go down, these funds increase their exposure to long term securities to benefit from the resultant increase in prices. The volatility in returns will depend upon the extent of long-term debt securities in the portfolio.

Short term funds may provide a higher level of return than liquid funds and ultra-short term funds, but will be exposed to higher mark to market risks.

b. Long Term Debt Funds

Long term debt funds are structured to generate total returns made up of both interest income and capital appreciation from the securities held. Since the price of securities may go up or down resulting in gains or losses, the total returns tend to be more volatile than short term debt funds that focus primarily on earning coupon income.

The value of bond held in a long term portfolio, changes with change in interest rates. Since market interest rates and value of a bond are inversely related, any fall in the interest rates causes a mark-to-market gain in a bond portfolio and vice versa. Therefore in a falling interest rate scenario, when investors in most fixed income products face a reduced rate of interest income, long term debt funds post higher returns. This is because the interest income is augmented by capital gains and result in a higher total return.

The extent of change in market prices of debt securities is linked to the average tenor of the portfolio - higher the tenor, greater the impact of changes in interest rates. Long term debt funds choose the tenor of the instruments for the portfolio, and manage the average maturity of the portfolio, based on scheme objectives and their own interest rate views.

- An **income fund** is a debt fund which invests in both short and long term debt securities of the Government, public sector and private sector companies with a view to generate income. An income fund may allocate a portion of the portfolio to government securities to meet the need for liquidity in the portfolio. Corporate debt securities enable higher interest income due to the credit risk associated with them. In the corporate bond market, an income fund tries to manage interest income from buying bonds at a spread to Government securities and manages capital gains by taking a view on the interest rate movements and credit spread. Thus, income funds feature both interest rate risk and credit risk.
- **Gilt Funds** invest in government securities of medium and long-term maturities. There is no risk of default and liquidity is considerably higher in case of government securities. However, prices of government securities are very sensitive to interest rate changes. Long term gilt funds have a longer maturity and therefore, higher interest rate risk as compared to short term gilt funds. Gilt funds are popular with investors mandated to invest in G-secs such as provident funds or PF trusts.
- **Dynamic debt funds** seek flexible and dynamic management of interest rate risk and credit risk. That is, these funds have no restrictions with respect to security types or maturity profiles that they invest in. Dynamic or flexible debt funds do not focus on long or short term segment of the yield curve, but move across the yield curve depending on where they see the opportunity for exploiting changes in yields.

Duration of these portfolios are not fixed, but are dynamically managed. If the manager believes that interest rates could move up, the duration of the portfolio is reduced and vice versa.

- **Floating rate funds** invest primarily in floating rate debt instruments. In these instruments the coupon is not fixed for the term of the instrument but is periodically revised with reference to the market rate. If interest rates in the markets go up, the coupon for these instruments are also revised upwards and vice versa. The reset period is defined when the bond is issued, say every 6 months, as also the market benchmark which will be referred to determine current rates. Since the coupon of the bond will be in line with the market rates, there is low interest rate risk in the bonds. These funds give the benefit of higher coupon income when interest rates are on the rise, without the risk of falling bond prices.
- **Fixed maturity plans (FMPs)** are closed-end funds that invest in debt securities with maturities that match the term of the scheme. The debt securities are redeemed on maturity and paid to investors. FMPs are issued for various maturity periods ranging from 3 months to 5 years.

Mutual fund companies typically keep FMPs in the pipeline, issuing one after another, particularly depending upon demand from corporate investors in the market. The return of an FMP depends on the yield it earns on the underlying securities. The investments may be spread across various issuers, but the tenor is matched with the maturity of the plan. An FMP structure eliminates the interest rate risk or price risk for investors if the fund is held passively until maturity. Therefore, even if the price of bonds held in the portfolio moves up or down, as long as the fund receives the interest payouts and the original investment on maturity, the FMP does not suffer significant risks. This makes FMPs the preferred investment in a rising interest rate environment, as investors can lock into high yields.

3.4.3 Hybrid Funds

Hybrid funds invest in a combination of debt and equity securities. The allocation to each of these asset classes will depend upon the investment objective of the scheme. The risk and return in the scheme will depend upon the allocation to equity and debt and how they are managed. A higher allocation to equity instruments will increase the risk and the expected returns from the portfolio. Similarly, if the debt instruments held are short term in nature for generating income, then the extent of risk is lower than if the portfolio holds long-term debt instruments that show greater volatility in prices.

- **Debt-oriented hybrids** invest minimum of 70 to 95% in a debt portfolio. The debt component is conservatively managed with the focus on generating regular income, which is generally paid out in the form of periodic dividend. The credit risk and interest rate risk are taken care of by investing into liquid, high credit rated and short term debt securities. The allocation to equity is kept low and primarily in large cap stocks, to enable a small increase in return, without the high risk of fluctuation in NAV. These attributes largely contribute accrual income in order to provide regular dividends. Debt-oriented hybrids are designed to be a low risk product for an investor. These products are suitable for traditional debt investors, who are looking for an opportunity to participate in equity markets on a conservative basis with limited equity exposure. These funds are taxed as debt funds.

Monthly income plan is a debt-oriented hybrid. Though typically most debt-oriented hybrids invest maximum of 15% in equity, there are quite a few variants. Aggressive MIPs invest up to 30% in equity, while conservative MIPs invest only up to 5% equity.

- Predominantly **equity-oriented hybrids** invest in the equity market, but invest up to 35% in debt, so that some income is also generated and there is stability to the returns from the fund. Balanced funds are designed as equity-oriented funds. Balanced funds are suitable to those investors who seek the growth opportunity in equity investment, but do not have a very high risk appetite. Balanced funds typically have an asset allocation of 65-80% in equity, and 20-35% in debt. They are taxed and treated as

equity funds and to this maintain at least a 65% exposure to equity markets at all times.

The proportions in equity and debt are managed tactically by the fund managers based on their view of the markets. In an environment conducive to equity, balanced funds' allocation to equity may be raised to 80% in order to maximize returns. In a scenario where equity markets are incurring losses, balanced funds minimize the extent of fall in the value of the portfolio by reducing equity exposure and increasing debt exposure.

- **Asset Allocation Funds** invest in both equity and debt but without a pre-specified allocation as in the case of other hybrid funds. The fund manager takes a view on which type of investment is expected to do well and will tilt the allocation towards either asset class. Such funds can even hold 100% in equity or debt.
- **Capital Protection Funds** are closed-end hybrids funds. In these types of funds the exposure to equity is typically taken through the equity derivatives market. The portfolio is structured such that a portion of the principal amount is invested in debt instruments so that it grows to the principal amount over the term of the fund. For example, Rs.90 may be invested for 3 years to grow into Rs.100 at maturity. This provides the protection to the capital invested. The remaining portion of the original amount is invested in equity derivatives to earn higher returns.

3.4.4 Other Funds

- A **Fund of Funds (FoF)** is a mutual fund that invests in other mutual funds. It does not hold securities in its portfolio, but other funds that have been chosen to match its investment objective. These funds can be either debt or equity, depending on the objective of the FoF. A FoF either invests in other mutual funds belonging to the same fund house or belonging to other fund houses. FoFs belonging to various mutual fund houses are called multi-manager FoFs, because the AMCs that manage the funds are different.

A FoF looks for funds that fit into its investment objective. It specialises in analyzing funds, their performance and strategy and adds or removes funds based on such analysis. An FoF imposes additional cost on the investor, as the expenses of the underlying funds are built into their NAV. SEBI has imposed a ceiling of 2.50% for expense ratio of FoFs, which is the same as expense ratio limit for equity funds.

Equity FoFs do not enjoy the tax concessions available to equity funds on dividends and long term capital gains.

- **Exchange Traded Funds (ETFs)** hold a portfolio of securities that replicates an index and are listed and traded on the stock exchange. The return and risk on ETF is directly related to the underlying index or asset. The expense ratio of an ETF is similar to that of an index fund.

ETFs are first offered in a New Fund Offer (NFO) like all mutual funds. Units are credited to demat account of investors and ETF is listed on the stock exchange. On-going purchase and sale is done on the stock exchange through trading portals or stock brokers. Settlement is like a stock trade, and debit or credit is done through the demat account.

ETF prices are real-time and known at the time of the transaction, unlike NAV which is computed end of a business day. Their value changes on a real-time basis along with changes in the underlying index.

- **Gold ETFs** have gold as the underlying asset so as to provide investment returns that, closely track the performance of domestic prices of gold. Each ETF unit typically represents one gram of gold. For every unit of ETF issued, the fund holds gold in the form of physical gold of 99.5 % purity or gold receipts. They are also allowed to invest in the gold deposit schemes of banks to a limit of 20% of the net assets of the scheme. The custodian of the fund is responsible for the safe keeping of the assets. The actual returns from gold ETF may be lower than market returns due to the effect of fund management expense charged and cash holdings.

	Physical Gold	Gold ETF
Impurity Risk	Present	Absent
Liquidity	Low	High
Transaction Cost	High	Low
STCG	If held for not more than 36 months	If held for not more than 36 months
LTCG	If held for more than 36 months	If held for more than 36 months

- **International funds** invest in markets outside India, by holding certain foreign securities in their portfolio. The eligible securities in Indian international funds include equity shares of companies listed abroad, ADRs and GDRs of Indian companies, debt of companies listed abroad, ETFs of other countries, units of index funds in other countries, units of actively managed mutual funds in other countries. International equity funds may also hold some of their portfolios in Indian equity or debt. They can also hold some portion of the portfolio in money market instruments to manage

liquidity. The overseas investment limit for resident individuals has gone up to US\$ 125,000 per year.

The definition of equity-oriented funds in the Income Tax Act refers only to investment in equity shares of domestic companies. If an international fund invests at least 65% of net assets in domestic equity, and the rest abroad, only then it will be treated as an equity-oriented fund.

Therefore, international funds that invest in equity shares overseas, will not be classified as equity-oriented funds for purposes of taxation.

Rewards	Risks
Portfolio diversification from exposure to global markets.	Political events and macro-economic factors cause investments to decline in value.
Benefits from investing in asset classes not available domestically.	Investment's value will be impacted by changes in exchange rates.
Opportunity to improve long-term portfolio performance from picking global leaders.	Countries may change their investment policy towards global investors.

- **Arbitrage funds** aim at taking advantage of the price differential between the cash and the derivatives markets. Arbitrage is defined as simultaneous purchase and sale of an asset to take advantage of difference in prices in different markets. The difference between the future and the spot price of the same underlying is an interest element, representing the interest on the amount invested in spot, which can be realized on a future date, when the future is sold.

Funds buy in the spot market and sell in the derivatives market, to earn the interest rate differential. For example, funds may buy equity shares in the cash market at Rs. 80 and simultaneously sell in the futures market at Rs. 100, to make a gain of Rs. 20. If the interest rate differential is higher than the cost of borrowing there is a profit to be made. The price differential between spot and futures is locked in if positions are held until expiry of the derivative cycle. On settlement date both positions are closed at the same price, to realize the difference. A completely hedged position makes these funds a low-risk investment proposition. They feature lower volatility in NAV, similar to that of a liquid fund.

- **Real Estate Mutual Funds** invest in real estate either in the form of physical property or in the form of securities of companies engaged in the real estate business. SEBI's regulations require that at least 35% of the portfolio should be held in physical assets. Securities that these funds can invest in include mortgage-backed securities and debt issuances of companies engaged in real estate projects. Not less than 75% of the net assets of the scheme shall be in physical assets and such securities. Assets held by the fund will be valued every 90 days by two valuers accredited by a credit rating agency. The lower of the two values will be taken to calculate the NAV. These funds are closed-end funds and have to be listed on a stock exchange.
- **Real Estate Investment Trusts (REIT)** are trusts registered with SEBI that invest in commercial real estate assets. The REIT will raise funds through an initial offer and subsequently through follow-on offers, rights issue and institutional placements. The value of the assets owned or proposed to be owned by a REIT coming out with an initial offer will not be less than Rs. 500 crore and the minimum offer size will not be less than Rs. 250 crore. The minimum subscription amount in an initial offer shall be Rs. 2 lakh. The units will be listed on the stock exchange. Not less than 80% of the value of the REIT assets will be in complete and income generating assets and not more than 20% shall be in under-development properties, listed or unlisted debt securities, equity shares of real estate companies, government securities, mortgage backed securities and money market instruments. A full valuation of the assets shall be done each year and an updation every six months. The NAV will be declared within 15 days of such valuation/updation. Not less than 90% of the net distributable cash flows of the REIT will be distributed to the investors' atleast on a half-yearly basis.
- **Rajiv Gandhi Equity Savings Scheme, 2012** has identified schemes of mutual funds and ETFs that meet certain requirements as eligible securities under this scheme. The schemes have to invest in securities that form part of the BSE100 or CNX 100, shares of PSUs classified as Maharatnas, Navratnas and Miniratnas, among others. The scheme has to be listed on a stock exchange and settled through the depository mechanism. The Rajiv Gandhi Equity Savings Scheme (RGESS) offers a rebate to first time retail investors with annual income below Rs. 12 lakhs. 50% of the amount invested (excluding brokerage, securities transaction tax, service tax, stamp duty and all taxes appearing in the contract note) can be claimed as a deduction from taxable income. Although any amount can be invested in such scheme, the benefit is only available up to Rs. 50,000. Thus, the deduction for new retail investors is limited to 50% of Rs. 50,000, i.e., Rs. 25,000 or maximum amount invested whichever is less under section 80CCG. The investment of Rs 50,000 can be spread over a block of 3 financial years. Once RGESS deduction of upto Rs. 25,000 is claimed in upto 3 financial years, no further RGESS deduction can be claimed by that investor in any future years. The investment will have a lock-in of three years of which the first year will be a fixed

lock-in during which no sale or transfer is allowed and the next two years will be a flexible lock-in during which transactions are permitted, subject to certain conditions. Mutual funds announce specific schemes that are eligible for the RGESS deduction.

- **Infrastructure Debt Schemes** are closed-ended schemes with a tenor of at least five years that invest in debt securities and securitized debt of infrastructure companies. 90% of the fund's portfolio should be invested in the specified securities. The remaining can be invested in the equity shares of infrastructure companies and in money market instruments. The NAV of the scheme will be disclosed at least once each quarter. The minimum investment allowed in these schemes is for Rs. one crore and the minimum face value of each unit shall be Rs. ten lakh. As a closed-ended scheme the units of the scheme will be listed on a stock exchange. An Infrastructure Debt Scheme can be set up by an existing mutual fund or a new fund set up for this purpose. The sponsor and key personnel must have adequate experience in the infrastructure sector to be able to launch the scheme.
- **Infrastructure Investment Trusts (InvIT)** are trusts registered with SEBI that invest in the infrastructure sector. The InvIT will raise funds from the public through an initial offer of units. The offer shall be for not less than Rs. 250 crores and the value of the proposed assets of the InvIT shall not be less than Rs. 500 crores. The trust will have a minimum 25% public float and at least 20 investors. The minimum subscription size will be Rs. 10 lakhs. The units will be listed on a stock exchange. 80% of the value of the assets will be invested in income-generating completed projects and the remaining 20% in under-construction projects and approved securities. The assets shall be valued on an annual basis and an updation every 6 months and the NAV should be declared within 15 days of the valuation/updation. 90% of the net distributable cash flows of the trust will be distributed to the investors.

3.5 Taxation of Mutual Fund Products

The portfolio of a mutual fund scheme generates returns from the appreciation in the value of the securities held and the income received on these securities, such as interest and dividend. These returns belong to the investor and reflect in the appreciation in the NAV of the scheme. The returns are received or realized by the investors either in the form of dividends paid by the mutual fund to the investors or as capital gains when the units are redeemed by the investor. These returns are taxable in the hands of the investor when they are received depending upon the nature of the investment, the period of holding the investment and the type of investor. Mutual fund schemes are considered equity-oriented schemes if not less than 65% of the net assets are invested in equity and equity-linked instruments.

3.5.1 Tax on Dividend

Dividend received by investors from mutual funds are exempt from tax i.e. investors do not pay a tax on any dividend income received from mutual funds. However, debt-oriented mutual funds pay a dividend distribution tax (DDT) before paying out the dividend to the investors. The DDT is applicable on the gross dividend payable with effect from October 1st 2014. The investors indirectly bear the tax since it is paid out of the distributable surplus that would otherwise have been available to them. The rate of DDT currently applicable on dividends is as follows:

	Resident Individuals/HUF	Domestic Companies	NRI
Equity-oriented schemes	Nil	Nil	Nil
Liquid and Money Market Schemes	25%	30%	25%
Other Debt Funds	25%	30%	25%

Notes: *Surcharge and education cess will apply additionally to the base rate.*

3.5.2 Tax on Capital Gains

Capital gains tax applies to the gains realized on redemption or sale of units. The rate of tax depends on the nature of capital gains: short-term or long-term. The holding period of the investment before redemption in order to categorize the gains as short or long term capital gains depends upon the type of fund. In case of equity-oriented funds, if the units were held for not more than 12 months before they were redeemed or sold, the gains are considered short-term-term capital gains (STCG), else it is long-term capital gains (LTCG). For non-equity oriented schemes, the gains are categorized as short-term capital gains if the units were held for not more than 36 months before redemption. Else it is long-term capital gains.

The tax on capital gains is as follows:

	Resident Individuals/HUF	Domestic Companies	NRI
Equity Oriented Scheme			
LTCG	Nil	Nil	Nil
STCG	15%	15%	15%

Non-Equity Oriented Schemes			
LTCG	20% with indexation	20% with indexation	20% with indexation
STCG	Marginal rate of taxation	Marginal rate of taxation	Marginal rate of taxation

Note: *Surcharge and Cess as applicable will be charged*

Indexation is the process of calculating long-term capital gains for tax purposes after adjusting the purchase price for inflation. The adjustment is done using the cost of inflation index issued by the Central Board for Direct taxes for each financial year. Indexation ensures that the increase in the value of the investment that can be attributed to inflation is not taxed, and only the real return is taxed.

Redemption from equity-oriented funds and sale of units of such funds in the stock exchange will attract Securities Transaction Tax at the rate of 0.001% of the redemption / sale value. Investor will receive the net amount after deduction of STT by the fund / stock exchange broker.

NRI investors in mutual funds alone have tax deducted at source at the rate of 15% for STCG in equity-oriented funds and at the rate of 30% and 20% for STCG and LTCG from non-equity-oriented funds. Surcharge and education cess will be added to these rates as applicable.

Investors can set-off a capital loss incurred on the sale or redemption of their investments against taxable gains made on other investments. This will reduce the tax that has to be paid. This is called set-off and if a capital loss cannot be set-off against a capital gain of that particular year, it can be carried forward for the next eight years. The applicable rules are:

- Short-term capital loss can be set-off against long-term and short-term capital gains.
- Loss arising from a long-term capital asset can be set off only against long-term capital gains.
- Short-term or long-term capital loss can be set off only against income under the head capital gains and not any other source of income.
- A loss under any other head of income can be set off against short or long term capital gain.

3.6 Mutual Fund Investment Options

The nature of primary return that an investor earns from a mutual fund investment, whether dividend or capital gain, and the impact of tax on their returns, will depend upon the choices they make on structuring their return. Mutual funds offer investment options for each scheme that define how the investor will take the returns from the investment. Most mutual funds offer a dividend option and growth option. The dividend option implies that the funds will payout the returns generated in the form of periodic dividends. There is a dividend re-investment option too where the dividend declared is not paid out but re-invested in the scheme. The NAV of the scheme will fall to the extent of the dividend that is paid out of its net assets. In the growth option, the returns generated is retained in the scheme and translates into an appreciation in the NAV, and hence the value of the investment. The investor can realize this appreciation at any time by redeeming the units.

Investors can enhance their post-tax returns by choosing the right investment option, given the type of investment and period of holding. The need for income or appreciation can be met by using facilities such as periodic redemptions if the investor needs to receive money from their investment or re-investment of dividends if the investor is seeking long-term wealth creation. For example, an investor in a tax bracket lower than the DDT rates will choose the growth option in a debt fund to eliminate the impact of 25% DDT on dividends paid. The need for periodic income can be met by redeeming units and the capital gains tax will still be lower than the DDT. They may have to consider the impact of exit loads on the redemption of units. However, most funds do not impose an exit load if the investment is held for a minimum period, depending upon the type of scheme.

3.7 Process associated with Investment in Mutual Funds

The categories of investors who can invest in a mutual fund scheme in India is prescribed by SEBI's regulations. This includes resident individuals, NRIs, PIOs, Foreign nationals, Institutions, Trusts.

Eligible investors are required to have a permanent account number (PAN) issued by the Income Tax authority and be compliant with the requirements of the Know Your Customer (KYC) norms. If the investment is jointly held, all the investors have to comply with these regulatory requirements.

3.7.1 Permanent Account Number (PAN)

The PAN is a prerequisite for investment in a mutual fund for all categories of investors including NRIs and guardians investing on behalf of minors. The information has to be provided in the application form at the time of making the investment. For mutual fund

transactions, the original PAN card is verified against a self-attested photocopy at the time of making the first investment. The investor's financial advisor can attest the PAN card, if the advisor has complied with the Know Your Distributor (KYD) norms and registered as such, with AMFI. Such verification can be done online on the website of the Income Tax department even if the original PAN card is not provided, if the investor presents any other proof of identity.

The exceptions to this are micro investments which are defined as investment made in a fund through a lump sum or a systematic investment plan not exceeding Rs.50000 per year by individual investors including NRIs but not PIOs and minors. This exemption does not apply to HUFs and other categories of investors.

The details of PAN and exemptions from PAN are discussed in greater length in the Chapter 2 of the workbook of NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination.

3.7.2 Know Your Customer (KYC)

SEBI requires investors to ensure compliance with the KYC norms when they initiate a transaction with an entity registered with them such as a mutual fund, stock broker, depository participant, portfolio managers or venture capital funds. To avoid duplication of the process every time the investor opens an account with an investment or service provider mentioned earlier, SEBI has mandated that the KYC done with one entity is applicable to transactions with the others. Proof of being compliant with norms has to be provided at the time of making the investment. This is the acknowledgement sent by the KYC registration agency (KRA) to the investor on completion of the KYC process.

The KYC process involves establishing the identity and address of the investor by collection of required information in a specified format. The information has to be supported by prescribed documents. The information provided is verified in person by an authorized official of the market intermediary.

The common KYC form is in two parts. Part 1 requires personal information such as name, address, status, occupation and income details, proofs of identity and address. PAN card, UID card, Voters' ID or driving licence are accepted as proof of identity while for address documents such as the passport, latest utilities bill or bank account statement, voter's id, driving licence or ration card has to be provided. The exemption available to micro-investments from providing PAN details will apply for the KYC process too. Such investors must quote a PAN exempt KYC reference number obtained from the KRA along with the application form. This is information that is relevant to all the entities. Part 2 is used by the intermediaries to collect information of specific relevance to them. The forms are available with these SEBI-registered entities or can be downloaded from any of the websites of mutual funds, broking houses or SEBI. Separate forms are available for individual and non-individual

investors. The KYC form along with self-attested copies of the proofs has to be submitted to any of the above mentioned financial intermediary along with the originals for verification.

The details of KYC Process are discussed in greater length in the Chapter 2 of the workbook of NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination.

3.7.3 In Person Verification (IPV)

Once the form is received, the intermediary will send an official to conduct in-person verification. Once that is done, the intermediary will upload the information of the investor on the system of the KYC Registration Agency (KRA) and despatch the supporting documents. The KRA will send a letter confirming the details to the investor within 10 days of receipt of the documents. The KRA maintains the investor's information and makes it available to other intermediaries with whom the investor opens an investment or service account.

The details of IPV are discussed in greater length in the Chapter 2 of the workbook of NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination.

3.7.4 Fresh Purchase of Mutual Fund Units

An investor can make an initial investment in a mutual fund either in the new fund offer (NFO) or subsequently when the open-ended fund opens for transactions. A fresh purchase of units is made by submitting an application form in which mandatory information has to be provided such as name, date of birth, status, occupation of the first holder, PAN details, address and contact details, signature and bank account details of the first holder. The application form provides for joint holder details to be provided for two joint holders (a folio can have up to three holders) and the mode of holding and operating the folio will have to be provided for the records.

The investment details such as the name of the scheme, option and payment mode have to be filled in. The investor can also make nominations in the application form. The form has to be signed by all the holders, irrespective of the mode of holding chosen.

The information provided in the application form is used by the R&T agent of the mutual fund to create the investor folio.

- **Purchase of Units in an NFO**

An investor can buy units in an NFO by submitting the application form along with the payment, at the AMC's office or designated collection centres during the NFO period. NFOs are kept open for a period of 15 days (except for the ELSS, which is kept open for 30 days). Allotment of units at the issue price (typically at the face value of the units) is made within 5 business days from the closure of the NFO.

- **Purchase of Units in the Continuous Offer Period**

Open-ended schemes have to be available for ongoing transactions within 5 business days of the allotment of units in an NFO. Once the scheme opens for transactions investors can buy units of the scheme or redeem investment or conduct other financial and non-financial transactions with the fund. The application form for purchase of units, along with the payment has to be submitted at the AMC's office or the investor service centres.

The units will be allotted to investors at the applicable NAV for the transaction. The applicable NAV will depend upon a) type of scheme, b) day of transaction, c) time of making the application, d) availability of clear funds to the mutual fund for all liquid fund purchases and for non-liquid purchases if the application value is Rs. 2 lakhs or more. If the application for purchase is received at an official point of acceptance (OPoA), such as investor service centres or AMC's office, on a business day within the cut-off time prescribed by SEBI, the transaction gets the applicable NAV for that day.

The cut-off time fixed by SEBI for purchase of units is 3.00 pm except for liquid fund purchases where the cut-off time is fixed at 2.00 pm.

The applicable NAV for a liquid fund purchase transaction received within the cut-off time and where clear funds are available to the mutual fund is the NAV of the day immediately preceding the date of application.

The applicable NAV for a non-liquid fund purchase received within the cut-off time on a business day is the NAV of the day of the transaction. If the investments is for a value of Rs. 2 lakhs and above, then the applicable NAV for the transaction is the NAV of the day on which clear funds are available for investment to the mutual fund.

3.7.5 Additional Purchases in a Mutual Fund

Investors can make additional investments in an open-ended scheme after the fresh purchase made in the NFO or continuous offer period. The folio number created at the time of the fresh purchase is the unique identity of the investor with the mutual fund under which all personal information such as name, signature, address, contact details and regulatory compliance on PAN and KYC norms are recorded. Quoting the folio number at the time of making the additional purchase eliminates the need for providing all the information again. Additional investment will be added to the existing folio number. A transaction slip can be used to make the additional investment. It is used by investor for all subsequent transactions with the mutual fund after the initial investment. The transaction slip is sent to the investor along with confirmation of the original investment through the statement of accounts. It can also be downloaded from the website of the mutual fund. It has a simple format that provides for the folio number to be mentioned and the details of the transaction to be conducted. Investors can also use the application form to make additional investments by just filling up the folio number in the space provided.

3.7.6 Minimum Investment Amount

Mutual funds specify the minimum amount that can be invested by an investor in a scheme. This is higher for the initial or fresh investment made by the investor to open the investment account. Currently this is around Rs.5000 for most schemes of fund houses. Subsequent investments in the same folio can be made with a lower investment amount, such as Rs. 1000.

3.7.7 Payment Instruments for Mutual Fund Purchases

The approved modes of payment for investments by investors in mutual funds are the following:

- Local Cheques and At-par cheques that are treated at par with local cheques wherever it is presented.
- Demand drafts in locations not covered by the mutual fund's network of authorized centres for collection of application forms.
- Third-party cheques i.e. cheques not issued by the first investor, in only the following situations.
 - Grandparent investing for grandchild for a sum not exceeding Rs. 50,000.
 - Employer making payments on behalf of employee through payroll deductions.
- Electronic payment modes such as ECS, RTGS, ETS, Swift, Direct transfer. Direct transfer requires the investor and the fund to have accounts with the same bank in which case a transfer instruction can be given. Electronic fund transfer modes require the bank of the fund and the investor to be participating banks in the systems provided by RBI for the same. The IFSC codes of the respective branches and the details of the beneficiary (mutual fund in this case) account are required.
- Cash investments not exceeding Rs. 50,000 per investor per mutual fund each financial year.
- ASBA (Application Supported by Blocked Amount) for investments in the NFO. The investment amount for the NFO is blocked with a bank approved by SEBI to be released only on allotment.
- NRI investors can make payments through their NRO, NRE or FCNR account or also through a draft drawn on a foreign bank and supported by foreign inward remittance certificate (FIRC).

The details of Payment Instruments are discussed in greater length in the Chapter 2 of the workbook of NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination.

3.7.8 Investment Modes

Investors can directly invest in a mutual fund scheme by choosing the 'Direct Plan' option provided in the application form and submitting the application to the official point of

acceptance. All mutual fund schemes have to offer a direct plan which features a lower expense ratio for investors who do not use the distribution network set up by the mutual fund. Investors can also choose to use the services of a distributor who will assist in making the investment and provide advice and service on maintaining the investment. The distributors are paid a commission by the mutual fund, which reflects as a higher expense ratio. These investors invest in the 'regular plan' of the scheme.

The stock market platform for mutual funds namely NSE's Mutual Fund Services System (MFSS) and Bombay Stock Exchange Platform for Allotment and Redemption of Mutual Funds (BSE StAR MF) can be used to buy units of schemes offered through the stock exchange. Investors can transact between 9.00 am and 3.00 pm through the brokers of the stock exchange who are registered as a mutual fund advisor and with BSE and NSE for using this facility. The confirmation slip generated by the system serves the purpose of confirmation of the transaction and the electronic time stamp of the trading system on the slip is used to determine the applicable NAV. In a purchase transaction, the receipt of funds for units is handled by the broker while the allotment of units is done by the R&T agent who will send the statement of account (SoA) to the investor. In a redemption transaction, lodging the request is done through the broker and the R&T agent releases the funds. Investors can also choose to hold units in dematerialized form in which case the demat account details have to be provided at the time of entering the transaction on the system. The mutual fund will transfer the units to the eligible broker's pool account and the broker will transfer the units to the investors demat account. In case of redemption, the investor has to give a delivery instruction slip for the units to be redeemed to their depository participant. The funds will be credited to the investor's bank account.

3.7.9 Redemptions from a Mutual Fund

Investments in open-ended schemes of mutual funds can be realized at any time by redeeming the units. A redemption request can be for all the units held or for a part of it. The redemption request can specify the number of units to be redeemed or the amount in rupees to be redeemed. The request may be made using the transaction slip and submitted at an OPoA. It has to be signed by the holders according to the mode of holding registered in the folio. The cut-off time for redemption from all types of mutual fund schemes is 3.00 pm. The applicable NAV for valid transactions received on a day is the NAV calculated for the day. The NAV is adjusted for exit load, if any.

The redemption amount is sent either through a cheque with pre-printed details of the first holder or credited to the bank account of the first holder registered with the mutual fund. The investor can choose the mode of receiving redemption and other payouts, such as dividend, from the mutual fund at the time of making the application. The IFSC code of the account has to be given to receive the proceeds electronically through ECS, NEFT or direct

credit. Direct credit facility is provided only with such banks that the mutual fund has a tie up with.

In case of redemptions by an NRI, the bank account into which the redemption proceeds will be credited will depend upon whether the original investment was made from repatriable funds or domestic funds. If investments were made from an NRO or rupee account, redemption proceeds can only be credited to a similar account from which repatriation is regulated. If the investment was made from repatriable funds then the redemption proceeds will be credited to an NRO or NRE account specified by the investor. Redemption requests should be serviced within 10 working days of receipt.

Mutual funds specify the minimum redemption amount for each transaction. They may also specify the minimum balance to be maintained in the folio. If redemption will result in the folio balance falling below the minimum balance required, mutual funds retain the right to redeem all the units held and close the folio.

3.7.10 Maintenance of Investor Folio: Non-Financial Transactions

The investment account or folio of the mutual fund investor contains the personal information and operational specifications that the investor has provided in the initial application for units made. All transactions of the investor with the mutual fund, financial and non-financial, are recorded in the folio. The personal and operational information provided by the investor is applicable to all the investments held in the folio. Non-financial transactions deal primarily with updating the records of the investor for any changes in the personal or operational information. The AMC or R&T agent has to be intimated of the change to update the records. The documents to support the request for change have to be provided along with the request.

3.7.11 Personal Information

Personal Information captured includes the name, address and status of the investor along with the signature. This information must correspond with the information provided by the investor at the time of the KYC process and registered with the KRA. Any change in this information has to be updated in the records of the KRA using the KRA change form. The change request will have to be supported by documents to support it. For a change in name, the name change certificate issued by a regulatory authority, a copy of the gazette announcement of the new name or a marriage certificate are documents that needs to accompany the change request. A request for a change of address has to be supported by an official document giving the new address, such as the passport, or utility bill or other accepted documentary proof.

A change in status from resident to non-resident or vice versa has to be updated in the records since this will have implications on fund transactions and taxation. The bank account to which

the redemption proceeds will be credited will depend upon whether they are freely repatriable or not. TDS applies on capital gains for redemption of units by NRI investors. The investor will have to change the bank details and address provided earlier.

The KRA will update the records on the basis of the KRA change form and the documentary proof provided. Once this is done, the mutual funds with which the investor holds investments will be intimated of the change.

3.7.12 Joint Holding

A mutual fund folio can be held jointly by up to three holders. The first holder is the primary investor and all financial transactions including payment for the investment, credit of redemption proceeds and dividends will be made through the account of the first holder. All communication of the mutual fund will also be conducted with the first holder. All the holders must be compliant with the requirements of PAN and KYC norms. The mode of holding and operating the account may be 'joint' or 'either or survivor'. Irrespective of the mode of holding, the application for unit must be signed by all the investors. The mode of holding may be changed, holders may be added or deleted only with all the existing holders' signature on the request.

The concept of Joint Holding is discussed in greater length in the Chapter 2 of the workbook of NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination.

3.7.13 Bank Account

The bank account details of the first holder has to be mandatorily provided since dividend and redemption payments can only be paid to the bank account of the first holder. Details required include account number and type, bank name and branch, IFSC code and MICR code. SEBI allows investors to register multiple bank accounts with a mutual fund using the registration form provided by the fund. The investor has to designate one account as the default account into which the dividend and redemption proceeds will be paid out. Investors can change the default bank account, add or remove existing accounts from the list of account registered with the mutual fund by using the form prescribed for the same by the fund.

3.7.14 Nomination

Nomination is a facility offered to individual investors to choose the person(s) entitled to receive the benefits of the investment made in the event of the death of the investors. Such persons are called nominees. The nomination can be made at the time of making the investment or subsequently at any time. While nomination is optional, AMFI has mandated as best practice that all singly held folios should have nomination or the investor should declare the intention not to do so in the application form. Nomination can be changed at any time with all the joint holders signing the request, irrespective of the mode of holding. A new

nomination overwrites an existing nomination. In a jointly held folio, the rights of the joint holders to the investment supersede the right of the nominee to the investment.

A maximum of three nominees can be there in a folio and the folio holder(s) can specify the percentage allocated to each nominee. The names and address of the nominees have to be provided. The signature of the nominees is not mandatory.

The concept of Nomination is discussed in greater length in the Chapter 2 of the workbook of NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination.

3.7.15 Change in Investment of Minors

Minor investors are investors who have not attained 18 years of age as on the date of investment. The financial transactions of minors are conducted by guardians their behalf. The date of birth of the minor investor has to be mandatorily provided along details of the guardian. The guardian has to comply with the norms of KYC and PAN. The investment folio has to be held in the sole name of the minor. A change in the guardian has to be recorded with the AMC and the new guardian has to comply with the regulatory requirements. The guardian cannot operate the folio once the minor becomes a major. The folio operations will be suspended till the change in status is recorded with the AMC including updating the KYC and PAN compliance of the erstwhile minor, record the signature of the minor, attested by the bank or other approved entity, in the folio for further transactions and change of bank details to that of the minor.

The details of Investments by Minors are discussed in greater length in the Chapter 2 of the workbook of NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination.

3.7.16 Power of Attorney

Some folios may be operated by persons authorized to do so by the investor by executing a power of attorney (PoA). The certified copy of the PoA has to be registered with the mutual fund and the signature of the investor as well as the PoA holder is recorded. The PoA holder can conduct all regular transaction with respect to the folio, depending upon what is accorded in the PoA. The investor granting the PoA can also conduct transactions during this period. The PoA holder and the investor have to be PAN KYC compliant.

The details of investments through a PoA are discussed in greater length in the Chapter 2 of the workbook of NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination.

3.7.17 Transmission

In the event of the death of a mutual fund investor, the units held have to be passed on to the persons entitled to receive them. AMCs use the way the folio was held and operated to

decide the entitlement. If the folio was jointly held, the order of holders' moves up with second holder now becoming the first holder. If there was no joint holding but there is a nomination made in the folio, then the units are passed on to the nominee. The joint holder and the nominees are deemed to hold the units in trust for the heirs of the original holder till such time the legal entitlements are decided. If the units were held singly and there is no nomination, the units are transmitted to the legal heirs once the succession is established.

The documents required to be provided in applying for a transmission are death certificate, probate of will, succession certificate from court if there is no will, other documents such as birth certificate, marriage certificate that establish the relationship of the claimant with the deceased. If the transmission amount is greater than a threshold limit specified by the AMC, then the person to whom the units are transmitted to execute an indemnity to indemnify the mutual fund from any action by other claimants in the future.

The person to whom the units are being transmitted have to comply with the regulatory norms of PAN and KYC, provide bank account details and signature duly attested by the authorities.

The details of Transmission are discussed in greater length in the Chapter 2 of the workbook of NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination.

3.7.18 Statement of Account

The statement of account (SoA) is the proof of investment for an investor who has purchased units in a mutual fund scheme. It is computer generated and unsigned and is not a certificate that can be traded. The statement is sent by the R&T agent to the investor as evidence that the requested transaction, whether financial or non-financial, has been completed and recorded in the folio of the investor held with the mutual fund. The details of the transaction provided in the SoA will include the applicable NAV for the financial transaction, the units allotted or redeemed and the balance units. The SoA will provide scheme-wise information on the units held, the current NAV and market value of the investments.

A consolidated account statement (CAS) is required to be sent to investors for each month in which there has been a transaction in the folio before the 10th of the subsequent month. The transactions will be consolidated across mutual funds on the basis of the PAN of the investor. If there is no transaction, then a consolidated statement will be sent every half year. Individual mutual funds will continue to send email confirmations of purchase transactions within 5 working days of the transaction. Investors can also ask for a physical statement if they so require.

3.8 Systematic Transactions

Mutual funds offer investors the facility to automate their investment and redemption transactions to meet their needs from the investment. Investors may choose to invest periodically rather than in a lump sum to benefit from volatility in prices, they may choose to redeem periodically to generate regular payout from the investment or they may want to rebalance the portfolio periodically to align or re-align the asset allocation to their situation. Systematic investment plans (SIP), systematic withdrawal plans (SWP), systematic transfer plans (STP) and switches are some of the facilities provided.

Systematic transactions require investors to commit to a set of transactions in advance. The value of each investment, the periodicity of the transaction and the day of execution transaction will be decided at the time of commitment. The transaction will be executed at the applicable NAV at the time of execution of each transaction. Systematic transactions which have been initiated can be cancelled at any time by the investor after giving due notice.

3.8.1 Systematic Investment Plans (SIP)

In a systematic investment plan, investors commit to invest a fixed sum of money at regular intervals over a period of time in a mutual fund scheme. It enables investors to build a corpus over time even with small sums invested. Investing periodically, instead of making a lump sum investment, removes the need for the investor to time the investment to get a good price. The investment is made at different prices over the term chosen and this allows investors to benefit from the volatility in the market. Since the same amount is being invested in each installment, investors buy more units when the price is low and less units when the price is high. Overtime, the average cost of acquisition per unit comes down. This is called rupee cost averaging and is the primary advantage that SIPs provides investors.

SIP Date	Investment Amount (Rs) (A)	NAV(B)	Units Allotted(A/B)
10-Feb-15	2500	10.50	238.10
10-Mar-15	2500	11.70	213.68
10-Apr-15	2500	12.30	203.25
10-May-15	2500	12.10	206.61
10-Jun-15	2500	11.95	209.21
10-Jul-15	2500	10.25	243.90
Total	15000		1314.74

Average cost per unit		11.41	
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The above table shows the monthly investments made by an investor in mutual funds at different NAVs. The investor is able to reduce the average cost of acquisition per unit by just investing regularly, without having to adopt any market timing strategy. This is possible because the same sum of money invested buys more units when the NAV is low and less units when the NAV is high. This reduces the average cost of purchase of units for the investor. The investor is able to use market volatility to his advantage. This is the benefit of rupee cost averaging and SIPs.

An investor enrolling for an SIP has to make the following decisions:

- **The scheme, plan and option:** Mutual funds will decide the schemes in which SIPs will be allowed.
- **The amount to be invested in each installment:** The minimum investment for each installment will be specified by the mutual fund. This is usually lower than the minimum amount of investment for a lump sum investment.
- **The periodicity of the investment:** The intervals at which the investment can be made, say monthly or quarterly, is defined by the mutual fund. Investors can choose the periodicity that is most suitable.
- **The date of investment each period:** The investor has to choose the day from those specified by the mutual fund.
- **The tenor of the plan:** The date of commencement of the SIP and the term over which the SIP will run has to be selected by the investor. The mutual fund usually specifies the minimum commitment period.
- **The mode of payment:** The payment mode for an SIP can be the following
 - **Post-dated cheques:** Each cheque will bear the date of the installment and will be for SIP amount. The set of cheques equalling the number of installments over the term of the in the SIP will be handed over along with the SIP enrollment form.
 - **Electronic Clearing Service (ECS):** ECS is an electronic payment method in which the investor instructs the bank to credit a beneficiary account with a fixed amount on allotted dates. The investor has to submit the bank account details of the beneficiary such as name, bank, branch, account number, MICR code of the destination bank branch, date on which credit is to be afforded to the beneficiaries and the amount. Investors fill up the ECS mandate form and submit it with their SIP application. ECS facility is available only in select cities as given by the AMC.
 - **Standing Instructions (SI):** SI is a payment option for an SIP if the investor and the mutual fund hold bank accounts with the same bank. The investor instructs the bank to credit the SIP instalment amount on each SIP date to the mutual fund's account.

Electronic payment options require an instruction to be given to the bank that is signed by all the account holders. This form is part of the SIP enrolment form and registered by the mutual fund with the bank.

Investors can make additional investments in an existing folio through an SIP or initiate an investment in a scheme through an SIP. To start an SIP in an existing folio, the SIP enrollment form along with the post-dated cheques or instruction form for electronic payment has to be registered with mutual fund. If a fresh investment is being made in the scheme through the SIP, the first installment will be used to open the folio. The investor has to submit the application form duly filled along with the SIP enrollment form. The cheque for the first installment alone will bear the date on which the enrollment form is submitted. An SIP can also be initiated along with an investment in an NFO. The first installment will be the allotment in the NFO and the subsequent installment after the scheme reopens for continuous purchase. The amount of each installment of the SIP, whether in the NFO or subsequently, will be the same.

The SIP enrolment form will require the SIP commencement date, periodicity and tenor of the SIP, date selected, installment amount and details of payment to be provided. The enrolment form along with the payment mandate has to be submitted at the official points of acceptance.

Mutual funds specify a minimum period (typically 15 to 30 days) before the first installment for submitting the forms.

An SIP can be discontinued or cancelled by the investor giving notice of the same in writing to the mutual fund and to the bank, in case of electronic payment instructions. The mutual fund specifies the notice in days required before the next installment to process the cancellation. Dishonour of cheques and insufficient funds in the bank account of the investor are other ways in which an SIP is discontinued. If the payment for one or more installment does not go through, the mutual fund may cancel the SIP.

The mutual fund will notify the investor to renew an SIP in force when it is close to completion of its term. Investors can choose to renew it on different terms with respect to investment amount, frequency, term and payment mode.

3.8.2 Systematic Withdrawal Plan (SWP)

Investors can structure a regular payout from the balance held in a mutual fund investment by registering for a systematic withdrawal plan. An SWP enables recurring redemptions from a scheme over a period of time at the applicable NAV on the date of each redemption. It is a facility that provides a defined payout from a fund for investors who need it. Investors seeking to redeem units from a scheme can also use this facility to eliminate the price risk associated with redeeming all the required units at one point. In an SWP since the withdrawal happens at different points, the investor will be able to benefit from the NAV volatility in the period.

When the NAV is high, fewer units are redeemed to payout the same amount of money and vice versa.

Investors can register for an SWP using the transaction slip. They need to specify the following to the mutual fund:

- Mutual fund scheme, plan & option.
- Amount to be redeemed: The mutual fund will specify the minimum amount that can be withdrawn in one installment.
- Frequency of withdrawal from the options provided by the mutual fund such as monthly, quarterly and so on.
- Date of redemption for each installment has to be selected from the options provided by the mutual fund.
- The period or tenor of the SWP over which the redemption will be done. The mutual fund may specify a minimum period for the SWP.
- Date of commencement of the SWP. Mutual funds specify a minimum period before the first redemption for the SWP request to be registered with them.

The SWP is redemption from a scheme. Exit loads will apply to each redemption transaction and there will be tax implications for the investor on redemption in the form of capital gains. The redemption amount will be credited to the investor's bank account registered with the mutual fund. The SWP will cease automatically if the balance in the folio falls below a specified amount. Mutual funds may offer variations to the SWP such as the facility to withdraw only the appreciation in a folio in the period between one installment and the next. Investors can cancel and SWP by notifying the mutual fund of the same.

3.8.3 Systematic Transfer Plan (STP)

A systematic transfer plan combines redemption from one scheme and an investment to another scheme of the same mutual fund. The scheme from which units are redeemed is called the source scheme and the scheme into which investments are made is called the target scheme. For example, an investor who has been accumulating funds in an equity fund may decide to transfer it over a period of time to a less risky fund such as a short term debt fund as the time to use the corpus comes near. Instead if the units were redeemed at one point, there is a risk of the NAV being low at that point in time and the resultant fall in the value of the corpus. The folio under which the investment in the target scheme will be made will be the same folio from which the redemption is done from the source scheme.

The investor registers an STP with the mutual fund by specifying the following:

- Source and target scheme including plan and option. The schemes that are eligible for STP will be specified by the mutual fund.

- The amount to be redeemed and invested in each installment. The mutual fund will specify the minimum amount that can be transferred.
- The frequency of the STP has to be selected from the options provided by the mutual fund.
- The period over which the STP has to be conducted has to be specified. Mutual funds may fix a minimum period for the STP.
- The commence date for the STP has to be specified and due notice has to be given to the mutual fund before the commencement of the first transfer.

The redemption of units from the source scheme and the investment into the target scheme will happen at the applicable NAV in force. The redemption will attract exit loads and taxes as applicable.

3.8.4 Switch

A switch is a single transfer from one scheme or option of a scheme to another scheme, or option of the same scheme. The investor redeems units from scheme and simultaneously invests it in another scheme of the same mutual fund in an inter-scheme switch. In an intra-scheme switch, the investor redeems from one option of a scheme and invests in another option of the same scheme. In a switch, an investor can transfer all or a portion of the funds held in the investment. The applicable NAV for the switch-out (redemption) from the source scheme or option and switch-in (purchase) into the target scheme or option will depend upon the type of schemes. Since there is a redemption that happens in a switch, exit loads and taxes will apply. The investor will need to specify the source and target schemes and options and the amount to be switched.

3.9 Benefits of Investing in Mutual Funds

Mutual funds offer a route to investing in asset classes such as equity, debt, gold and real estate. As holders of the mutual fund units, investors are the beneficial owners implying that any returns or losses generated from the investment is to the account of the investor.

In a mutual fund, the investment activities such as evaluating and selecting securities, creating and managing the portfolio, and reviewing and rebalancing the portfolio based on the performance of the portfolio as a whole and the securities included in it, is done by professional fund managers for a fee. They bring experience, information and investment skills that individual investors may not all have.

Some securities may not be available for investment by retail investors. There are bonds and equity shares that are placed to institutional investors only. Mutual funds provide access to investors to such securities through their portfolio.

Mutual funds offer tax arbitrage to investors. Mutual funds are exempt from paying taxes on income and returns earned. They are thus able to earn income without paying any taxes on them and pass it on to the mutual fund investors as dividend which is exempt from tax according to prevalent tax laws in the hands of the investors.

Mutual funds give the flexibility to an investor to organize their investments according to their convenience. Direct investments may require a much higher investment amount than what many investors may be able to invest. For example, investment in gold and real estate require a large outlay. Similarly, an effectively diversified equity portfolio may require a large outlay. Mutual funds offer the same benefits at a much lower investment value since it pools small investments by multiple investors to create a large fund. Similarly, the dividend and growth options of mutual funds allow investors to structure the returns from the fund in the way that suits their requirements.

Investing in the securities markets will require the investor to open and manage multiple accounts and relationships such as broking account, demat account and others. Mutual fund investment simplifies the process of investing and holding securities.

Costs of investing in mutual funds are higher because the funds are managed by external agencies that need to be paid a fee for their services apart from the transaction costs that the investors have to bear. Direct investments may have lower costs since only the transactions costs have to be borne by the investor.

Mutual funds may provide an easier and more efficient way of investing in different asset classes and securities.

Sample Questions

- 1. The asset class in which a fund will invest will be defined by**
 - a. The risk profile of the fund
 - b. The return requirements of the investor
 - c. The investment objectives of the fund**
 - d. The investment horizon of the investor

- 2. The interest rate risk in a debt fund will depend on**
 - a. The tenor of securities**
 - b. The credit quality of the portfolio
 - c. The coupon of the securities
 - d. None of the above

- 3. In a fund of fund the portfolio consists of**
 - a. Debt securities
 - b. Equity instruments
 - c. Derivative instruments
 - d. Units of other schemes**

- 4. The dividend distribution tax applicable for individuals in equity funds**
 - a. Is at 15%
 - b. Is at 25%
 - c. Is at 30%
 - d. Does not apply**

CHAPTER 4: INVESTMENT PRODUCTS

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Small Saving Instruments
- Fixed Income Instruments
- Alternate investment options
- Direct equity investments

The primary function of a financial adviser with respect to investment planning is asset allocation. While a fund manager or a portfolio manager engages in a bottom up activity of selecting specific stocks and securities to construct a portfolio, the financial planner is not involved in such activity of security selection. Financial advisory is a top-down function where, based on the financial goals, expectations for return and risk preferences of the investor, an appropriate asset allocation that satisfies the specified needs is recommended.

Financial plans are implemented and executed by using various financial products. The asset allocation function in financial advisory services may be extended to recommend specific products, if the adviser is also engaged in implementing the financial plan. In terms of the current regulatory regime for advisors, they may execute a financial plan only if it is done through an independent arm of their firm or by a completely different firm that they may own. The distributors of financial products are required to undergo a comprehensive certification covering the risk, return, holding period and operational details of the various financial and investment products they choose to distribute to investors.

This chapter therefore focuses on the financial products used in investment planning and provides a brief overview of their features. In order to acquire detailed knowledge, separate certification exams for each category of products may be pursued.

4.1. Small Saving Instruments

The Indian government has instituted a number of small saving schemes to encourage investors to save regularly. The main attraction of these schemes is the implicit guarantee of the government, which is the borrower. These schemes are offered through the post office and select banks.

The saving schemes currently offered by the government are:

- Public Provident Fund (PPF)

- Senior Citizens' Saving Scheme (SCSS)
- National Savings Certificate (NSC)
- Post Office Schemes and Deposits
- Kisan Vikas Patra (KVP)
- Sukanya Samriddhi Account
- Gold Monetisation Scheme, 2015
- Sovereign Gold Bond Scheme

As per the decision of the Government on the recommendations of the Committee for Comprehensive Review of National Small Savings Fund (NSSF), the rate of interest on small savings will be dynamic and reflect the interest rates prevailing in the market. Hence, rates of interest on small saving schemes will be aligned with G-sec rates of similar maturity with a spread of 25 basis points (bps) and announced in April of every year. Also, the rate of interest on an investment made in all schemes, except PPF, on a particular date remains unchanged for the entire duration of the investment till maturity, irrespective of the revision in subsequent years. In other words, the balances lying to the credit of the PPF account or the fresh contributions made to this account will bear interest as per the rates notified by the Government from time to time.

4.1.1 Public Provident Fund

Instituted in 1968, the objective of the PPF is to provide a long term retirement planning option to those individuals who may not be covered by the provident funds of their employers or may be self-employed.

PPF is a 15-year deposit account that can be opened with a designated bank or a post office. A person can hold only one PPF account in their name except an account in the name of a minor child to whom he or she is a guardian. HUFs and NRIs are not allowed to open PPF accounts. If a resident subsequently becomes an NRI during the prescribed term, he/she may continue to subscribe to the fund till its maturity on a non-repatriation basis. Joint account cannot be opened, however nomination facility is available.

Minimum amount that needs to be deposited in this account is Rs. 500. The maximum limit is Rs. 1,50,000¹. Subscription should be in multiples of Rs. 5 and can be paid in one lump sum or in instalments not exceeding 12 in a financial year. Regular deposits have to be made in the account over the term of the fund. Penalties apply if the minimum deposit is not made in a financial year.

¹The Finance Bill 2014 hiked the maximum limit for deductions for investments made under section 80C of the Income Tax Act, 1961 to Rs. 150000. The PPF Act needs to be amended for this to come into force. Till such time the limit will stand at Rs. 100000

A maximum of 12 deposits can be made in a single year. Interest is calculated on the lowest balance available in the account between 5th of the month and the last day of the month, however, the total interest in the year is added back to PPF only at year end. Interest is cumulated and not paid out.

The account matures after expiry of 15 years from the end of financial year in which the account was opened.

One withdrawal in a financial year is permissible from seventh financial year. Maximum withdrawal can be 50% of balance at the end of the fourth year or the immediate preceding year, whichever is lower. On completion of term, the account can be closed or continued, with or without additional subscription, for further blocks of 5 years. Once an account is continued without contribution for more than a year, the option cannot be changed. Account holders can avail of a loan facility in the 4th to 6th year out of the amount standing to the credit in the account between the third financial year to the fifth financial year.

In the event of the death of the account holder during the term of the scheme, the balance in the account shall be paid to the nominee or to the legal heir if the account does not have a nomination.

Contribution to PPF is eligible for deduction under sec 80C of Income tax Act 1961. Interest is completely tax free and the applicable rate of interest for 2015-16 is 8.7%. Unlike other instruments which are eligible for tax deduction under Section 80C, PPF enjoys an exempt-exempt-exempt (EEE) status, where withdrawal on maturity is also not taxed.

A PPF account is not subject to attachment (seizure of the account by Court order) under any order or decree of a court.

4.1.2 National Savings Certificate (NSC)

National Savings Certificates are issued by the government and available for purchase at the post office. NSCs are issued with tenors of 5 years (NSC VIII issue amended as of December 1, 2011) and 10 years (NSC IX issue, effective December 1, 2011). The interest on these instruments for 2015-16 is 8.5% for the 5-year bond and 8.8% for the 10-year bond. Interest is compounded half-yearly and accumulated and paid on maturity.

The certificates can be bought by individuals on their own account or on behalf of minors. NRI, HUF, Companies, trusts, societies, or other institutions are not allowed to purchase the NSCs. If a resident holder becomes an NRI subsequent to the purchase, the certificate can be held till maturity. However, the maturity value cannot be repatriated. Joint holding is allowed and the certificate can be held jointly by up to two joint holders on joint basis or either or survivor basis.

Certificates are available in denominations of Rs. 100, 500, 1000, 5000, and 10000. The minimum investment is Rs. 500 without any maximum limit. The certificates can be bought by cash or through cheques or demand drafts.

Investments made in the NSC VIII issue and IX issue enjoy tax benefits under section 80C of Income Tax Act, 1961. Accrued interest is taxable, but is it deemed to be reinvested and therefore the interest becomes eligible for Section 80C benefits. There is no tax deducted at source at the time of redeeming the certificate value.

NSCs can be transferred from one person to another with the consent of a designated official of the post office under situations such as transfers to heirs of a deceased holder, under a court order, to near relative such as wife, lineal ascendant or descendant and transfer to a bank, housing company or other specified institution as security.

Premature encashment is allowed only in case of death of the holder, forfeiture by a pledgee, or under orders of court of law. If the encashment happens within a period of one year from the date of the certificate, only the face value will be paid. If the encashment happens after one year but before three years, simple interest is paid at the rates applicable to Post office savings accounts. After three years, the certificates will be encashed at a discounted value specified in the rules.

Nomination is allowed in the certificates, which can be done at the time of the purchase of subsequently. There shall be no nomination allowed on certificate held on behalf of a minor. A nomination can be cancelled or changed by making an application to this effect at the post office where the certificates stands registered.

The certificates are also accepted as collateral for taking a loan. The government has recently enabled holding NSCs in demat form.

4.1.3 Senior Citizens' Saving Scheme (SCSS)

The Senior Citizens' Saving Scheme is a savings product available to only senior citizens of age 60 years or above on the date of opening the account. Proof of age and a photograph of account holder are required. The age limit is reduced to 55 years in case of an individual retiring on superannuation or otherwise, or under VRS or special VRS, provided the account is opened within one month of date of receipt of retirement benefits. The retired personnel of Defence Services, excluding Civilian Defence Employees, shall be eligible irrespective of age limit. The account can be opened at any post office undertaking savings bank work and a branch of a bank authorized to do so. The scheme can be held in individual capacity or jointly with the spouse. The age restrictions apply only to the first holder. NRIs, PIOs and HUF are not eligible to invest in this scheme.

The term for the scheme is 5 years. A one-time extension of three years is allowed, if applied within one year of its maturity. Maximum limit of investment is Rs. 15 lakhs. However, in case of retirees before the age of 60 years the limit is restricted to retirement benefits or Rs. 15 Lakhs, whichever is less. 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 Lakhs. The deposit can be made in cash if the amount is less than Rs. 1 lakh, or cheques or demand draft.

The interest rate applicable on the scheme for 2015-16 is 9.3% p.a. payable quarterly. The benefit of section 80C is available on investment but interest is fully taxable.

Premature closure is allowed after expiry of one year subject to following conditions:

- After expiry of 1 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. In case of a jointly held account, the right of the joint holder to receive the amount will rank above that of the nominee. The nomination can be cancelled or changed at any time. The investment is non-transferable and non-tradable.

4.1.4 Post Office Schemes and Deposits

a. Post Office Monthly Income Scheme (POMIS)

The Post Office Monthly Income Scheme provides a regular monthly income to the depositors. This scheme has a term of 5 years (reduced from 6 years w.e.f. 1 December, 2011).

Minimum amount of investment in the scheme is Rs. 1500, and the maximum amount is Rs. 4.5 lakhs for a singly held account and Rs. 9 lakhs if the account is held jointly. A depositor can have multiple accounts, but the aggregate amount held in the scheme across all post offices cannot exceed the maximum permissible limits. The deposit can be made in cash, cheque or demand draft.

For 2015-16, the applicable interest rate is 8.4% p.a. payable monthly with no bonus on maturity. The earlier facility of bonus of 5% payable on maturity stands withdrawn from 1 December, 2011. Nomination facility is available and can be made at the time of opening the account or subsequently at any time before maturity.

Premature withdrawal of the invested amount is allowed after 1 year of opening the account. If the account is closed between 1 and 3 years of opening, 2% of the deposited amount is

deducted as penalty. If it is closed after 3 years of opening, 1% of the deposited amount is charged as penalty.

The bonus applicable for accounts opened before 1 December, 2011 is forfeited when the account is closed early.

b. Post Office Time Deposits (POTD)

Post Office Time Deposits are similar to fixed deposits of commercial banks. The post office deposits with terms of one year, two years, three years and five years. The account can be held singly in individual capacity or jointly by a maximum of two holders.

The minimum deposit amount is Rs. 200. There is no maximum limit. The interest rates on these accounts are reset annually. The applicable rates for 2015-16 are as follows:

Term	Interest Rate
One Year	8.4%
Two Years	8.4%
Three Years	8.4%
Five Years	8.5%

*These rates are subject to changes annually as indicated by the government.

Interest rates are compounded quarterly and are subject to tax. The five year term deposit is eligible for tax benefits under Section 80C of the Income Tax Act, 1961.

c. Post Office Recurring Deposit

Post Office Recurring Deposit (RD) accounts can be opened by resident individuals, and a maximum of two people can hold an account jointly or on either or survivor basis. An individual can hold any number of RD accounts, singly or jointly. Deposits can be made at a minimum amount of Rs. 10 per month and in multiples of Rs. 5 thereafter for every calendar month. There is no maximum limit. Interest is payable on a quarterly compounded basis. The maturity amount with interest is paid at the end of the term. Interest is taxable. Deposits have to be made regularly on a monthly basis, and penalties apply for non-payment of instalment.

An account can be discontinued by the Post Office, if payments are not made for four months and if such a condition is not rectified by paying the penalties. Deposits can also be made in advance and a nominal rebate is allowed in such cases. The account can be closed after three

years, and in cases of such pre-mature closure only the savings bank interest rate is payable. One withdrawal is allowed after the deposit has been in operation for at least one year and 12 monthly deposits have been made. Interest as applicable will apply on the withdrawal and the repayment can be in a lump sum or in instalments. An account can be extended for another 5-year term after maturity.

4.1.5 Kisan Vikas Patra (KVP)

The KVP can be purchased by an adult for self or by two adults for a minor investor. NRIs HUFs and other entities are not eligible to invest in the KVP. It can be purchased from any departmental post office or bank through cash, local cheque or DD. KVP is available in denomination of Rs.1000, Rs.5000, Rs.10,000 and Rs.50,000. The minimum investment is Rs.1000 and there is no maximum investment. The amount invested doubles in 8 years and 4 months. The effective interest rate is 8.7%. The facility of nomination and joint holding is available in the KVP and the certificate can be transferred from one person to another and one post office to another by endorsement and delivery. KVP can be prematurely encashed 2 ½ years from the date of issue. There is no tax incentive for the investment made and the interest earned is taxed on accrual basis.

4.1.6 Sukanya Samriddhi Account Scheme

The Sukanya Samriddhi Account is a scheme launched for the benefit of girl children. The account will be opened in the name of the girl child by a natural or legal guardian. The account is opened with an authorized list of banks including SBI, Axis bank, ICICI bank, Canara bank, and others. Only one account can be opened in the name of a child and a guardian can open a maximum of two accounts in the name of two different girl children. The age of the child cannot be more than 10 years at the time of opening the account. The minimum investment in the account is Rs. 1000 in a financial year and a maximum of Rs. 1,50,000. Investments can be made in a lump sum or in tranches. There is no limit on the number of deposits that can be made in a financial year in multiples of Rs.100. The account will earn interest at the rate of 9.2% compounded annually for the year 2015-16. The account can be transferred to any place in India. The account will mature on the completion of 21 years from the date of opening the account. If the girl child gets married before the completion of 21 years then the account is closed. Partial withdrawal is allowed after the holder attains 18 years of age, to the extent of 50% of the amount in balance at the end of the preceding financial year. Any amount deposited in the account is eligible for deduction under section 80C of the Income Tax Act.

4.1.7 Sovereign Gold Bond Scheme, 2015

The Sovereign Gold Bond Scheme (SGB) was launched in 2015 to provide an alternative way for investors to take exposure to gold as an investment. SGBs are government securities denominated in grams of gold. The bonds are issued in denomination of one gram of gold and

in denominations thereof. The tenor of the bond is 8 years. Each bond Investors buy the bonds in cash and on redemption are paid the maturity value also in cash. The units (grams) of gold bought by the investor and represented by the bonds is protected. The value of the bond will reflect the price of gold. On maturity the value of the bond may be higher or lower depending upon the prevailing price of gold. The bonds bear an interest of 2.75% per annum on the initial investment and will be paid semi-annually to the account of the bond holder. Investors can apply for the bond when the issue of each tranche is open. RBI will provide information about the issue price based on the previous week's price of gold. The bonds are available for investment by resident individuals, HUFs, Trusts, Universities, Charitable Trusts and others. The investor can apply for the bonds online through the website of listed scheduled commercial bank or physically through the designated banks or post-offices. The bonds can be held in physical form or in dematerialized form. The bond is tradeable on stock exchanges. Early redemption is allowed after the fifth year from the date of issue. The minimum investment is 2gms and the maximum is 500 gms per eligible investor for each fiscal year. Interest will be taxed as per the prevalent tax laws and capital gains, if any, will be taxed similarly as for physical gold. Joint holding, nomination and the facility of marking lien is available on these bonds.

4.1.8 Gold Monetisation Scheme,2015

The Gold Monetisation Scheme (GMS) is a scheme that allows eligible resident investors including individuals, HUFs, Trusts and companies to monetise the gold held by them into interest earning deposits with all Scheduled Commercial Banks, excluding RRBs. The gold can be in the form of coins, bars and jewellery. The gold deposited under the scheme should be assayed by the Central Purity Testing Centre (CPTC) and converted in tradable gold bars of 995 purity after refining. The minimum gold that can be deposited under the scheme is 30gms and there is no maximum limit. The gold can be converted into Short term bank deposits (1-3 years) which will earn interest at the rate fixed by the respective bank. The interest will be credited periodically to the account and can be either withdrawn or allowed to accumulate till maturity. On completion of the term of deposit, the prevailing value of the deposited gold and accumulated interest, if any, will be repaid either in rupees or gold as chosen by the depositor at the time of making the deposit. Medium Term Bank Deposit (5-7 years) and Long Term Bank Deposit (12-15 years) will be accepted by the designated bank on behalf of the Central Government, unlike the short term deposit which is the liability of the bank accepting it. The interest applicable currently on the medium term deposit is 2.25% and long term deposit is 2.5%. Pre-mature redemption, either partially or fully, may be allowed by the designated bank subject to any lock-in period and penalties imposed by the bank. The redemption will be made only in rupees at the prevailing value of gold at the time of redemption.

4.2. Fixed Income Instruments

The Indian debt markets are largely wholesale markets dominated by institutional investors. There is however a few retail products that are offered from time to time. Some bonds are offered to retail investors but do not have a liquid secondary market. Therefore retail investors do not participate in such bond issues or end up buying and holding the bonds to maturity.

The following are bonds and deposits available to retail investors:

- Government securities
- Corporate bonds
- Company deposits

4.2.1 Government Securities

Government securities (G-secs) are issued by the RBI on behalf of the government. G-secs represent the borrowing of the government, mostly to meet the deficit. Deficit is the gap between the government's income and expenditure. G-secs are issued through auctions that are announced by RBI from time to time. Banks, mutual funds, insurance companies, provident fund trusts and such institutional investors are large and regular buyers of G-secs. With a view to encouraging retail participation, the government has reserved 5% of the auction amount in every auction for non-competitive buyers, including retail investors.

In order to buy G-secs, retail investors have to open a constituent SGL (CSGL) account with their bank or any other holder of SGL (Securities General Ledger) accounts. The CSGL account is held as part of the accounts of the offering bank, in which the G-secs are held as electronic entries in demat form. Investors can also transfer the G-secs to their normal demat account, after buying them. The minimum investment amount is Rs. 10000. Investors can apply for buying G-secs through their SGL-holding bank and make the payment through their bank. The price at which the retail investors are allotted G-secs as non-competitive bidders will be the weighted average price of the successful bids in the auction.

There is no cumulative option in a G-sec. Interest is paid out on pre-specified dates into the designated bank account of the investor. Interest is not subject to TDS but is fully taxable. Redemption proceeds are also paid into the bank account. Though there is a retail debt market segment in which all issued G-secs can be traded, there is limited liquidity for small lots of G-secs. The institutional market where the trading lot is Rs.5 crore is quite active. Retail investors may have to hold the G-secs to maturity.

G-secs can be offered as collateral for taking a loan from a bank. G-secs are benchmark securities in the bond market, and tend to offer a lower interest rate compared to other borrowers for the same tenor. This is because there is no credit risk or risk of default in a G-

sec. The price of the bonds in the secondary market will respond to changes in interest rates. An increase in interest rates sees the price of existing bonds depreciate and vice versa. The extent of change in the price of bonds is a function of its features, and bonds with a higher tenor see a greater change in price for a change in interest rates. The low liquidity in the secondary retail markets may mean that investors may not be able to sell and realize the gains in price, if any.

4.2.2 Inflation-Indexed Bonds

Inflation Indexed Bonds (IIB) are a category of government securities issued by the RBI which provides inflation protected returns to the investors. These bonds have a fixed real coupon rate which is applied to the inflation adjusted principal on each interest payment date. On maturity, the higher of the face value and inflation adjusted principal is paid out to the investor. Thus, the coupon income as well as the principal is adjusted for inflation. The inflation adjustment to the principal is done by multiplying it with the index ratio. The index ratio is calculated by dividing the reference index on the settlement date by the reference index on the date of issue of the security. The Wholesale Price Index (WPI) is the inflation measure that is considered for the calculation of the index ratio for these bonds.

Another category of inflation-indexed instruments issued by the RBI for retail investors is the Inflation-Indexed National Saving Securities-Cumulative 2013. These bonds of 10-year tenor were available to retail resident individuals, minors, HUFs, and charities among others. The bond carries a fixed interest of 1.5% and an inflation rate calculated on the basis of the Consumer Price Index (CPI). The interest is compounded every six months and cumulated and paid with the principal on maturity. The fixed rate of interest will be the floor and will be paid even if there is deflation. The interest is taxable according to the tax status of the investor.

The minimum investment was Rs. 5000 and the maximum Rs. 500000 per applicant. The bonds were issued in the form of a credit to the Bon Ledger Account (BLA) and a certificate is issued to the holder. The bonds are not listed or traded on the secondary markets and can be transferred prior to maturity only on the death of the holder to the nominees or legal heirs.

4.2.3 Corporate Bonds

Corporate bonds are debt instruments issued by private and public sector companies. They are issued for tenors ranging from two years to 15 years. The more popular tenors are 5-year and 7-year bonds. Most corporate bonds are issued to institutional investors such as mutual funds, insurance companies, and provident funds through a private placement of securities. Companies may also raise funds from the public by making a public issue of bonds where retail investors are called upon to invest.

Bonds of all non-government issuers come under the regulatory purview of SEBI. They have to be compulsorily credit-rated and issued in the demat form. The coupon interest depends

on the tenor and credit rating of the bond. Bonds with the highest credit rating of AAA, for example, are considered to have the highest level of safety with respect to repayment of principal and periodic interest. Such bonds tend to pay a lower rate of interest than those that have a lower credit rating such as BBB which are seen as having a high credit or default risk. All public issues of bonds have to be mandatorily listed on a stock exchange. A privately placed bond may also be listed on a stock exchange if it meets the listing requirements.

Corporate bonds can be issued using various cash flow structures. A plain vanilla bond will have a fixed term to maturity with coupon being paid at pre-defined periods and the principal amount being repaid on maturity. The bond is usually issued at its face value, say, Rs. 100 and redeemed at par, the same Rs. 100. The simple variations to this structure could be a bond issued at a premium or discount to face value or redeemed at a premium or discount to face value. In some cases, the frequency of the interest payment could vary, from monthly, to quarterly and annual. Or, the bonds could feature a cumulative option where the interest is not paid out to the investor periodically but instead re-invested and paid out along with the principal at maturity. The yield to the investor is higher in such an option because of the re-investment returns. Apart from a regular fixed-interest-paying bond, the other types of bonds issued are: zero coupon bonds, floating rate bonds and bonds with put or call options. Convertible bonds, allow investors to convert the bond fully or partly into equity shares, in a pre-determined proportion. Interest earned is fully taxable.

The price of the bonds in the market will respond to changes in interest rates. Secondary market trading in corporate bonds is usually concentrated among institutional investors and the market is not very liquid for retail investors. Apart from credit risk, retail investors also bear liquidity risk while buying these bonds.

4.2.4 Infrastructure Bonds

The government announces from time to time, a list of infrastructure bonds, investment in which is eligible for deduction under Section 80C of the Income tax Act.

Bonds issued by financial institutions like the Industrial Development Bank of India (IDBI), India Infrastructure Finance Company Ltd. (IIFCL) and National Bank for Agriculture and Rural Development (NABARD) are eligible for such deduction. The bonds are structured and issued by these institutions as interest paying bonds, zero coupon bonds or any other structure they prefer.

The terms of the issue such as tenor, rate of interest and minimum investment may differ across the bonds. What is common is that these bonds have a minimum lock-in period (which could be three years, or five years) during which they cannot be transferred or pledged.

Infrastructure bonds are compulsorily credit rated, and can be issued in the demat form. Interest from these bonds is taxable. Infrastructure bonds do not carry any government guarantee.

4.2.5 Bank Deposits

A bank fixed deposit (FD) is also called as a term or time deposit, as it is a deposit account with a bank for a fixed period of time. It entitles the investor to pre-determined interest payments and return of the deposited sum on maturity. Fixed bank deposits offer higher returns than savings accounts as the money is available for use by the bank for a longer period of time. Fixed deposits are preferred by investors who like the safety that a bank provides and do not have an immediate need for the funds.

Bank FDs are considered to be a safe investment option. This is because each depositor is insured up to Rs. 1 lakh by the Deposit Insurance and Credit Guarantee Corporation (DICGC). It includes all deposits and interest on them, held across branches of a given bank.

A fixed deposit is created by opening an FD account with the bank which in turn issues an FD receipt. Interest on an FD can be paid into the depositor's savings bank account at a predefined frequency, or accumulated and paid at the end of the term. On maturity, the lump sum deposit amount is returned to the investor.

Investors can also choose to renew the deposit on the maturity date. The minimum deposit amount varies across banks. The duration of deposits can range from 14 days to 10 years though FDs longer than 5 years are not very common.

- **Interest Rates on FDs**

Interest rates depend on the duration of deposit, amount deposited and policies of the bank. In general, longer term deposits pay a higher rate than shorter term deposits. Banks also offer special rates to senior citizens, defined as those who are over 60 years of age. Interest rates also vary from bank to bank. The interest rate paid by a bank depends on its need for funds for a particular tenor.

Interest rates do not remain unchanged. Deposit rates offered by banks for various tenors change over time, depending on the economic cycle, their need for funds and demand for credit (loans) from banks. However, a rate committed to be payable for a tenor, until maturity, does not change even if market interest rates change. New rates usually apply only for fresh deposits.

Banks may also prescribe a minimum lock-in period during which funds cannot be withdrawn from the FD account. They may levy a penalty on depositors for pre-mature withdrawals.

FD holders may enjoy additional benefits such as loan facility against the security of their FD receipts, or cash overdraft facility.

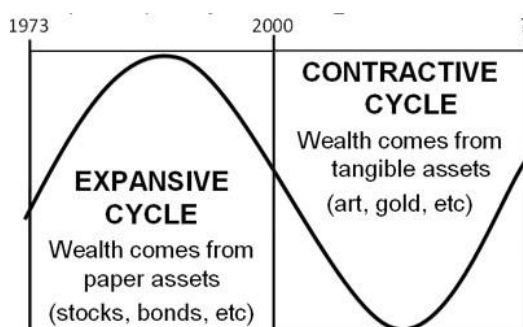
Investment in specified (under Section 80C of the Income Tax Act) 5-year bank FDs are eligible for tax deductions up to a maximum amount of Rs.1 lakh, along with other investment options listed under the same section. These deposits are subject to a lock-in period of 5 years and have to be added back to the taxable income in the year of redemption.

4.3. Alternate Investments

Alternate investments refer to those investments whose risk and return structures differ from the traditional asset classes such as equity and debt. They could be linked to the real economy more strongly than other financial instruments normally are. The low correlation of returns of such investments with that of traditional investments enhances the diversification benefits in a portfolio in which these investments are included. The overall risk in the portfolio reduces. However, such investments typically tend to have a higher risk and lower liquidity and do not trade like other assets. Investors have limited information available about them. They are therefore suitable as an investment option for investors willing to take greater volatility in returns, longer investment horizons and lower liquidity for better returns. Some of the alternate investments may require investing in physical assets.

Alternate investments are relatively illiquid and therefore it is difficult to determine the current market value of the assets. This also leads to limited historical data on performance and a low concentration of analysts tracking alternates.

In general, alternate asset classes tend not to move in lock-step with traditional asset classes; i.e., they have low correlations to stocks and bonds. Notice in the picture how different asset classes perform in various phases of economic cycle.



Derivatives, structured products, real estate, gold, commodities, private equity and art/collectibles are the most common alternate investments.

4.3.1 Derivatives and Structured Products

A derivative refers to a financial product whose value is derived from another. A derivative is always created with reference to the other product, also called the underlying.

A derivative is a risk management tool used commonly in transactions where there is risk due to an unknown future value. For example, a buyer of gold faces the risk that gold prices may not be stable. When one needs to buy gold on a day far into the future, the price may be higher than today. The fluctuating price of gold represents risk. Gold represents the 'underlying' asset in this case. A derivative market deals with the financial value of such risky outcomes. A derivative product can be structured to enable a pay-off and make good some or all of the losses if gold prices go up as feared.

Derivatives are typically used for three purposes: hedging, speculation and arbitrage.

a. Hedging

When an investor has an open position in the underlying, he can use the derivative markets to protect that position from the risks of future price movements.

Example: An investor has saved for the education of his child. The portfolio is made up of an index fund that invests in the CNX S&P Nifty. The investor has been systematically investing in this product over the last 15 years. In the next three months, the child would enter college and the investor is keen to liquidate the investment to fund the education expense. The current value of the investment is Rs.10 lakhs. The risk the investor faces is that the value of the portfolio will reduce over the three months if there is fall in the market index. The investor can enter into a contract to sell his portfolio three months from now, at a price to be determined today. By doing this the investor has hedged or insured himself against the risk of a decrease in the value of the portfolio.

b. Speculation

A speculative trade in a derivative is not supported by an underlying position in cash, but simply implements a view on the future prices of the underlying, at a lower cost.

Example: A speculator believes that the stock price of a particular company will go up from Rs. 200 to Rs. 250 in the next three months and wants to act on this belief by taking a long position in that stock. If he buys 100 shares of this company in spot market (delivery), he needs $\text{Rs. } 200 \times 100 = \text{Rs. } 20,000$ to enter into this position. If his prediction comes true and the stock price moves up from Rs. 200 to Rs. 250, he will make a profit of Rs. 50 per share and total profit of $\text{Rs. } 50 \times 100 \text{ shares} = \text{Rs. } 5,000$ over an investment of Rs. 20,000 which is a return of 25%.

Alternatively, he can take a long position in that stock through futures market as well. Suppose he buys a three months futures contract of that stock (1 lot of 100 shares), he need not pay the full amount today itself and pays only the margin amount today. If the margin required for this stock is 10%, then he needs $\text{Rs. } 200 \times 100 \times 10\% = \text{Rs. } 2000$ to take this long position in futures contract. If the stock price moves to Rs. 250 at the end of three months, he makes a profit of $\text{Rs. } 50 \times 100 = \text{Rs. } 5000$ from this contract. Since his initial investment was only Rs. 2000, his returns from the futures position will be $5,000/2,000 = 250\%$. This difference in returns between the spot position and futures position is due to the leverage provided by the futures contracts. This leverage makes the derivatives a preferred product of speculators. However, the same leverage makes the derivatives products highly risky. If the market had moved against his prediction, the losses that investor would have incurred would have been many times the loss on the spot market position.

c. Arbitrage

If the price of the underlying is Rs.100 and the futures price is Rs.110, anyone can buy in the cash market and sell in the futures market and make the riskless profit of Rs.10. This is called arbitrage.

The Rs. 10 difference represents the cost of buying at Rs. 100 today, selling at Rs. 110 in the future, and repaying the amount borrowed to buy in the cash market with interest.

Arbitrageurs are specialist traders who evaluate whether the Rs.10 difference in price is higher than the cost of borrowing. If yes, they would exploit the difference by borrowing and buying in the cash market, and selling in the futures market at the same time (simultaneous trades in both markets). If they settle both trades on the expiry date, they will make the gain of Rs.10 less the interest cost, irrespective of the settlement price on the contract expiry date, as long as both legs settle at the same price.

After necessary approvals from SEBI, derivative contracts in Indian stock exchanges began trading in June 2000, when index futures were introduced by the BSE and NSE. In 2001, index options, stock options and futures on individual stocks were introduced. India is one of the few markets in the world where futures on individual stocks are traded. Equity index futures and options are among the largest traded products in derivative markets world over. In the Indian markets too, volume and trading activity in derivative segments is far higher than volumes in the cash market for equities. Other highly traded derivatives in global markets are for currencies, interest rates and commodities.

Futures

A futures is a contract for buying or selling a specific underlying, on a future date, at a price specified today, and entered into through a formal mechanism on an exchange. The terms of

the contract (such as order size, contract date, delivery value and expiry date) are specified by the exchange.

Example:

- FUTIDX NIFTY 26 Nov 2015 is a futures contract on the Nifty index that expires on 26th November 2015.
- The value is 8075, which means a buyer or seller agrees to buy or sell Nifty for a delivery value of 8076 on a future date.
- It is available to trade from the date it is introduced by the exchange to its expiry date on 26th November 2015.
- On expiry, the settlement price at which this future contract will be settled may be higher or lower than 8075. If it is higher, any investor who had bought the future contract at a price of 8075 would have made profits and a seller at that price would have made losses. If the settlement price is lower, then the situation is reversed for the buyer and seller.

A futures contract can be bought or sold on the exchange in the derivative segment of the market. Orders placed by buyers and sellers on the electronic trading screen are matched. The price of the futures contract moves based on trades, just as it does in the cash or spot market for stocks.

An important feature of an exchange-traded futures contract is the clearing-house. The counterparty for each transaction is the clearing-house. Buyers and sellers are required to maintain margins with the clearing-house, to ensure that they honour their side of the transaction. The counterparty risks - are eliminated using the clearing-house mechanism.

Options

Options are derivative contracts, which splice up the rights and obligations in a futures contract. The buyer of an option has the right to buy (in case of “call”) or sell (in case of “put”) an underlying on a specific date, at a specific price, on a future date. The seller of an option has the obligation to sell (in case of “call”) or buy (in case of “put”) an underlying on a specific date, at a specific price, on a future date. An option is a derivative contract that enables buyers and sellers to pick up just that portion of the right or obligation, on a future date.

A buyer of an option has the right to buy (in case of call) or sell (in case of put) the underlying at the agreed price. He is however not under obligation to exercise the option. The seller of a call option has to complete delivery as per the terms agreed. For granting this right to the buyer, the seller collects a small upfront payment, called the option premium, when he sells the option.

A call option represents a right to buy a specific underlying on a later date, at a specific price decided today. A put option represents a right to sell a specific underlying on a later date, at a specific price decided today.

a. Option Terminology

Arvind buys a call option on the Nifty index from Salim, to buy the Nifty at a value of 8200, one month from today. Arvind pays a premium of Rs.85 to Salim. What does this mean?

- Arvind is the buyer of the call option.
- Salim is the seller or writer of the call option.
- The contract is entered into today, but will be completed one month later on the settlement date.
- 8200 is the price Arvind is willing to pay for Nifty, one month from today. This is called the strike price or exercise price.
- Arvind may or may not exercise the option to buy Nifty at 8200 on the settlement date.
- But if he exercises the option, Salim is under obligation to sell the Nifty at 8200 to Arvind.
- Arvind pays Salim Rs.85 as the upfront payment. This is called the option premium. This is also called as the price of the option.
- On settlement date, Nifty is at 8300. This means Arvind's option is "in the money." He can buy the Nifty at 8200, by exercising his option.
- Salim earned Rs.85 as premium, but lost as he has to sell Nifty at 8200 to meet his obligation, while the market price is 8300.
- On the other hand, if on the settlement date, the Nifty is at 8100, Arvind's option will be "out of the money."
- There is no point paying 8200 to buy the Nifty, when the market price is 8100. Arvind will not exercise the option. Salim will retain the Rs.85 he collected as premium.

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

II. 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.

III. 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.

IV. 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.

As seen from the above examples, option buyer has limited loss (premium paid) and unlimited profit whereas option seller/writer has unlimited loss and limited profit (premium received).

Structured products are hybrid securities that combine the features of debt and exchange traded derivatives. These products are typically privately placed and offer market linked returns on debt securities by taking exposure to derivatives. SEBI has prescribed eligibility and disclosure norms to protect the investors in such instruments. The products have to be mandatorily credit rated and will have the prefix- 'PP-MLD' followed by the rating assigned to it. The minimum allotment size for such products shall be Rs.10 lakhs in any issue. The issuer has to provide an analysis to the investors on the value of the security under different market conditions. The instrument should be valued by a credit rating agency and the value provided each week. The securities are listed on a stock exchange.

4.3.2 Real Estate

Most investors tend to have a default alternate investment in the house in which they live in. Research shows that about 50% of most investors' wealth is in their homes. However, for purposes of wealth management, the self-occupied house property is not considered as an investment asset for the following reasons:

- Investors do not earn any income in the form of rent from the house they occupy. They may instead incur expenses in upkeep and maintenance.
- Investors are unlikely to sell a house they currently occupy, unless they reinvest the same to move into a better property.

Since the scope for an income or realizable capital gain is limited in a self-occupied property, it is not considered as part of the investment portfolio.

Real estate investments may be structured as income generating or growth oriented investment. Income generating investments focus on rental income and interest income from securities. The risk in this structure is primarily from a probable default in receiving the expected income. Growth oriented investments seek to benefit from value appreciation over time. They require a longer investment horizon.

The opportunities in real estate investing have increased due to higher growth rates in development and pre-sales across several locations. Real estate investing is primarily available as private equity funds and PMS schemes, due to large fund outlay which generally corporates and HNIs can make.

Real estate mutual funds (REMFs) schemes have yet to be issued in India despite the regulations being in place. SEBI has announced the SEBI (Real Estate Investment Trusts) Regulations, 2014 in August 2014 that define the norms for launching REITs in India. Both these formats will provide additional vehicles for investor participation in real estate investments.

However, real estate growth is aligned to economic cycles, as real estate growth has a high dependence on money supply and credit availability. Over valuation in bullish markets is a common feature, as prices rise rapidly and hence, is a big risk. Therefore, the sector tends to suffer steep corrections when the bubble bursts. Timing the investment becomes an important factor that determines the returns in real estate investments. Rental incomes are a hedge against inflation, as rentals rise with inflation.

4.3.3 Gold

Gold is mostly bought by central banks as part of the reserves they like to keep. Indians are among the largest retail buyers of gold in the world. In India, gold is seen as an asset that is suitable for long term wealth creation. It is also used as a collateral for loans and is therefore seen as an asset to fall back on when in need for funds. Traditional allocation to gold among even middle class households may be high due to the purchase of jewellery. Gold jewels have limited investment value due to their high making costs, no income-generating power, and limited sale to realize the gain due to the emotional attachment to jewels. Jewels are usually recycled and sold to be reinvested in new jewels.

Investment in gold has the potential to beat inflation over a long period. It is a safe haven when economic growth is slow and traditional asset classes such as equity and debt are underperforming. As an investment, one can purchase it as coins including the Indian Gold Coins available at designated branches of MMTC, bars, jewellery, or through mutual funds known as gold ETFs (Exchange Traded Funds) or gold funds and the gold bonds and gold deposit scheme launched in November, 2015.

ETFs and gold funds (mutual funds that invest in gold ETFs) remove the issues of storage, assurance of purity, liquidity and the facility for regular investment associated with physical holding in gold. Gold ETFs invest in 99.5% purity gold which is held with the custodians. Divisibility of the investment in ETF is high since even one unit of gold ETF can be liquidated or sold in the market. In the case of physical gold, while it is easy to sell gold, liquidating it for smaller values may be an issue, unless the investor is holding gold in the smallest physical denomination possible. Moreover, the deductions on account of wastage and making charges, among others, at the time of sale of gold jewellery can eat into the realisable value.

Though SIP is not possible in an ETF structure, there are three ways in which regular systematic investment in gold may be possible:

- Buy a gold savings fund. Gold Savings Fund is a fund of funds that holds ETFs. It gives investors indirect way of investing through SIP in gold ETF. Even investors who do not have demat accounts can take exposure in this way to a Gold ETF. Only drawback is the higher expense ratio for the FoF structure.
- Through SIP options provided by online brokers
- Setting up manual reminders.

Allocation to gold in a strategic portfolio should not ideally be over 10%. It may be used primarily to take advantage of its low correlation with other assets, and the ability to accumulate it in small lots compared to other alternate assets. Tactical allocation to gold goes up during times of risk and uncertainty when gold is seen as a store of value.

4.3.4 Commodities

When investors seek to move beyond the traditional asset classes, they look for asset classes with low correlation. They also seek hedge against inflation, attractive returns and diversification benefits when traditional asset classes under perform. Commodities have emerged as a sought after asset class in this context.

Commodities have an inherent return that is generated based on their demand and supply. Investors can earn such returns either by a passive index replication or from active management of a commodity portfolio. Investing in commodities can be done using three routes:

- Investing in commodity indices or their ETFs
- Investing in commodity-based stocks, bonds or mutual funds
- Investing in commodity futures or hedge funds.

Mutual funds in India are not yet allowed to invest in commodities directly, except gold. Exposure to commodities through mutual funds is possible by investing in commodity-based mutual funds, which invest in stocks and bonds of companies in the commodity sector. For

example, a commodity-based fund may take exposure to non-ferrous and ferrous metals by holding shares of Hindalco and SAIL in its portfolio.

From 2002, a new set of commodity exchanges with national reach and electronic trading platforms began operations in India. The national exchanges currently operational include Multi Commodity Exchange of India (MCX), National Commodity Exchange of India (NCDEX), Indian Commodity Exchange Limited, National Multi-Commodity Exchange of India Ltd and Ace Derivatives and Commodity Exchange. The Forward Markets Commission was the regulatory authority for commodity exchanges. After its merger with SEBI in September 2015, SEBI will be the regulator.

A popular way to invest in commodities is through standardized commodity futures, which are agreements to buy or sell a specific quantity of a commodity at a specific price at a future date. Commodity exchanges are permitted to trade goods including agricultural produce (such as cotton, pulses), precious metals (such as gold, silver, platinum) and industrial metals (such as zinc, copper, iron ore, aluminium) and fossil fuels, including crude oil. The standard terms of a futures contract, such as permissible tenderable varieties, trading lot, delivery schedule, modes of price quote, clearing and settlement, margins and delivery details are specified by the exchange. The price of the future contract alone is quoted by the traders in the market.

4.3.5 Private Equity and Venture Capital

Private equity refers to investments made into closely held companies, typically in the early stages of the company, to fund new technologies, expand working capital within an owned company, make acquisitions, or to strengthen a balance sheet or provide long term capital to scale up and grow in size. Private equity investment managers screen such companies with significant growth potential and provide them capital. Each private equity investment is backed by a strong investment thesis which plays out over a 5 year and more time horizon. Each investment is preceded by extensive business, legal and financial due-diligence and post investment the investment managers exert significant influence on the company through shareholder rights and board positions. The intent of PE funds is to identify companies with potential, invest when the valuation is low, provide capital and expertise to help the company realize its potential and then exit when the valuations appreciate to desired levels.

Capital for private equity is raised from retail and institutional investors by private equity funds. The subscription offer for investment into the fund is exclusively opened for a short period to a select group of investors, including HNIs, body corporates, trusts, partnership firms, as the threshold investment amount (ticket size) is typically high.

Investment can be done into a venture capital fund (SEBI Approved) or a PE structure. Investments could be made into equity or debentures of unlisted entities. A share of the

profits of the fund's investments, called carried interest, is paid to the PE fund's management company as a performance incentive, typically up to 20%. The remaining 80% of the profits are paid to the fund's investors. A minimum rate of return is fixed, which must be achieved before the fund manager can receive any carried interest payments.

The investment approach is sector agnostic investments in various stages of growth. PE funds may provide capital at various stages of the growth of the company starting with

- seed financing which involves development of a new concept and start-up financing (also known as early financing)
- expansion financing (also known as second and third stage financing)
- mezzanine financing, which is typically used for companies which are expected to go public and may involve debt or equity
- PEs may also fund a buyout or a merger/acquisition transaction

PE funds adopt suitable exit mechanisms, in consultation with the promoters of the portfolio companies, including public market exits through IPO, sale to financial / strategic investors or buyback by the company / promoters.

The risk in PE investments is significantly influenced by the stage of the company at which the fund invests. PE funds that make early stage investments see a greater number of projects becoming unviable. PE investments require a long investment horizon. Liquidity is low in these investments and returns may be low and even negative in the initial stages. Sometimes, when the fund is ready to exit from an investment, unfavourable equity markets may make an IPO unfeasible.

SEBI (Alternative Investment Funds) Regulations, 2012

SEBI (Alternative Investment Funds) Regulations, 2012 (AIF Regulations) seeks to regulate all alternate investment funds whether operating as Private Equity Funds, Real estate funds, Hedge funds etc. Venture capital funds which were registered under the SEBI (Venture Capital Funds) Regulations, 1996, since repealed, will continue to be regulated by the provisions of the erstwhile regulations till the existing fund or scheme is wound up. All new funds or schemes have to be registered under the AIF regulations.

The AIF Regulations define alternative investment funds as privately pooled investment vehicles established in India as a trust, company or limited liability partnership to collect funds from investors, and invest it according to a defined investment policy for the benefit of the investors. This will not include any funds established under the SEBI (Mutual Fund) Regulations, 1996 or SEBI (Collective Investment Schemes) Regulations, 1999 or any other regulations in force to regulate fund management activities.

Category of Funds

Funds may seek registration under these Regulations as category I, II or III funds.

Category I funds invest in start-ups, SMEs, social ventures, infrastructure or other sectors designated as economically and socially desirable by the government or regulators. They are closed-ended funds with a minimum tenure of three years.

Category II funds are those that do not fall under categories I or III and do not take borrowings for other than operational requirements. Category II funds will be closed-ended funds with a minimum tenure of three years.

Category III funds are those that undertake complex trading strategies including investment in derivatives. Category III funds may be open or closed-ended.

The tenure of the funds may be extended up to two years with the consent of two-thirds of the investors by value. The fund has to liquidate its assets within one year of the end of its tenure. Units of closed-ended fund may be listed on a stock exchange with a minimum tradable lot of Rs. one crore.

Eligibility Norms

The constitution of the fund seeking registration under the AIF Regulations must allow it to carry on the activities of an alternative investment fund. The entities involved in the fund, such as sponsor, managers and key personnel must be deemed as fit and proper persons. The key personnel must have adequate experience with one person having at least 5 years of experience in asset and portfolio management and advisory, or securities trading, or dealing in other financial assets. The applicant must have adequate infrastructure to manage the fund.

Investment Norms

An AIF will have a corpus of at least Rs. 20 crores. It will be available for subscription by resident Indian, non-resident and foreign investors. The minimum subscription shall be for at least Rs. one crore and the holding of the investor will be denoted in units. In case of an open-ended fund the holding of an investor shall not fall below the minimum subscription mentioned above after a partial redemption. The sponsor or manager of the fund shall demonstrate continuing interest in the fund by holding the lower of two and half percent of corpus or Rs. 5 crore (five percent or Rs. 10 crore for category III funds) in the fund. The maximum number of investors in an AIF will be 1000. The funds will be sourced only through a private placement of securities using a placement memorandum in which all material information that a proposed investor will require to make the investment decision will be provided. The placement memorandum will be first filed with SEBI at least 30 days before the

launch of the scheme and any comments shall be incorporated before the launch of the scheme.

An AIF may invest in securities of domestic companies and companies incorporated outside India. The regulations also specify investment restrictions in terms of extent of holding in a company, investment in associate companies, modes of holding un-invested funds and for each category of funds the Regulations specify conditions for investment and operations. Investments of category I, II funds shall be valued every six months by an independent valuer. Category III funds shall disclose the NAV to the investors at least once every quarter for closed-ended funds and once every month for open-ended funds.

The regulations also describe Angel Funds as a sub-category of venture capital funds who raise capital from angel investors. Angel investors are defined as individual investors with tangible assets of at least Rs 2 crores and have early stage investment experience, companies and registered AIFs. They will invest only in venture capital companies that have been incorporated within three years of the investment, have turnover less than Rs. 25 crores and is not associated with an industrial house having a group turnover of more than Rs. 300 crores. Investments made shall be between Rs. 50 lakhs and Rs. 5 crores and shall have a lock in of 3 years. A scheme memorandum shall be filed with SEBI and any comments incorporated before the launch of the scheme. Angel funds shall not be listed.

The AIF shall set up a procedure to settle disputes between the investor, fund and manager or sponsor.

4.3.6 International Investments

Investors can choose to invest in securities in international markets. The advantage of investing in such securities comes from the portfolio diversification benefits from exposure to global markets. Investors also get access to products that are still not available in India. For example, commodity ETFs are an efficient way to take exposure to the commodities market which is currently not available in India. Investors can invest instead in commodity ETFs listed abroad. Resident investors are permitted to invest up to \$125000 a year overseas. They can do this by directly buying the securities or through international funds structured to provide international exposure to the investors.

The risk in international investing comes from the lower understanding of the economic and political conditions in other countries and the impact they will have on the investments. Investing through a fund manages this risk to some extent because regulations require such funds to have a dedicated fund manager with relevant experience. The other prevalent risk is the currency risk. The appreciation or depreciation of the currency will impact the actual return to the investor, over and above the performance of the fund. At the time of

redemption, a currency appreciation will reduce the return to the investor and depreciation will enhance returns from the fund.

4.3.7 Art and Collectibles

Art objects, collectibles and precious stones are costly and illiquid investments that are difficult to value and authenticate. The market is small, with collectors spread over a wide geographical area. Investors have to be knowledgeable and well net-worked to know the market to be able to buy and sell these products. In the absence of regulators and regulations, chances of fraud are high.

4.4. Direct Equity

Investors can invest in equity instruments either in the primary market or in the secondary markets. In the primary market, investors can invest in Initial Public Offers (IPO) and Follow-on Public Offers (FPO) made by companies. These offerings will be available for a limited period during which investors have to evaluate and invest. Investors can also buy shares in the secondary market on the stock exchange where issued shares are listed and traded. Investing directly in equity market, whether primary or secondary, requires certain skills and conditions to be successful.

Equity instruments come with no guarantee of principal invested or income expected from it. The onus is on the investor to evaluate the operational, financial and management strengths of the company before making an investment. The past performance of the company and the future prospects has to be analysed in the light of micro and macro-economic conditions and compared with the performance of peer group companies. The shares of the company must be valued based on the expected performance. The price at which the shares are available must be seen relative to the value to determine whether the shares are correctly priced. Analysis and valuation require the necessary skills and the access to relevant data and information.

Constructing an equity portfolio involves selection of securities, determining the right time to buy and sell stocks, decide on the proportion of the different securities and sectors in the portfolio and the trade-off between holding a diversified portfolio or a concentrated portfolio. Investors have to decide on the strategies that they will use to manage the portfolio, such as the strategic long-term allocation and the tactical allocation to benefit from market conditions. Reviewing the investment decisions periodically and rebalancing the portfolio to reflect the current situation of the companies invested in as well as the investor, is also a significant factor in the performance of equity investments of an investor.

Equity investment requires disciplined investing over a long investment horizon so that the short-term volatility in returns are smoothed out. Behavioural factors, such as aversion to loss, herd mentality and others, may result in the investor making the wrong choices and decisions. The effect of behavioural factors on investing is discussed in greater detail in the Investment Adviser (Level 2) Workbook.

4.4.1 Benefits and Risk of Equity

Equity share capital has distinct features which define its risk and return. These features determine the suitability of raising equity capital for the company over other sources of financing such as debt. For the investors, the risk and return in the equity investment determines whether it is appropriate for their needs.

a. Ownership Rights

Shareholders are the owners of the company and have the right to participate in its profits and growth. Since equity shares are issued for perpetuity, the ownership claims are valid as long as the issuing company exists. Shareholders exercise their ownership rights by voting on all major resolutions of the company. The voting rights are in proportion to the number of shares held by the shareholders and allow them to express their views by voting for or against a proposal.

In theory, shareholders can get rid of poorly performing management by voting in a new board of directors which in turn can appoint a competent management team. In practice however, public shareholders are too small or widely scattered and only institutional shareholders have some influence on corporate governance.

b. Residual Claim

Shareholders hold two positions within a company. As investors, they are entitled to a return on their investment. But as owners of the company they are obliged to pay off all the money owed to external (non-owner) creditors first, before taking their return. This problem is resolved by paying shareholders only after all operating expenses, interest costs and taxes are paid from the company's revenues and depreciation is provided for. Thus the payment made to shareholders is a share of profit after tax (PAT) in the form of dividends. This is the residual profit of the company and belongs to the shareholders, whether it is paid as dividend or not.

Shareholders are ranked last both for profit sharing as well claiming a share of the company's assets. If a company goes bankrupt and has to be liquidated, the money generated from converting assets into cash cannot be claimed by equity shareholders until creditors and preference shareholders have been paid.

c. Reserves and Net Worth

Companies are not obliged to payout dividends every year, nor are dividend rates fixed or pre-determined. If companies are growing rapidly and have large investment needs, they may choose to forego dividend and instead retain their profits within the company. The share of profits that is not distributed to shareholders is known as retained profits. Retained profits become part of the company's reserve funds. Reserves also belong to the shareholders, though it remains with the company until it is used in operations or distributed as dividend or bonus. Reserves represent retained profits that have not been distributed to the rightful owners of the same, namely the equity investors. They enhance the net worth of a company and the book value of the equity shares.

If the company is making losses and cannot pay interest (even from its reserve funds) then it is not permitted to declare any dividend for its shareholders. As soon as it returns to profits, it must first clear its interest dues before paying out dividend.

d. Limited Liability

Equity shareholders are owners of the company, but their obligation to the company is limited to the amount they agree to contribute as capital. If a company falls into bad times and goes bankrupt, and does not have adequate assets to cover its dues, equity shareholders cannot be called upon to make good the shortfall. Their liability is limited to the amount they have contributed towards the share capital of the company.

e. Returns are not fixed

Investment in equity shares does not come with a guarantee of income or security for the investor. The return to the investor from equity is in the form of dividends, if it is paid by the company and capital appreciation from an increase in the value of the shares in the equity market. At the time of the issue of shares the company does not commit to pay a periodic dividend to the investor or a pre-fixed date for payment of dividend, if any. The investor cannot take any action against the company if dividends are not declared or if the share value depreciates.

4.4.2 Market Indicators

Market Capitalisation refers to the market value of the outstanding share capital of a company. The number of shares times the market price per share gives the market capitalisation. Market cap is an indicator of the size of the company in terms of the current market price of its shares. The largest companies by market cap represent blue-chip stocks that also enjoy a high level of liquidity. Large cap stocks are the top rung of largest and most liquid stocks in the market. Mid cap stocks refer to those that are the next rung, in terms of

size. Small cap stocks are those that are smaller in size and therefore do not enjoy much liquidity.

In terms of return performance, large-cap stocks tend to be less volatile than mid-cap stocks. In bull markets, mid-caps tend to run ahead of large-caps, and in bear markets, they tend to fall more than large-caps. If large-cap stocks represent liquidity and stability, mid-caps represent momentum and opportunity.

A **Stock Market Index** tracks the performance of a section or the entire stock market by measuring price movements of a chosen sample of shares. Widely tracked indices are made up of the most actively traded and investible equity shares in the country.

Equity stock indices such as Dow Jones Industrial Average (DJIA) and S&P 500 (for USA); FTSE 100 (UK); Nikkei (Japan); Hang Seng (Hong Kong); and CNX Nifty and S&P BSE Sensitive Index (Sensex) (India) are considered to be representative indices. In addition, sector specific indices that focus on shares from a specified industry; or size of market capitalization or any other grouping are useful for sector analysis and investment. An index usually tracks the price of a chosen set of equity shares. The components are chosen based on the focus of the index. Sensex and Nifty for example, track the prices of 30 and 50 largest and most liquid equity shares on BSE and NSE, respectively.

The simplest way to compute an index is to add up the prices of constituent shares at a point of time and divide by the number of shares to create an average. However, an index based only on share prices would be heavily influenced by large price changes in a single stock, even if that stock belongs to a company that is relatively smaller or less significant in the overall market. To avoid such biases, share prices are weighted by market capitalization of the component stocks. The index then represents the collective market capitalization of index stocks at a point in time.

An index is always calculated with reference to a base period and a base index value. This ensures that trends in index movements are always measured relative to a base level.

A stock market index has several uses:

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

The most widely tracked indices in India are the S&P BSE Sensitive Index (Sensex) and the CNX Nifty (Nifty). The Sensex has been computed since April 1, 1979 and is India's oldest and most tracked stock index. The base value of the Sensex is 100 on April 1, 1979. The composition of stocks in the Sensex is reviewed and modified by the BSE index committee according to strict guidelines in order to ensure that it remains representative of stock market conditions. The criteria for selection of a stock in the Sensex include factors such as listing history, trading frequency, market capitalization, industry importance and overall track record.

The CNX Nifty is an index composed of 50 most representative stocks listed on the National Stock Exchange. The base period for CNX Nifty is November 3, 1995, and the base value of the index has been set at 1,000. The selection of shares that constitute the index is based on factors such as liquidity, availability of floating stock and size of market capitalization. The index is reviewed every six months and appropriate notice is given before stocks that make up the index are replaced.

The SX40 is composed of 40 most representative stocks listed on the Metropolitan Stock Exchange of India Ltd.. The base period for SX40 is March 31, 2010 and the base value of the index has been set at 10,000. SX40 is a free float based index consisting of 40 large cap liquid stocks representing diversified sectors of the economy.

4.4.3 Fundamental Analysis and EIC Framework

Theoretically, the fair value of a bond or an equity share is the sum of the discounted value of the expected future cash flows. The valuation is simpler in a bond, because the cash flows are predefined and end at a given point in time. Equity earnings are not pre-defined and equity is a perpetual investment with no pre-set maturity date. The focus in equity valuation is on the future earnings and the estimates of growth in earnings.

Fundamental analysis is based on the premise that 'fair value' of an equity share can be estimated from information about the company. Technical analysis is about looking for clues in the share price itself, for its future behaviour. Both approaches are widely used and are complementary to each other. Better the quantitative and qualitative understanding of factors impacting earnings, better the estimate of earnings and therefore price and value.

EIC framework is the commonly used approach to understand fundamental factors impacting the earnings of a company, scanning both micro and macro data and information.

Analysts follow two broad approaches to fundamental analysis – top down and bottom up. Given that the factors to consider are economic (E) industry (I) and company (C) factors, beginning at company-specific factors and moving up to the macro factors that impact the performance of the company is called the bottom-up approach. Scanning the macro economic scenario and then identifying industries to choose from and zeroing in on companies, is the top-down approach.

Quantitative models are also used to estimate the current value of a share from the estimated future earnings, using the discounted value of cash flows, or applying more complex valuation models that consider the growth prospects, investments, cash flow and sustainability of earnings growth. A simpler approach is to use financial ratios to estimate the value of a share.

4.4.4 Valuation Measures Price

a. Price-Earnings Multiple

The price-earnings ratio or the PE multiple is a valuation measure that indicates how much the market values per rupee of earning of a company.

It is computed as:

Market price per share/Earnings per share

PE is represented as a multiple. When one refers to a stock as trading at 12x, it means the stock is trading at twelve times its earnings. The PE multiple based on historical earnings is of limited value. The prices change dynamically, while the reported earning is updated every quarter. Therefore prices tend to move even after the historical earning per share is known, in anticipation of the future earnings.

If it is expected that earnings of a firm will grow then the market will be willing to pay a higher multiple per rupee of earnings. The focus is therefore on 'prospective' PE or how much the current price is discounting the future earnings. For example, when analysts say that shares of XYZ company is trading at 20 times its 2014 earnings, but is still about 15 times the 2015 earnings, given the state of its order book. What they are saying is that the growth in EPS is likely to be high, and therefore the current high PE based on historical numbers may not be the right one to look at.

Most publications and reports show the PE using historical earning numbers from the latest quarterly reports. Analysts' estimates of future earnings are not widely available and they may vary. Some publications report 'consensus' view of prospective earnings.

It is common to look at the PE multiple of the index to gauge if the market is overvalued or undervalued. The PE multiple moves high when prices run ahead of the earnings numbers and the market is willing to pay more and more per rupee of earnings. Many would consider a market PE of 22x or above as an overvalued zone (Please note that this varies from industry to industry). When markets correct and uncertainty about future earnings increases, the PE multiple also drops. A value investor, who would like to pick up stocks when they sell at lower valuations, may be interested to purchase when PE is low.

Analysts also compare the PE of one company with another, to check the relative value. The PE multiple of a stable, large and well known company is likely to be higher than the PE multiple the market is willing to pay for another smaller, less known, and risky company in the same sector.

b. Price to Book Value (PBV)

The PBV ratio compares the market price of the stock with its book value. It is computed as market price per share upon book value per share.

The book value is the accounting value per share, in the books of the company. It represents the net worth (capital plus reserves) per share. An important limitation of this number is that most assets on the books of the company are shown at cost less depreciation, and not inflation adjusted. Therefore the realizable value of the assets is not reflected in the book value. However, in a company which has been building reserves from sustained profitability, the book value is an important indicator of value. Since the book value considers the net worth of a company, it is an important number in fundamental analysis.

If the market price of the stock were lower than the book value (i.e., the PBV is less than one), the stock is deemed to be undervalued and undiscovered. Analysts would concur that the market prices have fallen more than what is justified by the value of the stock, and would consider the price attractive to buy. In a bullish market when prices move up rapidly, the PBV would go up, indicating rich valuation in the market. However, please note that there may be other reasons for a stock being sold for less than its book value such as the poor investments made by the firm in the past which needs to be written down subsequently. Hence investors should not rely only on PBV for their investment decisions and should understand that not all stocks that trade at a discount on their book values are bargains (undervalued).

c. Dividend Yield

Value investors, who look for the opportunity to buy a stock at a price lower than its fundamental or intrinsic value, prefer a combination of low PE, low PBV and high dividend yield. Dividend yield compares the dividend per share to market price per share. A higher dividend yield would mean that the income potential of the share is not yet reflected in market prices. A lower dividend yield is associated with a higher valuation for a share.

Dividend yields are also used as broad levels with which to measure market cycles. A bull market will be marked by falling dividend yields, as prices move up. A bear market will have a relatively higher and increasing dividend yields as prices tend to fall.

Some companies have a history of growing and consistent dividends. They are sought by investors who seek a regular income. Public sector units, especially PSU banks, in India tend to have a higher dividend yield.

4.4.5 Technical Analysis

Technical analysis involves studying the price and volume patterns to understand how buyers and sellers are valuing a stock and acting on such valuation. There are three essential elements in understanding price behaviour:

- a. The history of past prices provides indications of the underlying trend and its direction.
- b. The volume of trading that accompanies price movements provides important inputs on the underlying strength of the trend.
- c. The time span over which price and volume are observed factors in the impact of long term factors that influence prices over a period of time.

Technical analysis integrates these three elements into price charts, points of support and resistance in charts and price trends. By observing price and volume patterns, technical analysts try to understand if there is adequate buying interest that may take prices up, or vice versa.

Technical analysts have also created a number of technical indicators which help them judge the relative strength of buying and selling interest in the markets. For example, a moving average constructed from prices over a span of many days helps compare where the current prices are, compared to the average prices across the span. If the prices are above, say the 30-day moving average, it is discerned that prices are in an uptrend, at a level higher than what was seen on an average in the last 30 days.

Several other mechanical indicators such as rate of change in price, relative strength indicators and moving-average convergence-divergence indicators are used in technical analysis. The objective of these tools is to understand the underlying pattern in prices and judge the trend in prices for its strength, persistence and possible reversal.

Sample Questions

1. What is the tax benefit available on the Senior Citizen Savings Scheme?
 - a. Interest is exempt from tax
 - b. Investment gives Section 80C benefits**
 - c. Maturity value is exempt from tax
 - d. All of the above

2. Corporate bonds with high credit rating
 - a. Have higher coupon
 - b. Have higher face value
 - c. Have lower default risk**
 - d. All of the above

3. A call option is likely to be exercised if
 - a. Market price is higher than strike price**
 - b. Strike price is higher than market price
 - c. Premium moves down
 - d. Market moves down

4. Which of the following investment is unlikely to provide inflation-hedged returns?
 - a. Gold
 - b. Real estate
 - c. Commodities
 - d. Bonds**

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CHAPTER 5: MANAGING INVESTMENT RISK

LEARNING OBJECTIVES

After studying this chapter, you should know about:

- Definition of risk
- Common types of risk
- Different measures of risk

5.1. Risk

Risk is usually understood as “exposure to a danger or hazard”. In investment decisions, risk is defined as the possibility that what is actually earned as return could be different from what is expected to be earned. For example, consider an investor who buys equity shares after hearing about the huge returns made by other investors. He expects to earn at least 50% return within 2 years. But if equity markets decline during that period, the investor could end up with negative returns instead. This deviation between actual and expected returns is the risk in his investment.

If the return from an investment remains unchanged over time, there would be no risk. But there is no investment of that kind in the real world. Even returns on government saving products change. For example, consider the Public Provident Fund (PPF), which is a 15-year deposit in which investors have to put in money at least once every year. This investment is considered to be government- guaranteed and its returns are viewed as being very safe. The rate of return on PPF was 12% in the year 2000. Consider the changes ever since:

- Reduced to 11% in January 2000
- Reduced to 9.5% in March 2001
- Reduced to 9 % in March 2002
- Reduced to 8% in March 2003

An investor, who began to invest in 1999, hoping to earn 12% return, would have found that by March 2003, the rate had come down to 8%. The unexpected change to investment return that impacts the investor’s financial plans is the risk investors have to deal with.

Deviations from expected outcomes can be positive or negative: both are considered to be risky. However, it is human nature to focus on negative deviations- or situations when actual returns fall below the expected level.

The causes of risk depend on the uses to which the investment proceeds are put, and the factors that influence them. For example, returns earned from investment in the equity

shares of a cement company depend on the performance of the company, which in turn is a function of factors such as demand for cement, employee costs, prices of inputs, government duties, competition from imports. The risk associated with investing in such a company would be affected by all these factors that can cause returns to deviate from expected levels.

All investments are subject to risk, but the type and extent of risk are different. Thus it is important to understand the common types of risk and evaluate investments with respect to them. Understanding the risk will help an investor decide the impact it will have on their financial situation and how to deal with it. The risk that an individual will be willing to take is specific to their situation in life. Some risks will require strategic portfolio changes to be made, such as extent of diversification in the portfolio. Other risks may be managed tactically, for example making temporary changes in asset allocation to deal with a risk.

5.2. Common Types of Risk

There are several types of risk to which investments can be exposed.

5.2.1 Inflation Risk

Inflation risk represents the risk that the money received on an investment may be worth less when adjusted for inflation. 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 the falling purchasing power of money.

Consider an example. Asha has invested a lump sum in bank fixed deposits that yield her about Rs. 5000 per month. This is adequate to cover the cost of her household provisions. Suppose that inflation rises by 10%, meaning that there is a general rise in prices of goods by about 10%. Then Rs. 5000 will no longer be enough to cover Asha's monthly provisions costs, she would need 10% more, or Rs. 5500. The purchasing power of her cash flows has declined. Asha would have to manage her budget at a lower level, or reallocate her investments to earn higher cash flows. Her investment, though in a safe bank deposit, has been exposed to inflation risk.

Inflation risk is highest in fixed return instruments, such as bonds, deposits and debentures, where investors are paid a fixed periodic interest and returned the principal amount at maturity. Both interest payments and principal repayments are amounts fixed in absolute terms. Suppose a bond pays a coupon of 8% while the inflation rate is 7%, then the real rate of return is just 1%. If inflation goes up to 9%, the bond may return a negative real rate of return. Thus, even if there is no risk of default on payment of interest or return of principal, the real value of the investment has been eroded because of inflation.

Inflation risk has a particularly adverse impact on retired persons, whose income flows tend to be fixed in absolute terms. Tactical allocations that help generate higher returns will help manage the effect of inflation. For example, the investor may consider investing a portion of the debt portfolio in shorter term maturities to benefit from rising interest rates in response to inflation, or the investor may consider some exposure to an inflation-hedging asset class such as equity or commodities.

5.2.2 Default Risk

Default risk or credit risk refers to the probability that borrowers will not be able to meet their commitment on paying interest and/or principal as scheduled. Debt instruments are subject to default risk as they have pre-committed pay outs. The ability of the issuer of the debt instrument to service the debt may change over time and this creates default risk for the investor.

The sovereign government as a borrower and institutions associated with the government have not credit risk as they have the means to raise funds through taxation, international loans and even print notes as a last resort, to repay loans. All other borrowers have some degree of credit or default risk associated with them. This is measured using the credit rating assigned to a debt instrument.

Credit rating is an alpha-numeric symbol that expresses the credit rating agencies assessment of the ability and intention of the borrower to meet the obligations arising from the debt. SEBI has standardized the symbols used by credit rating agencies. Symbols such as AAA, A1 indicate the highest degree of credit worthiness while D represents default status. The credit rating is not a static parameter and is liable to change every time there is a change in the fundamentals of the company that will affect its ability to meet its obligations. The rating may therefore be downgraded to reflect a greater perceived default risk or upgraded to indicate lower risk. The financial situation of the issuer is monitored by the credit rating agency till the instrument is redeemed on maturity.

Monitoring the credit quality and exiting a bond whose credit rating is likely to fall to levels where the investor is uncomfortable with the risk, is the way to handle the credit risk in a bond. However, the low liquidity in the bond markets is likely to make it difficult for the investor to sell, especially when there is a likely downgrade. Holding a diversified portfolio of bonds is the best way to protect the investor's portfolio from the default by one issuer.

5.2.3 Liquidity Risk

Liquidity or marketability refers to the ease with which an investment can be bought or sold in the market. Liquidity risk refers to an absence of liquidity in an investment. Thus liquidity risk implies that the investor may not be able to sell his investment when desired, or it has to

be sold below its intrinsic value, or there are high costs to carrying out transactions. All of this affects the realisable value of the investment.

The market for corporate bonds in India is not liquid, especially for retail investors. Investors who want to sell a bond may not find a ready buyer. Even if there were a buyer, the price may be lower due to the lack of liquidity. Investments in property and art are also subject to liquidity risk, since identifying a buyer and determining the price is a lengthy process in the absence of frequent transactions. Some investments come with a lock-in period during which investors cannot exit the investment.

Investors can manage the liquidity risk by holding a diversified portfolio of securities so that their need for liquidity from their investments is taken care of by other investments in the portfolio and not dependent on the illiquid securities.

5.2.4 Re-investment risk

Re-investment risk arises from the probability that income flows received from an investment may not be able to earn the same interest as the original interest rate. The risk is that intermediate cash flows may be reinvested at a lower return as compared to the original investment. The rate at which the re-investment of these periodic cash flows is made will affect the total returns from the investment. The reinvestment rates can be high or low, depending on the levels of interest rate at the time when the coupon income is received. This is the reinvestment risk.

- If Interest rate rises , reinvestment risk reduces or is eliminated
- If Interest rate falls, reinvestment risk increases

Choosing the cumulative option available in most debt investments is a way for investors to protect the investment from re-investment risk. In a marketable security, such as a bond, this may expose the bond to higher price volatility. Bond fund managers use strategies such as laddering the portfolio to manage these risks.

5.2.5 Business Risk

Business risk is the risk inherent in the operations of a company. It is also known as operating risk, because this risk is caused by factors that affect the operations of the company. Common sources of business risk include cost of raw materials, employee costs, introduction and position of competing products, marketing and distribution costs.

For example, consider a company that manufactures jute bags. Suppose the cost of jute, which is the key raw material, goes up, the company has to face higher operating costs, which it may or may not be able to pass on to its customers through higher selling prices. This is a risk specific to businesses that use jute as an input.

Holding a diversified portfolio of securities so that all investments are not affected by a particular business risk is a way to manage this risk.

5.2.6 Exchange Rate Risk

Exchange rate risk is incurred due to changes in the exchange rate of domestic currency relative to a foreign currency. When a domestic investor invests in foreign assets, or a foreign investor invests in domestic assets, the investment is subject to exchange rate risk.

It must be noted that:

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

Consider this example. An NRI based in the US invests \$1000 in a bank deposit in India @10% for 1 year when the exchange rate is Rs. 60 per US\$. After one year, the rupee depreciates and the exchange rate is Rs. 67 per US\$. What is the risk to his investment if he decides to repatriate the money back?

The value of his investment has increased in rupee terms and declined in dollar terms as the rupee has depreciated against the dollar.

Initial Invested amount = US\$1000 = Rs.60000

Interest earned = 10% x 60,000 = Rs. 6000

Investment value after one year = 60000+6000 = Rs. 66000

Investment value in dollar terms = 66000/67 = \$985

Loss in investment value = \$1,000 - \$985 = \$15

Although the deposit paid a nominal return of 10%, there was a loss in investment value, because the exchange rate depreciated by more than 10%.

5.2.7 Interest Rate Risk

Interest rate risk refers to the risk that bond prices will fall in response to rising interest rates, and rise in response to declining interest rates.

Bond prices and interest rates have an inverse relationship. This can be explained with an example. An investor invests in a 5-year bond that is issued at Rs. 100 face value, and pays an annual interest rate of 8%. Suppose that after one year, the Reserve Bank of India cuts policy interest rates. As a result all rates in the markets start declining. New 5-year bonds are issued by companies with a similar credit rating at a lower rate of 7.5%. Investors in the old bonds have an advantage over investors in the new bonds, since they are getting an additional 0.5% interest rate. Since investors want to earn the maximum return for a given level of risk, there will be a rush of investors trying to buy up the old bonds. As a result the market price of the old bond will go up. The price will rise upto a level at which the IRR of the cash flows from the old bond is about 7.5%. This will take place for all bonds until their yields are aligned with the prevailing market rate.

Suppose, instead, that policy rates are increased. New issuers of 5-year debt will be forced to offer higher interest rates of, say, 9%. Now investors in the new bonds will earn more than investors in the old bonds. As a result, holders of the old bonds (which pay only 8% interest) will try to sell off their holdings and try to buy the new bonds. This market reaction will push down the prices of the old bonds upto the level at which the IRR of its cash flows exactly matches the market rate.

The relationship between rates and bond prices can be summed up as:

- If interest rates fall, or are expected to fall, bond prices go up.
- If interest rates rise, or are expected to rise, bond prices decline.

Bond investments are subject to volatility due to interest rate fluctuations. This risk also extends to debt funds, which primarily hold debt assets.

5.2.8 Market Risk

Market risk refers to the risk of the loss of value in an investment because of adverse price movements in an asset in the market. The price of an asset responds to information that impacts the intrinsic value of an investment. For example, an increase in interest rates reduces the value of the cash flows from existing bonds and therefore leads to a fall in the price of bonds (interest rate risk), an appreciation in the currency reduces the earning expectations of export-oriented companies and leads to a fall in price (currency risk). Market risk affects those investments where transactions happen at current applicable prices, such as equity, bonds, gold, real estate, among others. Investments such as deposits or small savings schemes are not marketable securities and the investor gets a pre-defined amount on maturity. They have no market risk; but they also do not gain in value.

5.2.9 Systematic and Unsystematic Risk

Total risk consists of two parts. The part of risk that affects the entire system is known as systematic risk, and the part that can be diversified away is known as unsystematic risk.

Systematic risk or market risk refers to those risks that are applicable to the entire financial market or a wide range of investments. These risks are also known as undiversifiable risks, because they cannot be eliminated through diversification. Systematic risk is caused due to factors that may affect the economy/markets as a whole, such as changes in government policy, external factors, wars or natural calamities. Here are some examples.

- The 2008 financial crisis affected economic growth and led to depressed equity prices across all stocks.
- The RBI's move to increase interest rates in order to control inflation. This led to a fall in the prices of all bonds during that period.
- The depreciation of the rupee in 2013 increased the costs of imports into the country. It affected the profitability of all companies whose inputs involved imported commodities.

Inflation risk, exchange rate risk, interest rate risk and reinvestment risk are systematic risks. Inflation risk affects all investments, though its highest impact is on fixed rate instruments. All overseas investments are subject to exchange rate risk. Interest rate and reinvestment risk impact all debt investments.

Unsystematic risk is the risk specific to individual securities or a small class of investments. Hence it can be diversified away by including other assets in the portfolio. Unsystematic risk is also known as diversifiable risk. Credit risk, business risk, and liquidity risks are unsystematic risks.

The following examples illustrate how an investment can be subject to both systematic and unsystematic risk.

- a. Ajay invests in equity shares of an infrastructure company. He believes that the company will do well because of the growing demand for infrastructure, and the company's strong technical and managerial capabilities. Ajay's investment is subject to two main risks- business risk and market risk. Ajay can reduce his business risk by investing in other companies operating in different sectors. But an economic slowdown would reduce the profitability of all companies. This is the market risk in equity investment that cannot be diversified.
- b. Ashima is keen to invest in bonds issues. Her investment is subject to credit risk and interest rate risk. She can reduce credit risk by increasing the proportion of highly-rated bonds in her portfolio. However, if interest rates fall, then prices of all the bonds held by her will decline. This is the interest rate risk which is common to all debt investments.

5.3. Measuring Risk

Risk is defined as deviation of actual returns from expected return. Hence measurement of risk needs data for actual as well as expected returns. Thus, while evaluating the risk of an investment two types of information are needed:

1. Information on the future values of return from that investment and
2. The likelihood of occurrence, or probability estimate for each return value

However, in real life, we may not be able to estimate future returns, or even correctly decide the range of values that returns could take. Nor can we assign accurate probabilities to each one of these values. Investors only have a single series of past observations, from which both actual and expected returns have to be extracted.

Since most investors tend to form expectations on the basis of historical performance of an asset, it is common practise to represent expected returns by an average return. For example, suppose the annual return from equities is measured over the last 30 years, and the average return is found to be 15%. Then it could be said that a return of 15% is the expected return from equity investment. If the observed return for each year was different from 15%, there is risk in the investment. The most common measure of quantifying risk is the standard deviation. The following section describes standard deviation, and its application in generating expected returns.

5.3.1 Computing Standard Deviation and Variance

The standard deviation is the average deviation of observed returns from the average return over a time period. It is computed using a statistical formula. To calculate standard deviation, we do the following:

1. Calculate expected return, or the average return of the series for which standard deviation is to be computed
2. Calculate deviations of each actual return value from the above average return.
3. Square this deviation
4. Add up all the squared deviations
5. Now take a square root of the sum of squared deviations (obtained in step 4)
6. Divide the square root obtained in step 5 by the square root of the number of observations
7. The number computed in step 6 is the standard deviation

At least 30 observations are required in the series in order to compute an accurate statistical value of standard deviation. The variance is simply the square of the standard deviation.

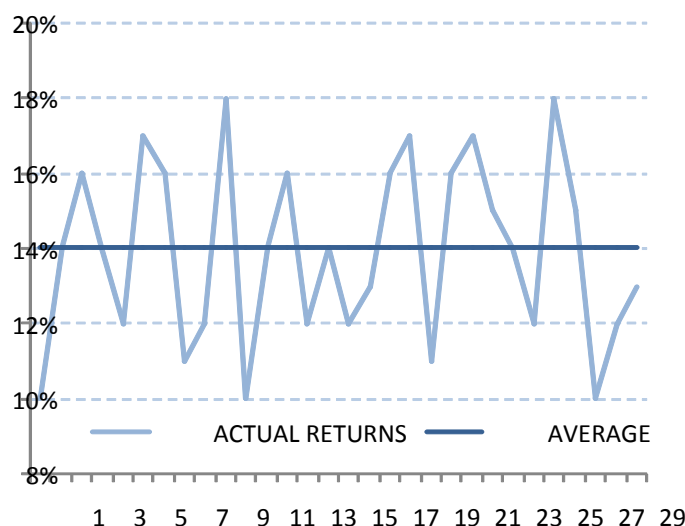
MS Excel can be used to quickly compute standard deviation and variance. The function STDEV returns the standard deviation of a selected series of data. The function VAR estimates the variance of the selected values.

Standard deviation and variance are also called measures of dispersion, because they measure the extent to which observed values are scattered away from the average. Higher is the standard deviation or variance, more is the dispersion of observed returns around the average. Therefore, higher standard deviations are associated with higher risk. Consider the following example:

An investor is choosing between two investment propositions A and B. The return from both over the last one year is the same at 12%. But A has a standard deviation of 8% and B has a standard deviation of 6%. Which of the two has a higher risk?

Clearly, investment A has a higher standard deviation and is associated with higher risk. This is because the scatter of returns earned by A around its past average is more than the scatter of returns earned by B. A is more volatile, and so more risky as compared to B.

The picture below depicts standard deviation graphically. The average return is shown by a straight line. Actual returns vary around the average value. The standard deviation of the series pictured here is 2.5%. If a series had a lower standard deviation, say, 1%, it would be less scattered around the average line.

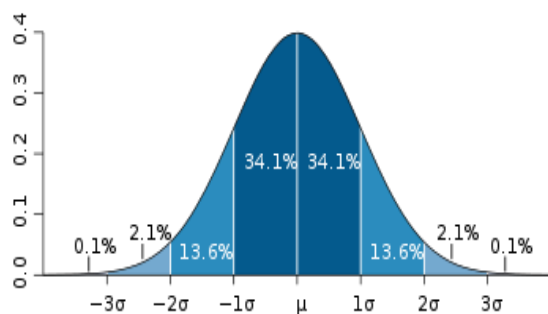


Standard deviation is usually computed on the basis of a past series of returns. Since the returns used are historical, the same level of risk may not apply in the future. This is because risk is driven by a variety of factors and not all of them can be forecast accurately. Therefore standard deviation is best used as an indicative rather than a conclusive number.

Forming return expectations for a given standard deviation

The standard deviation of the returns from an investment can be used to develop some estimates about how return and risk will behave in the future. Research has shown that many market returns series follow a similar distribution pattern called the normal probability distribution. A visual representation of the returns series of any investment that follows a normal distribution will have a bell-shaped pattern as shown under.

What this indicates is that most of the returns are concentrated around the average returns and decreases on either side. The possibility of the returns being outliers is low. This explains the bell shape of the graph representing the return data.



The mean and standard deviation can be used to estimate the range within which the returns will fall for an investment whose returns follow a normal distribution. The mean and standard deviation are connected by the 68-95-99.7 rule. This implies that

- 68% of the returns are distributed within 1 standard deviation of the mean.
- 95% of the returns are distributed within 2 standard deviation of the mean
- 99% of the returns are distributed within 3 standard deviation of the mean.

Since the mean represents average return, and standard deviation represents risk, the normal distribution allows us to estimate risk in terms of mean and standard deviation.

Consider this example.

Neeraj is considering two investment options: Option A with a mean of 12% and a standard deviation of 2.5% and Option B again with mean returns of 12 and a standard deviation of 4.5%. As his investment adviser how would you explain the risk in the investments using this data?

Since it is assumed that the investment returns follow a normal distribution pattern, the range of returns that the investment can take can be estimated using the 68-95-99.7 rule.

Option A

The maximum return that the investment can take 99% of the times is Mean+3 times Standard Deviation

$$= 12\% + 3 (2.5\%) = 12\% + 7.5\% = 19.5\%$$

The minimum return that the investment can take 99% of the times is Mean – 3 times Standard Deviation

$$= 12\% - 3(2.5\%) = 12\%-7.5\% = 4.5\%$$

The returns will range between 19.5% and 4.5%.

Option B

The maximum return that the investment can take 99% of the times is Mean+3 times Standard Deviation

$$= 12\% + 3(4.5\%) = 12\% + 13.5\% = 25.5\%$$

The minimum return that the investment can take 99% of the times is Mean – 3 times Standard Deviation

$$= 12\% - 3(4.5\%) = 12\%-13.5\% = - 1.5\%$$

The returns will range between 25.5% and - 1.5%

Since the range that the returns from Option B can take is wider (25.5% to -1.5%) the volatility is higher and therefore the investment is riskier.

Higher the standard deviation of the returns from an investment, greater is the range the returns can fall in and therefore greater in the volatility and risk in the investment.

Sample Questions

1. **A retired person is depending on a monthly annuity income to finance his expenses. The greatest risk faced by his cash flows is**
 - a. Business risk
 - b. Exchange rate risk
 - c. Interest rate risk
 - d. Inflation risk**

2. **Investment in a government security issued at a fixed interest rate is subject to**
 - a. Credit risk
 - b. Business risk
 - c. Interest rate risk**
 - d. Liquidity risk

3. **An investor purchases equity shares of a Sugar producing company. The returns from his investment do not face**
 - a. Interest rate risk**
 - b. Operations risk
 - c. Business risk
 - d. Market risk

4. **An investor holds a large portfolio of shares from different companies and industries. Her portfolio is likely to be protected from**
 - a. Credit risk
 - b. Inflation risk
 - c. Liquidity risk
 - d. Unsystematic risk**

CHAPTER 6: MEASURING INVESTMENT RETURNS

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Meaning of returns
- Different measures of returns
- Concept of compounding
- Real Rate Return versus Nominal rate of return
- Tax adjusted returns
- Risk adjusted returns

6.1. Understanding Return

Return on investment is a basic computation made to assess how an investment is performing. Every investment can be represented as a set of inflows and outflows. Return is the comparison of the inflow and outflow and therefore the benefit to the investor from making the investment. Returns can be positive or negative. A negative return means that the investment has yielded losses rather than benefits. Consider these examples:

- A plot of land was purchased for Rs.5 lakhs and sold for Rs. 4 lakhs
- A debenture was bought for Rs.105 and sold for Rs.130

On basis of a comparison of inflows and outflows, clearly, the first investment has resulted in a loss, whereas the second has yielded a profit. The first case represents negative return on investment; the second is an example of positive return.

Return can be measured in two ways:

1. Comparing amount of inflows and amount of outflows on an investment in absolute rupee terms.
2. Computing a rate of return by comparing inflows and outflows.

Consider the following investments:

- A. Purchase equity shares for Rs. 23,000 and sell at Rs. 28,000
- B. Purchase equity shares for Rs. 2500 and sell at Rs. 3100

The net return in rupees earned on investment A equals Rs. 5000 (28000 minus 23,000). The net return in rupees earned on investment B equals Rs. 600 (3100 minus 2500). In rupee terms, it appears that investment A has generated a much higher return as compared to investment B. However, investment A requires higher initial outflow, so the return is earned

on a much higher base. It is not possible to compare only amount of return earned; instead, one has to compare the amount of return relative to the initial investment (or starting value). This is done by calculating the rate of return.

The rate of return is usually measured in percent terms. This means equalizing the amount invested to Rs. 100 so it represents the return that would be earned on each investment if the amount invested was the same i.e. Rs. 100. This enables comparison of return across investments even if the amount invested is different. Thus, it is a better measure of return on investment.

The following sections describe different ways of calculating rates of return, depending on the period of investment and nature of inflows.

6.2. Understanding Return Concepts

6.2.1 Absolute Return

The absolute return on an investment is computed as:

$$\frac{((\text{End Value} - \text{Beginning Value}) / \text{Beginning Value}) \times 100}{}$$

OR

$$\frac{(\text{Return on Investment} / \text{Original Investment}) \times 100}{}$$

The rate of return is converted into percent terms by multiplying by 100.

In the above example the absolute returns on investment are:

Investment A: $(28000 - 23000) / 23000 = 21.74\%$

Investment B: $(3100 - 2500) / 2500 = 24.0\%$

Investment A has a higher amount of return in terms of rupees, but earns a lower rate of return as compared to investment B.

The concept of absolute returns is widely used in financial markets. For example, absolute returns of market indices such as the Sensex, or Nifty, are often used to assess the performance of stock markets for periods less than one year (such as daily, weekly, monthly, quarterly returns). The following extract from an article published in “The Hindu” on January 30, 2014 measures the 0.95% lost by the Sensex simply as the absolute return.

Sensex down 196 points in early trade after Fed's decision

MUMBAI: Extending losses for the fifth straight session, the BSE Sensex on Wednesday fell by over 196 points in early trade today on sustained selling by funds after the US Federal Reserve further decided to taper its monetary stimulus program. The 30-share barometer, which has lost 726 points in the last 4 sessions, fell further by 196.27 points or 0.95% to 20,451.03.

Absolute return is not an appropriate measure for comparing the performance of investments made for different periods of time. That is because the computation of absolute return does not take into account the holding period of investment. Consider the following investments:

- A. A house is purchased for Rs.20 lakhs and sold for Rs. 30 lakhs after 1 year.
- B. A house is purchased for Rs.20 lakhs and sold for Rs.30 lakhs after 3 years.

The absolute return in both cases is $((30 \text{ lakhs} - 20 \text{ lakhs}) / 20 \text{ lakhs}) \times 100 = 50\%$. But common sense tells us that option A is better than B, because the same rate of return has been earned in a shorter period of time (1 year versus 3 years). In other words, earning a profit of Rs.10 lakhs in one year is superior to earning it after 3 years. So there is a need to adjust absolute returns for varying holding periods of investments. This leads to the concept of annualized returns.

6.2.2 Annualized Return

Annualized return is a standardized measure of return on investments in which the return is computed as percent per annum (% p.a.). It is calculated as

$$(\text{End value} - \text{Beginning value}) / \text{Beginning value} \times 100 \times (1 / \text{holding period of investment in years})$$

Measuring returns as percent per annum is the accepted way to measure investment return. In the example given earlier, the annualized return on the two investments is computed as:

- 1. Annualized return = $((30 \text{ lakh} - 20 \text{ lakhs}) / 20 \text{ lakhs}) \times 100 \times (1/1) = 50\%$
- 2. Annualized return = $((30 \text{ lakh} - 20 \text{ lakhs}) / 20 \text{ lakhs}) \times 100 \times (1/3) = 16.3\%$

As expected, investment B has a much lower annualized return, because the same absolute return is earned over a longer holding period.

The purpose of annualizing is to standardize the investment period as though each investment was made only for one year. This enables easy comparison of investments across time periods. All annualized returns are represented as “% p.a.” If the p.a. is missing, it is usually a simple absolute non-annualized return.

To annualize, the absolute rate of return is multiplied by a factor such as:

- 365/number of days the investment was held
- 12/number of months the investment was held
- 1/number of years the investment was held

Consider the following examples.

1. Ram invests Rs. 10,000 in a 6 month bank deposit that gives 8% p.a. What is the amount of interest earned?

In this problem, the annualized return is given as 8%, and the holding period is $\frac{1}{2}$ years. So the absolute return is $8 \times \frac{1}{2} = 4\%$. The interest earned equals 4% of 10,000 = Rs.400. Bank deposit rates are quoted as annualized rates, but the actual interest that is credited for deposits of less than a year is calculated by adjusting the return for the fractional period. In general, for an n month deposit, interest earned equals Principal x (rate) x (n/12).

2. Mrs. Kapoor has been accumulating mutual funds over the past two years. She decides to sell her holdings on January 31, 2015, on which date the value of her investments is as shown below. What is the annualized rate of return on her investments?

Purchase Date	Purchase Cost (Rs.)	Market Value on Jan 31, 2015 (Rs.)
Dec 10, 2012	10000	13000
May 15, 2013	15000	16000

The annualized return can be computed as:

Absolute rate of return x (365/holding period of investment in days)

Date of Purchase	Purchase Cost (Rs.)	Market Value(Rs.)	Return	Absolute Return	Date of Sale	Holding Period in Days	Annualized Returns
A	B	C	D	E	F	G	H
			C-B	$(D/B) \times 100$		F-A	$E \times (365/G)$
10-Dec-12	10000	13000	3000	30%	31-Jan-15	783	14%
15-May-13	15000	16000	1000	7%	31-Jan-15	626	4%

6.2.3 Total Return

The returns from an investment can be in different forms such as interest income (debentures, bank deposits), dividend (mutual funds, equity shares) and profits on sale (capital gain on selling a house). An investment could provide more than one type of return. For example, equity shares can give dividend income, as well as profits on sale. A house property can yield rentals, and also capital gains on sale. A complete measure of return should take all benefits from an investment into consideration.

Total return is the return computed by comparing all forms of return earned on the investment with the principal amount. Thus total return is the annualized return calculated after including all benefits from the investment.

Total return can be positive as well as negative. The sign of total return depends on its components and whether they are positive or negative. For example, consider an equity share of face value Rs.10, which yields a dividend of 30%. The share is purchased for Rs. 200, but sold for Rs.190 after one year.

Dividends earned= 30% of Rs.10 = Rs.3; Loss on sale= Rs. 10

Total return = 3 – 10 = -7 on investment of 200

Rate of return % p.a. = $(-7/200) \times 100 = -3.5\%$

In this example the loss component is greater than the positive dividend earned so the total return becomes negative.

Consider the following examples:

1. Ajay bought an equity share whose face value is Rs.10 for Rs.250 and earned 50% dividend in year 1, 60% dividend in year 2, and sold it off after three years for Rs.300. What is the return on his investment?

Ajay has earned two forms of returns from his equity share: dividends and gains from sale.

His total return computation will include both components.

Ajay's dividend incomes are as follows:

50% on Rs.10 = Rs.5 in the first year

60% on Rs.10 = Rs.6 in the second year

Profit from selling off in the third year = Rs.50

Total return = Rs.61 on an investment of Rs.250, over 3 years.

The rate of return per cent per annum is:

$$(61/250) \times 1/3 \times 100 = 8.13\% \text{ p. a}$$

2. An investor bought a house for Rs.10 lakh. He earned a monthly rental income of Rs.3000 for 2 years. He then sold off the house for Rs.12 lakh. What is his total return?

Rental Income = Rs.3000 x 24 = Rs.72000

Profit from selling after 2 years = Rs.12 lakhs - Rs.10 lakhs = Rs.200000

Total return = 200,000+72000 = Rs.272000 on an investment of Rs.10,00,000

The rate of return per cent p.a.= $(272000/10,00,000) \times (1/2) \times 100 = 13.6\%$

Total return adds up the periodic return component of an investment and the growth in its value over the holding period. The break-up between these two return types varies between different investment options.

An investment option that provides most of the return in the form of periodic returns is an income-oriented investment. Such investments include bank deposits, bonds and monthly income scheme of post offices. In all these cases the principal invested is what is received on redemption. There are no capital gains at maturity of the investment.

An investment option that provides most of its return from the growth in the value of the principal amount invested is a growth-oriented investment. Such investments provide a smaller regular return, or none at all (such as investment in gold) but offer the scope of capital gain from sale at a higher value on a future date. Property, gold and equity are examples of growth-oriented investments.

6.3. The Concept of Compounding

Total return is a comprehensive measure of returns because it takes into account all the benefits earned from an investment. However, the examples considered in the earlier section give rise to some questions:

1. Ajay earns a dividend income of Rs.5 per share in the first year, and Rs.6 in the second year. Suppose he invests the Rs.5 into a bank deposit that earns 6% p.a. Then by the end of the second year, it would have earned Rs0.30, and his principal would have grown to Rs.5.30.

While computing total returns, we should then add up

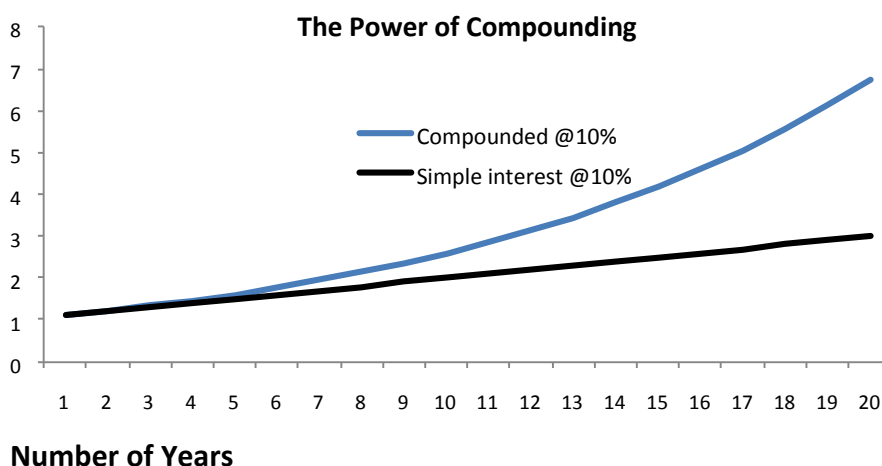
- From the first year: Rs.5 which has grown to Rs.5.30
 - From the second year: Rs.6 as dividend and Rs.50 as profit
 - Total amount of return is Rs. 61.30
2. An investor who earns a rental of Rs.3000 per month for two years before selling his house could have invested the rentals to earn further returns. His total earnings from the house property would be more than just Rs.72000 per year (3000x24).

In both cases, by ignoring the possibility that cash flows received on an investment may be put to work, the actual returns may be underestimated. This is the concept of re-investing, or compounding. Compound return is earned when the interest earned in one period is added back to the principal amount to generate a new principal on which interest is computed for the next period. As a result, interest is reinvested in the asset so that interest is earned on interest. Compounded return is the standard method of looking at returns for periods longer than one year.

6.3.1 Compound Return

Compound return is earned when the interest earned in one period is added back to the principal amount to generate a new principal on which interest is computed for the next period. As a result, interest is reinvested in the asset so that interest is earned on interest.

This picture below compares the value of a rupee when it grows at a simple interest of 10%, as against a compounded annual rate of 10%. At the end of the first year, the rupee would have grown to Rs.1.01, which forms the new principal for the second year if compound interest is calculated, and so on for each following year. Note that with time, the difference between the two options grows, as the power of compound interest kicks in.



The formula for compounding is

$$FV = PV (1+r)^n$$

Where

FV= Future Value

PV= Present Value

r = rate of return for each compounding period

n = number of compounding periods

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

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

Consider the following example.

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

1. The interest is used to pay the college fees of his daughter
2. The cumulative option is chosen and the interest is paid at maturity
3. If the interest is instead compounded quarterly and he chooses the cumulative option

Under Scenario 1

The interest income earned is: Rs.5 lakhs x 8% x 5=Rs.200000

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

Under scenario 2

The maturity value will be= $500000 \times (1+8\%)^5$

= Rs.734664

Interest income earned over 5 years = Rs.734664- Rs.500000= Rs.23664

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

Under scenario 3

The maturity value will be= $500000 \times (1+(8\%/4)^{20})$

= $500000 \times (1+2\%)^{20}$ = Rs.742974

Interest income earned over 5 years = Rs.743974- Rs.500000= Rs.242974

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

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

To understand more about compound interest, consider the example of Mr. and Mrs. Mony, both aged 30, who are making their respective retirement plans.

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

Note that both are planning to invest the same amount and expect the same rate of return, but Mrs. Mony plans to keep her funds invested for double the time (30 years versus 15 years). The retirement corpus of both can be calculated as follows.

	Investment Parameters	Mr. Mony FV	Mrs. Mony FV
Plan 1	R= 12% N= 15 yrs/30 yrs Amt.= 100000	37,27,971	2,41,33,268
Plan 2	R= 12% N= 15 yrs/30 yrs Amt.= 100000/30000	37,27,971	72,39,980
Plan 3	R= 12% N= 15 yrs/30 yrs	74,55,942	72,39,980

	Amt.= 200000/30000		
--	-----------------------	--	--

In Plan 1, Mrs. Mony's corpus has grown by more than 6.5 times than of Mr. Mony, due to the longer compounding period. In fact, even if she reduces her annual investment to one-third of the original, say Rs.30,000, her corpus is double that of Mr. Mony (Plan 2). For Mr. Mony to grow his corpus at the same compound rate, given his shorter investment horizon, he needs to double his investment (Plan 3). The power of compounding allows Mrs. Mony's corpus to grow more rapidly.

Various scenarios can be easily computed using EXCEL and an appropriate investment plan can be generated based on investment horizon, expected rate of interest, and expected investment amount.

6.3.2 Time Value of Money

The money available at the present time is worth more than the same amount in the future since it has the potential to earn returns. Consider the following options, assuming there is no uncertainty associated with the cash flow:

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

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

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

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

Since money has time value, it is not possible to compare cash flows received in different time periods. Consider the above example: suppose the Rs. 100 received now is placed in a one-month bank deposit yielding 6.5 % p.a. After a month, the value would grow to Rs. 100.54. If an investor has to opt for receiving Rs. 100 after a month, then he needs to be compensated by Rs. 0.54, the amount that has been foregone by waiting for a month. The two options will

be equivalent from the investor's point of view if the option is to receive Rs. 100 now or Rs. 100.54 after one month.

Thus the rate of return should also be adjusted for time value; this rate converts future flows into present flows and vice versa.

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

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

In any time value situation the important parameters are:

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

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

6.3.3 Annuities

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

Fixed Annuity means that fixed returns are received at regular periods. For instance, the Senior Citizen Saving Scheme pays 9.3% p.a. on the investment for a predetermined term assured (for example, for the next 5 years).

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

6.3.4 Concept of CAGR

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

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

$$PV (1+r)^n = FV$$

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

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

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

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

$$CAGR = (End\ Value/Beginning\ Value)^{(1/n)} - 1$$

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

$$End\ Value\ (or\ FV) = 120$$

$$Beginning\ Value\ (or\ PV) = 100$$

$$No.\ of\ years\ 'n' = 2$$

Substituting in the formula for CAGR we have:

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

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

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

$$120/100 = (1+CAGR)^2$$

$$CAGR = (120/100)^{(1/2)} - 1$$

$$\text{CAGR} = (1.2)^{(1/2)} - 1$$

$$= 1.095 - 1$$

$$= 0.095$$

$$= 9.5\%$$

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

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

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

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

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

An investor purchased mutual fund units at an NAV of Rs.11. After 450 days, she redeemed it at Rs.13.50. What is her compounded rate of return?

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

$$\text{CAGR} = (13.5/11)^{(365/450)} - 1$$

$$= 0.1807 = 18.07\%$$

The above calculations may look very complicated, but we can use Microsoft Excel to do this in a very simple manner. There are two options in Excel.

- Insert the CAGR formula itself and calculate using Excel
- Use the XIRR function to calculate CAGR

XIRR function in Excel

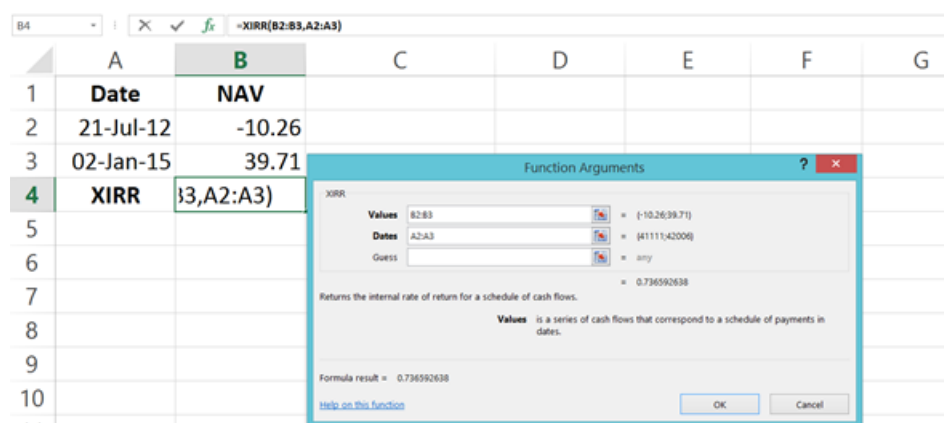
Consider the following problem.

An investor invested in a mutual fund on 21 July 2012 at a NAV of Rs.10.26. He wants to know his return on 2 Jan 2015, when the value was Rs. 39. 71. What is the CAGR?

Instead of calculating the period, n in years, the XIRR function can be directly used as follows.

- In Microsoft Excel, enter the two relevant dates and enter the NAV for each day against them. The worksheet will have 21 July 2012 and 2 Jan 2015 in one column, NAV values in the adjacent column against the respective dates.
- Ensure that the format for the date column is set to date, otherwise the formula will not work
- Enter the first value 10.26 as a negative value. Either put it in brackets or enter as –10. 26. This is to indicate that this was the cash outflow.
- Enter Rs.39.71 against 2 Jan 2015 as is the cash inflow. The formula will not work without at least one negative number.
- In a box below these values, click the button 'fx' and a box will open up. Choose 'financial' on the left side and within, choose XIRR
- The XIRR function will prompt for dates and values. Mark the cells in which the dates and the values are entered. The guess box can be left empty. CAGR is the answer shown in the box. If the enter key is pressed, CAGR is shown in the box. It can now be formatted as % with required number of digits.

The picture below shows the screenshot of the process of computing CAGR using XIRR. In the above problem, CAGR = 73.55%



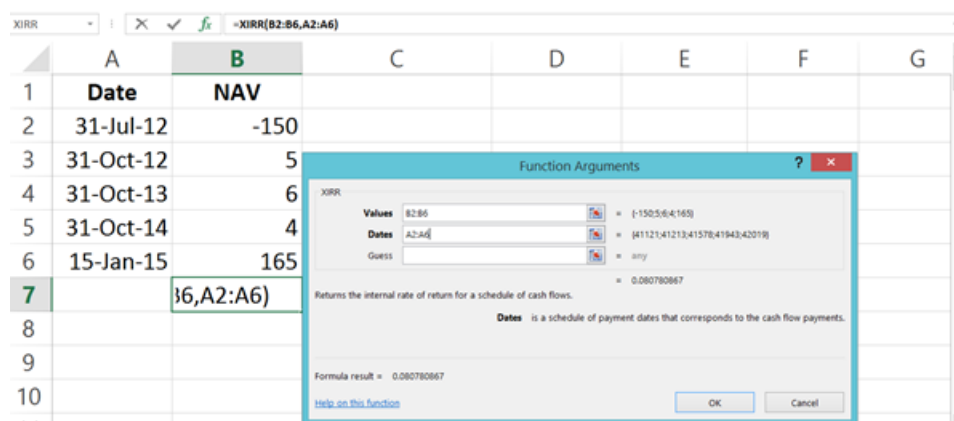
The XIRR function is particularly useful when CAGR has to be computed for a series of cash flows, rather than with just a beginning and ending value of the investment.

CAGR for multiple cash flows

Consider the following problem in which an investor receives intermediate cash inflows as well as final proceeds from the sale of his equity share.

An investor buys an equity share on 31 Jul 2012 for Rs.150. He receives a dividend of Rs.5 on 31 Oct 2012; Rs.6 on 31 Oct 2013; Rs.4 on 31 Oct 2014. He sells the share on 15 Jan 2015 for Rs.165. What is the CAGR of his investment?

This problem cannot be solved using the direct CAGR formula. The underlying CAGR for these multiple flows has to be calculated by using XIRR function in Excel. The procedure stated in the previous example can be followed here as well: separate columns should be created for inputting dates and corresponding matching cash flows. A screen shot of the solution looks like this:



As the box shows, the CAGR is 8.06%.

The CAGR of an investment does not represent the actual rate at which the investment grew each year of the investment period. It is a smoothened average annual rate, calculated based on the inflows and outflows from the investment. The actual underlying annual return may be volatile and this reflects the risk in the investment.

6.3.5 Internal Rate of Return (IRR)

The Internal Rate of Return (IRR) is an alternative way to express compounded return from an investment. Assume that an investment has a number of cash inflows (returns) over a period of time against a cash outflow (investments) made at the start. IRR is the inherent rate at which all the cash outflows compound to become equal to the cash inflows. Or, it is the discount rate at which the present value of future cash inflows from an investment exactly equals the value of cash outflows.

Consider an investment with a time horizon 't' of n years. If the initial outflow of CO occurs at the beginning (t = 0), and cash inflows CF occur in subsequent years (t = 1 to n), then the cash flows may be represented as:

Time t	Type of Cash Flow	Symbol
t=0	Cash Outflow	CO ₀
t=1,2,3,...,n	Cash Inflow	CF _t

This could easily be a bond, where an investment made at the start and a series of cash flows in the form of period interest and repayment of principal come in later. Or it could be a loan, in which a cash inflow happens at the start and there is a series of cash outflows of EMI (equated monthly instalments) happen every month.

The IRR is the discount rate r that equates the cash outflow to the total present value of all cash inflows. This implies that IRR is the r that solves the equation:

$$CO_0 = CF_1 / (1+r) + CF_2 / (1+r)^2 + \dots + CF_n / (1+r)^n$$

The computation of IRR requires that there should be at least one cash outflow, and at least one cash inflow from the investment. In other words, at least one negative cash flow and one positive cash flow are necessary.

IRR can be easily calculated in MS Excel by using the IRR function (for periodic cash flows) and XIRR function (for non-periodic cash flows). Consider the following example.

An investment of Rs. 10,000 in a mutual fund yields a cash flow of Rs. 7,000 and Rs. 6,240 respectively at the end of year 1 and year 3. Calculate the IRR of the investment.

Cash flows can be arranged by year as follows:

Time	Cash Flow
0	-10000
1	7000
2	0
3	6240

The IRR function in Excel prompts the user to select the range of cells that contain the data for which IRR has to compute. Once the appropriate column has been selected, and the enter key is pressed, the IRR value is displayed. In the above example, the IRR is 16.21%, as the screen shot below shows:

A	B	C	D	E	F	G	H	I	J
Time t	Cash Flow								
0	-10000								
1	7000								
2	0								
3	6240								
	=IRR(B2:B5)								

Function Arguments

IRR

Values: B2:B5 = {-10000;7000;0;6240}

Guess: = number

= 0.162077253

Returns the internal rate of return for a series of cash flows.

Values is an array or a reference to cells that contain numbers for which you want to calculate the internal rate of return.

Formula result = 0.162077253

[Help on this function](#)

OK Cancel

IRR is widely used to evaluate investments. If the IRR is greater than or equal to a minimum hurdle rate, the investment is considered to be financially worthwhile. This hurdle rate may be a benchmark, or the investor's cost of funds. For example, an investor may benchmark returns on debt funds to bank fixed deposit rates. If the IRR earned on a fund does not beat the bank deposit rate, then the investor may opt to stay with the bank deposit.

IRR is also the rate of return specific to an investment, or its own internal return. To understand this, we can view the investment as a CAGR problem in which the initial outflow is invested for n years, and each year's inflows (CF_1, CF_2, \dots, CF_n) are re-invested at a rate equal to the IRR. In this case, IRR represents a rate at which the investment's cash flows grow in a compounded fashion.

What is the difference between CAGR and IRR?

Both CAGR and IRR can be computed using the XIRR function. Consider the example solved earlier in this section:

An investor buys an equity share on 31 Jan 2013 for Rs. 150. He receives a dividend of Rs. 5 on 31 Mar 2013; Rs. 6 on 31 Mar 2014; Rs. 4 on 31 Mar 2015. He sells the share on 25 Jul 2015 for Rs. 165. What is the CAGR of his investment?

The CAGR value calculated using XIRR function in Excel is 8.04%. This is also the IRR generated by this investment. When CAGR is computed for multiple cash flow situations, it is usually equivalent to IRR. The key points to note when using XIRR and IRR functions are:

- If an investment involves only one cash outflow/inflow and a series of future inflows/outflows at periodic regular intervals, IRR can be used (bonds or loans for example)
- If an investment involves multiple inflows and outflows, coming in at uneven time intervals, CAGR can be used (equity shares, mutual funds)

However, there are two key differences between IRR and CAGR.

1. Conceptually, CAGR is a rate that measures how a value grows when it is growing at a compounded rate. IRR is a tool to evaluate investment viability. So IRR always requires at least one positive and one negative cash flow in the investment. On the other hand, CAGR can be computed even for a series of all-positive cash flows. For example, suppose a company's revenues were Rs. 2 crore in 2000, and grew to Rs. 5 crore in 2007. If we want to find out the CAGR at which its revenues have grown during this period, then the formula $(\text{end value} - \text{beginning value} / \text{beginning value})^{1/7} - 1$ can be used. The CAGR so calculated is 13.98%. IRR cannot be computed for this example, because there is no cash outflow.
2. In actual practise, CAGR is more commonly used for past period data, for which the inflows and outflows are known. IRR tends to be used for evaluating investment viability, where estimated future cash flows are used rather than actual values.

6.3.6 Net Present Value (NPV)

The Net Present Value (NPV) uses the idea of time value of money to evaluate the viability of an investment option. If an investment decision results in cash outflow at the initial stage and a series of cash inflows over a period of time, then the net present value of the cash flows can be calculated as the difference between the present value of the cash outflow and the sum of the present values of the inflows that accrue over a period of time. The discounting rate used in the calculation of the NPV is the required rate of return from the investment and therefore can be customized to reflect the risk in the market.

A positive NPV implies that the investment is worthwhile and a negative NPV indicates that the investment should be avoided. The NPV is the present value of the gain from an investment and the magnitude of the gain will help decide between different investment options, provided it is calculated at the same point in time. The constraint in using the NPV is the determining the discounting rate. Moreover, it is assumed to be constant over the life period of investment, which may not hold true.

6.3.7 Holding Period Return

Holding period return is the return earned on an investment during a specific period when it was bought and held by the investor. Such return computations use the portfolio value at two chosen points. A simple formula for holding period return is:

$$\text{HPR} = \frac{\text{Cash Inflows during the period} + \text{Capital gains during the period}}{\text{Beginning Value of investment}}$$

OR

$$\text{HPR} = \frac{\text{Cash inflows} + (\text{Ending value} - \text{Beginning value})}{\text{Beginning value of investment}}$$

This formula gives a simple absolute return, so it is appropriate for holding periods less than one year. For holding periods higher than one year, CAGR returns have to be estimated.

HPR is a very popular method of computing portfolio returns. Mutual funds declare the HPR on a regular basis for specific periods ending on the current date, as a representation of their performance.

Consider the returns of a mutual Fund below:

Date	Period	NAV per Unit (₹)	Scheme Returns (%) ^	Benchmark Returns (%)#	Additional Benchmark Returns (%) ##	Value of Investment of Scheme ₹ 10000@		
						Scheme (₹)	Benchmark (₹)#	Additional Benchmark (₹)##
Sep 30, 14	Last 1 Year	124.737	2.30	-1.79	-0.20	10,230	9,821	9,980
Sep 30, 13	Last 2 Years	82.261	24.55	16.17	17.73	15,512	13,496	13,860
Sep 28, 12	Last 3 Years	90.739	12.01	11.69	11.68	14,062	13,940	13,937
Sep 11, 00	Since Inception	10.000	18.42	12.08	11.93	127,601	55,689	54,581

Source: HDFC Mutual Fund

The NAV of the scheme as on 30th September, 2015 was 127.601.

If an investor buys units on Sep 30, 2014, sells out on Sep 30, 2015, then HPR is computed as

$$\text{One Year HPR} = (127.601 - 124.737) / 124.737 = 2.30\%$$

For an investor who buys on Sep 30, 2013 and sells out on Sep 30, 2015, the HPR is calculated as CAGR over the 2 year holding period

$$\text{Two Year HPR} = (127.601 / 82.261)^{(1/2)} - 1 = 24.44\%.$$

Similarly, the HPR for the other holding periods can also be calculated as the CAGR over the period.

6.4. Real Rate of Return vs. Nominal Rate of Return

The return on an investment is usually expressed as a nominal rate. When the nominal rate is adjusted for the effects of inflation, it is known as the real rate of return. Calculation of the real rate of return on investments enables investors to understand the actual purchasing power of their investment values. Consider the following example.

A bond pays 10% interest per annum. The inflation rate for that year is 5%. What is the real return?

Nominal rate of return= 10%

Inflation rate= 5%

Real rate of return = 10% - 5% = 5% (This is an approximate value. We will see more precise way to calculate the real rate of return in the next section).

The nominal return is always a positive rate, because investors have to be paid a positive rate to invest their money. But the real rate can be negative or positive. If inflation rate is higher than nominal rate of return, then that results in a negative real return. A negative real return implies that the return earned has been wiped out by rising prices! In financial advisory practice, we use this reality is a more nuanced way to help investors deal with the risks of earning a high nominal, but a low real return.

We use the principle of time value of money to understand the effective real rate of return. If an investment earns a nominal rate of return, that is the rate at which money is being compounded. However, if inflation reduces the value of those investment cash flows, the value of those returns is discounted by the rate of inflation. Therefore the real rate of return or effective rate of return on an investment is: $= ((1 + \text{nominal rate}) / (1 + \text{inflation rate})) - 1$

In the above example, the effective real rate is

$$= (1.10/1.05) - 1$$

$$= 4.76\%$$

This computation of real rate has several applications in insurance and retirement planning as we shall see in the later chapters. While planning for retirement, advisers do not focus on a corpus that can generate a fixed income after retirement. They instead take into account the fact that inflation is a reality even post retirement, and estimate the effective real rate of return.

6.5. Tax Adjusted Return

Tax-adjusted return is the return earned after taxes have been paid by the investor. Since taxes actually reduce the money in the hands for an investor, it is necessary to adjust for them to get a realistic view of returns earned. Tax adjusted returns are lower than nominal returns because tax payments lower the nominal value of returns.

Suppose an investor earns an interest of 10% on an investment of Rs.1000. If this interest is taxed at 20%, then we calculate tax adjusted return as follows:

Nominal interest rate = 10%

Interest received = 10% of 1000 = 100

Tax payable = 20% of 100 = 20

Net interest received = 100 - 20 = 80

Post tax return = $80/1000 = 8\%$

In general, post-tax or tax adjusted return $TR = NR * (1 - \text{tax rate})$

TR: tax adjusted return

NR: nominal return

Consider the following example.

An investment earns a return of 11% p.a., but the income is taxable in the hands of the investor. The investor's marginal tax rate is 30%. What is his after tax rate of return?

In this investment, 30% of the income will be paid as tax, and only 70% will be available to the investor.

Pre-tax rate of return = 11%

Tax rate applicable = 30%

Tax adjusted rate of return = $11\% \times (1 - 0.30) = 7.7\%$

Financial markets factor in the significance of tax by adjusting market rates for tax implications. For example, the bond market has both tax-free and taxable bonds. Tax-free bonds are issued by public sector units in the infrastructure sector. Since the interest paid on tax-free bonds is not taxed in the hands of the investor, the bonds are issued at a lower interest rate as compared to taxable bonds.

Tax adjusted returns are computed in two ways while comparing investments that have different tax treatment of return:

- a. Adjust the post-tax rate to compute actual post tax return.
- b. Adjust the pre-tax rate to compute effective nominal return Consider the following example.

An investor is considering a tax-free bond that pays 8% p.a. and a taxable bank deposit that pays 9% p.a. The tax bracket of the investor is 20%.

We can compare the two investments in two different ways. We can find out the post- tax return for both; or we can find a taxable equivalent in nominal terms for the tax-free rate.

Post tax return:

Interest on tax-free bond = 8%

Effective return on the bank deposit is = $9\% \times (1-0.02) = 7.2\%$

Nominal return:

Bank deposit = 9%

Tax free bond = $8\% / (1-0.2\%) = 10\%$

In this example, the tax free bond is a better choice, since it pays a better return of 8% after tax, compared to the taxable bank deposit. The tax free bond's 8% return is equivalent to a taxable rate of 10%. Or, the bank deposit should pay 10% pre-tax to be equivalent to the tax free bond paying 8%.

Tax adjusted returns are used to compare two investments that may have a different tax treatment. However, the effective return to the investors depends on their tax status and tax rates applicable to them.

6.6. Risk Adjusted Returns

The relationship between the risk and return from an investment is a direct one implying that the investor who invests in a high risk investment will expect to be compensated by higher returns. Risk adjusted return relates the return from an investment to the risk taken to generate it. A high risk adjusted return indicates that the investment was able to generate a higher return for a unit of risk taken.

Sharpe ratio and Treynor ratio are two commonly used ratios to measure the risk adjusted return in an investment. The return number used in the calculation of the risk adjusted return ratios is the excess return. Excess return is calculated as the excess of the investment return over the risk free rate of return. The Sharpe ratio relates the excess return generated by an investment to the standard deviation. Treynor ratio compares the excess return to the beta.

Sharpe and Treynor ratios are used to rank the performance of similar investments.

Sample Questions

1. **Investment A appreciates in value by 20% after one year. Investment B appreciates by 40% after three years. Which gives a higher return?**
 - a. Investment B, because it has a higher absolute return
 - b. Investment A, because it can be exited after just one year
 - c. Investment B, because it has a higher holding period
 - d. **Investment A, because it has a higher annualized return**

2. **An investment in 7% tax free bonds is compared with an investment in a 9% bank deposit where interest is taxable. Both have a one year investment horizon. Which of the following is true?**
 - a. The bond interest is tax free so it is better
 - b. **For an investor who is not taxable, the bank deposit offers a better return**
 - c. For an investor with a 30% tax rate, the bank deposit gives higher post tax return
 - d. For an investor with a 10% tax rate, the bank deposit gives lower post-tax return

3. **Simple absolute return is an appropriate measure of return for**
 - a. **Calculating returns for periods less than one year**
 - b. Comparing returns across time periods
 - c. Calculating returns where there is only capital appreciation
 - d. Calculating returns where there is only periodic income

4. **Annualization of returns enable**
 - a. Comparison over different investment amounts
 - b. **Comparison over different investment horizons**
 - c. Comparison over different levels of investment risks
 - d. Comparison over different levels of return

CHAPTER 7: CONCEPT OF FINANCIAL PLANNING

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Financial Planning
- Need for financial advisory services
- Scope of financial planning services
- Concept of assets, liabilities and networth
- Preparing a budget and financial planning delivery process

7.1. Financial Planning

Financial planning aims at ensuring that a household has adequate income or resources to meet current and future expenses and needs. The regular income for a household may come from sources such as profession, salary or business. The normal activities of a household and the routine expenses are woven around the regular income. However, there are other charges that may also have to be met out of the available income. The current income of the household must also provide for a time when there will be no or low income being generated, such as in the retirement period. There may be unexpected expenses which are not budgeted, such as a large medical expense, or there may be needs in the future that require a large sum of money, such as education of children or buying a home, all of which require adequate funds to be made available at the right time. A portion of the current income is therefore saved and applied to creating assets that will meet these requirements. Financial planning refers to the process of streamlining the income, expenses, assets and liabilities of the household to take care of both current and future need for funds.

Example

Vinod is 40 years old and earns Rs.2 lakhs a month. He is able to save about Rs.40000 a month after meeting all the routine expenses of his family, paying the loans for his house, car and other needs. His investments include those for tax savings, bank deposits, bonds and some mutual funds. He pays premiums on life insurance for himself and his wife. Vinod is the sole earning member of his family and he believes he takes care of his finances adequately to take care of his current and future needs. How would financial planning help him?

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

- a) As the sole earning member has he made provisions for taking care of his expenses if his current income is interrupted for any reason?

- b) Does he have adequate insurance cover which will take care of his family's requirements in the event of his untimely demise?
- c) What are his specific future expenses and how will he fund them?
- d) If Vinod has to create a corpus to fund large expenses in the future, what is the size of the investment corpus he should build?
- e) Given his current income and expenses is he saving enough to create the corpus required?
- f) Will he have to cut back on his current expense or can he increase his current income so that his expenses in the present and the savings for the future are met?
- g) What is the wealth Vinod has so far build from his savings and how can he best use it to meet his needs?
- h) How should his saving be deployed? What kinds of investments are suitable for Vinod to build the required corpus?
- i) How much of risk is Vinod willing and able to take with his investments? How would those risks be managed?
- j) How should Vinod ensure that his savings and investments are aligned to changes in his income, expenses, future needs?

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

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

7.2. Need for Financial Advisory Services

The primary task of the financial adviser is to link the large range of financial products and services to the specific needs and situations of the client. Not every product may be suitable to every client; nor would a client be able to identify how to choose and use products and services from a very large range. A financial advisor, who possesses the expertise to understand the dynamics of the products on the one hand and the needs of the client on the other, is best suited to enable using such products and services in the interest of the client.

The following are the primary reasons why financial advisers are needed:

- a) Personal financial management requires time and attention to recognize income and expense patterns, estimates of future goals, management of assets and liabilities, and

review of the finances of the household. Many clients may not find time from their professional tasks to focus on these key issues.

- b) Estimating financial goals, finding suitable products and arriving at suitable allocations to various assets require specific expertise and skills which may not be available in most households.
- c) Selecting the right investment products, choosing the right service providers and managers, selecting insurance products, evaluating borrowing options and such other financial decisions may require extensive research. A professional adviser with capabilities to compare, evaluate and analyse various products enables making efficient choices from competing products.
- d) Asset allocation is a technical approach to managing money that requires evaluating asset classes and products for their risk and return features, aligning them to the investor's financial goals, monitoring the current and expected performance of asset classes and modifying the weights to each asset in the investor's portfolio periodically to reflect this. Advisers with technical expertise enable professional management of assets.
- e) Financial planning is a dynamic process that requires consistent attention to changing market and product performances, dynamic changes in the needs and status of the client and the ability to tune the process to these changes. It needs full-time professional attention and the efficiencies of a disciplined and systematic process.

To choose a financial advisor is to engage a professional to devote time and provide expertise to a process-driven and result-oriented approach in managing personal finances.

7.3. Scope of Financial Planning Services

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

- a. **Personal financial analysis:** An adviser assesses the financial position of a household by bringing together its income, expenses, assets and liabilities. The sources of income, its stability and growth determine how a household may be able to finance its current expenses and future goals. For example, a sportsman's income accrues over a short span of time, depending on his success in his chosen sport. The income has to be allocated to his current goals of excelling in his chosen sport, which may need significant investment, and the future goals of securing his living when his income from his sport falls or stops altogether.

Current income is apportioned to current expenses and to saving for the future. The decision to allocate between the two would determine if the household is able to secure its lifestyle, fund its aspirations, and live comfortably. If current income is saved, assets

can be built with such savings, these assets generate income in the future when needed, or can be sold to fund a future goal. An employed individual contributing to his provident fund is setting aside a portion of his current salary to create a corpus that will be deployed to generate income after his retirement.

If current expenses are higher than the income, a household borrows and spends its future income today. Borrowings represent an easy option to fund a large scale current expense, such as buying a car or a house. The repayment of the borrowing over a period in the future reduces a part of the future income and apportions it to funding the asset that has been bought with a loan. This will also directly impact the cash flows in the household to meet other requirements. If a young earner invests too early in a residential property with a loan, he may be allocating a large proportion of his earnings to repaying the loan. This may leave him with lesser cash on a regular basis to meet any unexpected expense. The asset, in which he has invested, is a house, which cannot be liquidated in parts to meet sudden needs for funds. So a decision to acquire an asset with a loan, which looked like a compulsory saving in a good asset, may deteriorate into a poor financial decision that impacts his routine life.

A household has to evaluate what assets it needs when and how it can be funded and what the future implications will be on their financial situation. Personal financial analysis provides a holistic view of how these choices will impact the finances of a household. Financial advisers collect information about the household's finances, and analyse them in various ways to draw various inferences about their financial position.

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

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

- c. Insurance Planning:** Several unexpected expenses that can cause an imbalance in the income and expenses of a household can be managed with insurance. Insurance is a risk transfer mechanism where a small premium payment can result in payments from the insurance company to tide over risks from unexpected events. The temporary loss of income from disabilities and permanent loss of income from death can be covered with life insurance products. Health and accident insurance covers help in dealing with unexpected events that can impair the income of a household, while increasing its expenses on health care and recuperation. General insurance can provide covers for loss and damage to property and other valuables from fire, theft and such events. Insurance planning involves estimating the losses to the household from unexpected events and choosing the right products and amounts to cover such losses.
- d. Investment Planning and Asset Allocation:** A crucial component in financial planning and advisory is the funding of financial goals of a household. Investment planning involves estimating the ability of the household to save, and choosing the right assets in which such saving should be invested. Investment planning considers the purpose, or financial goals for which money is being put aside. These goals can be short-term such as buying a car, taking a holiday, buying a gift, or funding a family ceremony or can be long-term such as education for the children, retirement for the income earners, or high-expense goals such as marriage of children. An adviser helps with a plan to save for these goals, and suggests an appropriate asset allocation to pursue. The adviser does not focus on the selection of stocks or bonds, but instead takes a top down approach of asset allocation. The focus is on how much money is invested in which particular asset class in order to deliver the expected return within the risk preference of the investor. The adviser's job is to construct a portfolio of asset classes, taking into account the goals, the savings, the required return, and the risk taking ability of the investor. This is one of the core functions of the adviser and many specialise in asset allocation and investment planning.
- e. Tax Planning:** Income is subject to tax and the amount a household can save, the return they earn on their investment and therefore the corpus they are able to build for their future goals, are all impacted by the tax regime they fall under. A financial adviser should be able to assess the impact of taxes on the finances of the household and advice appropriate saving and investment options. The post-tax return of financial products will have to be considered while choosing products and estimating holding periods. The taxability of various heads of income such as dividends, rents and interest differ. The treatment of return if accumulated, rather than paid out periodically, varies. The taxability of gains differs based on the holding period. A financial adviser should bring in these aspects while constructing a plan for the household.
- f. Estate Planning:** Wealth is passed on across generations. This process of inter-generational transfer not only involves legal aspects with respect to entitlements under

personal law, but also documentation and processes that will enable a smooth transition of wealth in a tax-efficient way. Estate planning refers to all those activities that are focussed on transfer of wealth to heirs, charity, and other identified beneficiaries. There are several tools and structures to choose from, in estate planning. Some choices such as gifts can be exercised during one's lifetime, while choices such as wills come into play after death. Financial advisors help households make these choices after considering all the implications, and help them complete the legal and documentation processes efficiently.

7.4. Financial Advisory and Execution

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

One of the regulatory initiatives to prevent such mis-selling is to differentiate between providers of advice and distributors of financial products, and to ask advisers to earn their revenue from the client, and not from the producer. The distributor who executes the transactions in financial products may earn a commission from the producer. The current regulatory regime for financial advisors in India requires that any one offering financial advice for a consideration should be registered with SEBI, and should not earn any income from the producer. There are specific exemptions provided for those that offer advice incidental to a product they may sell.

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

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

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

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

- b. Fee-based financial planners and advisers:** Some financial advisers offer all the above services that are offered by a fee-only planner, but they also execute client transactions in the financial products recommended by them. They may therefore earn both a fee income for their advisory services and commissions and other incomes from the products that they recommend.

Such advisors let their clients know that they earn commissions by executing the transactions for them; they also provide the client the option to execute their transactions with other service providers.

Institutional advisers such as banks and brokers, have to keep separately identifiable division or department (SIDD) that offers financial advice, distinct from the pure execution services. Both business verticals need to operate independently and with complete transparency and disclosure to clients.

Clients tend to choose their advisers to execute the transactions, when they trust the adviser to offer products suitable to them, for the convenience of having all the information about their wealth in one place. Execution services also help advisers to monitor, review and revise financial decisions that were made earlier by a client, as the years go by.

- c. Execution only services:** Some advisers may not charge their clients for advice, if it is incidental to their core function of distributing financial products. Their income comes from the commissions from selling the product. They may also execute transactions advised by another financial adviser. Such advisers may also distribute a range of products including investment products, insurance products, banking and loan products, which are subject to regulations by multiple regulators apart from SEBI.

Some firms may organise the execution only services into an aggregation model. The aggregating entity has several distributors associated with it, who take a range of financial products to clients. In this case, the company short-lists the products it would offer, based

on its selection criteria. It may also have a central advisory team that selects products after research and data analysis. Those that like to offer these products to their clients, may associate with such company, and share their revenue with the company for using their research services, or execution platforms. Many aggregators offer a range of support services to their associates, including training, development, customer relationship management software, execution platforms and facilities that may be expensive to set up on a standalone basis. The shared facility helps the distributors to scale up their business, and pay the aggregator a share of revenue for the benefits offered.

- d. Wraps and Platforms:** Wraps and platforms are technology-based advisory solutions that are standardised for execution. A client or an advisor associates with the platform, and can offer its financial products as model portfolios that investors can buy. Advisors may also choose these platforms to execute transactions in standardised model portfolios. Clients can view how their portfolios are performing. Advisors can monitor and review the portfolios and holistically manage the money of clients across multiple products.

Wraps and platforms may charge the client a fee and share this fee with the advisor who executes the transactions using it. They may also enable the advisor to access clients using their platforms, to sell financial advice to such clients, and charge a fee and share it with the platform provider.

7.5. Assets, Liabilities and Net worth

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

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

Physical assets are tangible assets and include real estate, gold and other precious metals. Physical assets have an intrinsic value though the actual price at which they trade is impacted

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

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

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

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

The factors that impact net worth calculations and the interpretation of the number is dealt with in greater detail in the Chapter 3 of the workbook of NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination.

7.6. Preparation of Budget

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

Income has to be regular and stable to be able to be assigned to expenses. The income is first used to meet mandatory expenses such as repayment of loans and payment of taxes. The remaining income is next used to meet essential expenses, such as the living expenses. Discretionary expenses, such as those on entertainment and recreational activities, are next met out of available income. The excess income available is the savings of the household. However, meeting goals and future needs cannot be done if savings is ad hoc. Prudent financial management requires that a defined level of savings should be targeted that is essential to meet goals. A budget helps a household plan its income and expenses so that the income available is utilized in the best possible way to meet current and future requirements.

The steps to making a budget are the following:

1. List and total the regular and definite incomes that will be received in the period.
2. List and deduct the mandatory expenses from the total income. What is left is the disposable income.
3. Identify essential living expenses of the household and deduct from the disposable income.
4. List the discretionary expenses and deduct it from available income to arrive at the savings.

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

Creating, reviewing and managing a household budget is discussed in greater detail in the Chapter 3 of the workbook of NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination.

7.7. Financial Planning Delivery Process

Financial planning requires financial advisors to follow a process that enables acquiring client data and working with the client to arrive at appropriate financial decisions and plans, within the context of the defined relationship between the planner and the client. The following is the six-step process that is used in the practice of financial planning.

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

7.7.1 Defining the Client-Planner Relationship

The terms of engagement between the client and the financial planner describes the scope of services that a planner would offer, the fees that would be paid, and the rights and obligations of both parties. The terms are usually spelt out in a legal agreement that is signed by both parties.

It is important for the agreement to be compliant with the prevalent regulations. The SEBI (Investment Advisers) Regulations 2013 require that the advisers disclose a defined list of information about themselves, including their background, their track record in grievance redressal and the services they would offer. Documentation of client information, risk profiling, suitability tests of products being offered are all mandatory under the regulation. The terms of engagement has to comply with these Regulations.

7.7.2 Understanding Client's Financial Situation

Financial Planning is the exercise of ensuring that a household has adequate income or resources to meet current and future expenses and needs. The income is primarily derived from two sources:

- I. Income from profession or business or employment undertaken
- II. Income and earnings from assets or investments such as rent from property, interest from bank deposits, dividends from shares and mutual funds, interest earned on debentures

Income from business or profession will be the primary source of income in the period when the individual is capable of being gainfully employed and generate an income. When this period is over the dependence for income from the assets and investments will increase. Assets and investments as a source of income are typically built over a period of time from surplus income after meeting expenses.

Current income is first assigned to meet current expenses. Surplus income available after meeting expenses is called savings and it is used to create assets that will provide future income or meet future expenses. Large ticket size assets, such as real estate, or, purchases that are not amenable to being met out of regular income, such as buying a car, may require surplus income to be accumulated over a period of time. Typically such assets are acquired with a combination of own funds and loans. Loans result in a liability that has to be met out of current and future income.

- Income is used to meet current expenses and create assets to meet future income needs and expenses.
- Expenses have to be controlled to fit into available income and to be able to generate savings.
- Savings are used to create assets that will generate income for the future needs.
- Borrowings or loans may be combined with savings to acquire assets of a large value or meet expenses.
- Borrowings impose a liability to be met out of income to pay the cost and repay the loan.

Financial planning helps in understanding the relationship between the four elements of the personal finance situation of an individual: income, expenses, assets and liabilities so that all the current and future needs are met in the best way possible.

7.7.3 Identifying Financial Goals

Financial goal is the term used to describe the future needs of an individual that require funding. It specifies the sum of money required in order to meet the needs and when it is

required. Identifying financial goals help put in place a spending and saving plan so that current and future demands on income are met efficiently.

Goals described in terms of the money required to meet it at a point of time in future, is called a financial goal. For example, Rs. 3 lakhs required after five years for the college admission for a child is a financial goal. Converting a goal into a financial goal requires the definition of the amount of money required and when it will be required. Other examples of financial goals are

- Rs. 2 lakhs required each month after 10 years to meet household expenses in retirement.
- Rs. 3 lakhs required after 5 years for a foreign holiday
- Rs. 7 lakhs required after three years as down payment for a house
- Rs. 1 lakh required after 6 months to buy a car

As can be seen from the above examples, each financial goal contains two important components: (a) value of the goal and (b) time to goal.

I. Goal Value

The goal value that is relevant to a financial plan is not the current cost of the goal but the amount of money required for the goal at the time when it has to be met. The current cost of the goal has to be converted to the value in future. The amount of money required is a function of

- Current value of the goal or expense
- Time period after which the goal will be achieved
- Rate of inflation at which the cost of the expense is expected to go up

The current cost of a college admission may be Rs. two lakhs. But after 5 years, the cost would typically be higher. This increase in the cost of goods and services is called inflation. While saving for a goal, therefore, it is important to estimate the future value of the goal because that is the amount that has to be accumulated.

$\text{The future value of a goal} = \text{Current Value} \times (1 + \text{Rate of Inflation})^{\text{(Years to Goal)}}$

In the above example, if the rate at which the cost increases is taken at 10% then the cost of the college admission after 5 years would be:

$$\text{Rs. } 200000 \times (1 + 10\%)^5 = \text{Rs. } 322102.$$

This is the value of the goal which needs to be achieved by saving and investment.

II. Time to Goal or Investment Horizon

Financial goals may be short-term, medium-term or long-term. The term to goal refers to the time remaining for the funds to be made available to meet the goals. The investment horizon will determine the type of investment that will be selected for investing funds for the goal. If the goal is short-term, low risk investments will be preferred even though the returns will be low since the investor would not like to take a chance of losing the principle and return on the amount invested. As the time available for the investment increases, the investor will be able to take higher risks for better returns.

Farida (aged 35) is setting aside money to create an emergency fund and is also saving for her retirement. She has the option of investing in a short-term debt fund or in an equity fund. What will be the consequence of her decision?

A short-term debt fund may be ideal for her to hold her emergency fund since it has the twin features of relatively safe returns and ability to draw the funds out whenever she requires. But her retirement goal may see inadequacy of funds because the returns from short-term debt funds are low and the amount she is investing may not be earning as well as it could.

If Farida invested in an equity fund, she may find that the value of her emergency fund has gone down when she needs the money since the returns from equity will be volatile. This is a risk she will be unwilling to take. On the other hand, her retirement corpus will benefit from the higher returns from equity since she requires the funds only after a long period during which the volatility in returns will be ironed out.

The appropriate investment for a goal will be one that aligns the risk and return preferences of the investor to the investment horizon.

The term to the goal will keep reducing and the investments made for the goal has to align to the new situation.

In the above example, as Farida's retirement comes closer she will need to move her investments from equity to lower risk products.

III. Funding the goal

Once the financial goals have been identified, the next step is to evaluate the available income to determine how the goals will be met. Funding goals will depend upon the existing investments and assets that are available to meet future goals and the ability to save which will depend upon the current level of income and expenses of the household, and the liabilities of the individual which are the obligations that have to meet out of their available income. The ability to take loans to acquire assets or meet expenses will depend upon existing liabilities and the adequacy of the available income to meet the additional obligations.

The questions that help assess the ability to fund goals are:

- What is the current income available to meet expenses?
- What is the level of expenses?
- What is the amount of income that can be saved?
- What are the assets available that can be used to meet goals?
- What are the liabilities existing that also have a claim on income?

The current financial position will determine which of the financial goals are achievable and which may have to be postponed or given up till such time the savings improve.

Once the savings and investments available to meet the financial goals have been ascertained, the next step is to assign the existing savings and assets to the goals, so that the short fall in funds required can be accumulated over time. It may not be possible to save and meet all the goals. Prioritizing, or identifying the goals that are more important and urgent, and saving for them first will be necessary. The amount of savings that will be assigned to a goal will depend upon the value to be accumulated, the time available to reach it and the type of investment selected to invest the savings. If the time to the goal is longer and the investor is willing to invest in investments with higher risk for better returns, then the amount of savings that needs to be set aside will be lower.

- Higher the return earned on investments, lower will be the current savings needed since the higher returns earned will lead to the savings grow to a larger amount.
- Longer the period available to accumulate the saving, lower will be the savings needed since the savings have a longer time to earn returns and reach the required value.

Example

Madhur is saving for a car and requires Rs.7 lakhs at the end of five years. He has the option of investing the savings in equity which is expected to give him 15% return or a bank deposit that will give him 8% return.

If he decides to invest in equity, he will require Rs. 7902 to invest each month to be able to accumulate the funds. If he chooses to invest in a bank deposit, he will have to invest Rs. 9526 each month since the returns are lower.

If he increases the time available to 7 years, he will need Rs. 4757 only to invest each month in equity and Rs. 6243 if he chooses a bank deposit. This is because there is a longer time available to contribute to the goal and for the savings to appreciate to the required sum. However, the assumption made here is that the value of the goal remains the same Rs.7 lakh after 7 years. This may not necessarily be true.

The selection of the right type of investment in which to park the savings will depend upon the time available before the goal has to be met and the ability of the investor to take risks. If the investment period is long enough then the investor can consider products such as

equity. This is because the returns from investments such as equity are high but volatile in the short-term and require a longer investment horizon to smoothen out.

A risk-averse investor may not be willing to invest in a risky investment even if it is suitable given the time horizon available. For example, an investor may choose to park their savings for long-term goals in bank deposits which they see as an investment with low risk. But they run the risk of not being able to accumulate the funds required in the time available. To catch up with their goal value, they will either have to increase the amount they are contributing for the goal, or increase the time available for reaching the goal.

The existing investments of the individual will also be assigned to the different goals by matching the need of the goal to the features of the investment. If the investor has investments in bank deposits, then it can be used for goals that are near-term or may require periodic fixed payout, such as education fees and expenses of children.

Assigning existing investments to a goal will bring down the savings to be set aside for the goal, since these investments will also contribute to the targeted value of the goal.

In the above example, if Madhur had Rs. 100000 in equity mutual funds today which he assigns to this goal, then the value that he is saving for will come down to the extent that this Rs. 100000 will gain in value over 5 years, assuming the same return of 15%.

Value of the goal: Rs. 700000

Value of Rs. 100000 after 5 years: Rs. 201000 ($\text{Rs. } 100000 \times (1+15\%)^5$)

Value to be met from additional savings: Rs. 700000 - Rs. 201000 = Rs. 499000

Monthly saving to be invested for this goal: Rs. 5634 as against Rs. 7902 if no existing investment was assigned to the goal.

Note: The 'PMT' function in excel can be used to calculate the periodic investments required. The inputs required for the function are

Rate: the rate of return expected to be earned. This is divided by 12 if the investment is expected to be made monthly

Nper: the number of periods (months/years) over which the investment will be made

Future value: the amount that has to be accumulated

7.7.4 Risk Profiling

Clients' financial risk tolerance - attitudes, values, motivations, preferences and experiences, is measured with a risk profile. The risk profile questionnaire helps in understanding the risk

tolerance levels of a client. Risk tolerance is the assumed level of risk that a client is willing to accept.

Financial risk tolerance can be split into two parts:

Risk capacity: the ability to take risk

This relates to the client's financial circumstances and their investment goals. Generally speaking, a client with a higher level of wealth and income (relative to any liabilities they have) and a longer investment term will be able to take more risk, giving them a higher risk capacity.

Risk attitude: the willingness to take risk

Risk attitude has more to do with the individual's psychology than with their financial circumstances. Some clients will find the prospect of volatility in their investments and the chance of losses distressing to think about. Others will be more relaxed about those issues.

Risk tolerance is typically measured using questionnaires that estimate the ability and willingness to take risks. The responses of investors are converted into a score that may classify them under categories that characterize their risk preferences. Consider the following classification:

I. Conservative Investors

- Do not like to take risk with their investments. Typically new to risky instruments.
- Prefer to keep their money in the bank or in safe income yielding instruments.
- May be willing to invest a small portion in risky assets if it is likely to be better for the longer term.

II. Moderate Investors

- May have some experience of investment, including investing in risky assets such as equities
- Understand that they have to take investment risk in order to meet their long-term goals.
- Are likely to be willing to take risk with a part of their available assets.

III. Aggressive Investors

- Are experienced investors, who have used a range of investment products in the past, and who may take an active approach to managing their investments?
- Willing to take on investment risk and understand that this is crucial to generating long term return.
- Willing to take risk with a significant portion of their assets.

The risk preferences of the investor are taken into account while constructing an investment portfolio.

7.7.5 Portfolio Construction

An individual creates a portfolio of investments to meet their various goals. The investments selected have to balance the required return with an appropriate level of risk. Assets and investments differ on their features of risk, return, liquidity and others.

An investor will have multiple, differing requirements from their portfolio depending upon the goals they are saving for. They may need growth for long-term goals, liquidity for immediate needs and regular payouts to meet recurring expense. No one investment can meet all the requirements for growth, liquidity, regular income, capital protection and adequate return. The investor will have to create a portfolio of securities that has exposure to different assets which will cater to these diverse needs.

Investment Objective	Suitable Investment
Growth and appreciation in value	Equity shares and equity funds, Real estate, Gold
Regular income	Deposits, Debt instruments and debt funds, Real estate
Liquidity	Cash, Bank deposits, Short-term mutual fund schemes
Capital preservation	Cash, bank deposits, Ultra-short term funds

Consider the impact of the following investment decisions:

- Jayesh invests only in real estate. He has an urgent need for funds but finds that he is not able to sell or take a loan quickly enough.
- Kamal leaves all his money in his savings bank account which earns a very low interest. He finds that he is not able to accumulate enough money required to meet his future expenses.
- Latika invests all her money in equities. She finds that the value of her investment keeps fluctuating and she is not sure if she will have the required funds when she needs it.
- Harmeet has most of her money in gold jewellery. She finds that she is not able to generate the income from her investments to meet her regular monthly expenses.
- Gayatri has invested her money in bank fixed deposits. She is not able to manage her expenses from the interest she receives because the interest is fixed but her expenses keep on increasing.

The risk to the investors in the cases described above comes from the concentration of their portfolio in one category of investment. When equity markets go down Latika will find that

her entire investment portfolio has gone down in value. If the real estate markets crash, Jayant's investment value will decline, as will Harmeet's investments when the price of gold falls. Instead if they were holding some portion of the portfolio in different assets, a fall in one will be cushioned by a rise in another since not all asset values rise or fall together. This process of dividing the portfolio among different assets so that the overall portfolio's return is protected from the effect of a fall in one or few assets is called asset allocation. Each asset comes with its own focus feature, such as growth, income generation or liquidity, and together the assets in the portfolio will cater to the different needs of the investor.

The asset allocation that is suitable for a person will depend upon their specific situation. For example, a person close to retirement will have a higher allocation to safer investments such as debt and lower allocation to equity. On the other hand, an individual in the high income period whose goals are far away will prefer to earn higher returns with assets such as equity rather than lower risk assets with lower returns. The suitable asset allocation is a function of the investment period available to the investor and their ability to take risk.

Asset allocation leads to different asset categories being included in a portfolio. This brings diversification to the portfolio. Diversification means having a combination of investments in a portfolio in such a way that a fall in the value on one or few will be made up by other investments that are doing well. The benefit of diversification will be available to a portfolio only if the selection of investments is done with care so that they do not rise and fall together.

Asset allocation and diversification reduces the risk of loss in a portfolio and stabilizes the returns that the portfolio generates.

Portfolio Construction is discussed in greater detail in the Chapter 5 of the workbook of NISM-Series-X-B: Investment Adviser (Level 2) Certification Examination.

7.7.6 Review and Rebalancing

The investments made for the goals will require to be reviewed periodically. The review is necessary to answer the following questions:

- Are all the goals still relevant?
- Are the goals on target for achievement in the required time frame?
- Are the investments performing as expected?
- Do the investments need to be changed if it is no longer suitable for the goal?

A periodic review will help identify problem areas and enable early corrective action. For example, if an investment has not generated returns as expected, the goal may remain underfunded. The investor can take the call to save more for the goal or to divert funds from some other less important goal, if required. These decisions can be made at the right time only when a review throws up the problem.

Rebalancing the portfolio involves modifying the exposure to different asset classes in an investor's portfolio. Ideally, a portfolio should be rebalanced so that it is aligned to the risk and return requirements of the investor and reflects any change in their needs and situation, and not to benefit from short-term movements in asset prices. For example, Jayant has been saving for the education of his children for the last 8 years by investing in equity. The goal has to be met after 4 years now. Jayant would not want to leave the funds that have been accumulated in equity any more since there is a risk that the fluctuation in equity values will affect the amount that he has accumulated so far. Jayant would be ready to move the funds to less riskier investments at this stage.

Review of the portfolio of investments has to be done at least once a year as part of the financial planning process.

Sample Questions

1. Which of the following is a financial goal?
 - a. Rs.6 lakhs required for sister's wedding
 - b. A sizable sum needed to buy a new car in two years time
 - c. Rs. 10 lakhs needed for purchasing a flat
 - d. **Rs.5 lakhs needed after two years to pay child's tuition fees**

2. Mr. Khanna requires Rs.10 lakhs in six months time to pay his son's admission fees. An appropriate investment to set aside money for his goal would be
 - a. Equity shares of high-growth companies
 - b. Real estate
 - c. **Short term debt fund**
 - d. Long term corporate bond

3. Jaya needs Rs.5 lakhs urgently for an emergency medical procedure. Which investment is she most likely to tap?
 - a. Shares of Hindalco Ltd
 - b. **Bank deposit**
 - c. Gold jewellery
 - d. 5-year bonds of a finance company

4. A conservative investor wants to accumulate Rs.20 lakhs in 3 years time. What would be an appropriate investment option for him?
 - a. Shares of selected growth companies
 - b. **Bank deposits and good quality bonds**
 - c. Property
 - d. Gold funds

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CHAPTER 8: ASSET ALLOCATION AND INVESTMENT STRATEGIES

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Different kinds of asset classes
- Constructing a financial portfolio
- Practical asset allocation and rebalancing strategies
- Monitoring and Rebalancing of portfolio

8.1. Asset Classes

8.1.1 Asset Class

Every investment option can be described in terms of its risk and return characteristics. For example, the returns on the equity shares of a company would depend upon the profits the company makes and the business risks that the company faces. This translates into the possibility of a higher long term return if the company's performance is good. But in the short-term the holder of equity shares is likely to see a good amount of volatility in returns, as market participants evaluate the impact of different factors on the expected performance of the company and incorporate their view in to the price of the share. The returns from bonds of a company would depend on the ability to generate enough cash to pay interest, even if the company would make losses or a minimal profit. This translates into steady periodic return, with limited possibility for capital appreciation. A group of investments that exhibit similar risk and return characteristics, and respond in a similar fashion to economic and market events are grouped together as an asset class.

Example: Debt vs. Equity

A company that makes garments for export finds that a large order has been cancelled and its profits may decline. Let us discuss what effect this event will have on the lenders and owners of the company.

The return to owners of a company depends upon the profitability of the company which is expected to decline with the cancellation of the export order. Their returns will therefore, come down. But the lenders will earn the fixed interest irrespective of the decline in profits.

Investment options with conceptually similar risk-return features can be clubbed together into asset classes.

Owners of the company invest in equity; their returns immediately respond to profitability of the company. Lenders to the company invest in debt; their returns are not immediately affected, but any permanent drop in profits will impact them in the future. Therefore, equity is one asset class; debt is another.

8.1.2 Broad Asset Classes

Based on the return and risk attributes, financial assets or investment options can be broadly classified into the following asset classes:

- Equity
- Debt
- Cash

Equity as an asset class represents a growth-oriented asset. The major source of income to the investor is growth in value of the investment over time. Debt as an asset class represents an income-oriented asset. The major source of return from a debt instrument is regular income. Cash and its equivalents are for parking funds for a short period of time and earning a nominal return.

However, as investment options have extended beyond capital market products, these basic categories have also expanded to include commodities, real estate and currency.

The risk and return features of each asset class are distinctive. Therefore, the performance for each asset class may vary from time to time depending upon the prevalent economic factors. For example, commodities as an asset class perform well during inflationary times. Equity on the other hand, is impacted by inflation and tends to correct down.

Following is the list of generally used asset classes and their risk-return attributes:

Cash	<ul style="list-style-type: none">• Generally held for meeting day to day and emergency requirements.• Cash holds negligible value in terms of returns and hence, there is minimal risk.
Bonds	<ul style="list-style-type: none">• Bonds provide fixed return in the form of coupon/interest income.• Bonds have the scope for capital appreciation when interest rates fall, but may be subject to interest rate risk when interest rates rise.• Corporate bonds are subject to credit risk of the issuer.

	<ul style="list-style-type: none"> • Government securities are considered to be risk-free as it is believed that a Government will not default on its obligations towards its own citizens. • Debt securities are subject to inflation risk, interest rate risk, credit risk and re-investment risk, depending upon the type of bonds • 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	<ul style="list-style-type: none"> • A stock represents ownership in a company. • Empirical study suggests that this asset class provides higher returns if invested for long run. • Volatility is higher in this asset class than cash and bonds as an asset class. • Equity investments are subject to market risks and business risks
Real estate	<ul style="list-style-type: none"> • Real estate Involves investment in land or building (commercial as well as residential), or Real Estate Investment Trust (REIT). • Real estate as an asset class presents a number of management issues including tenancy management, property maintenance, and legal clearances. • It suffers from liquidity risk and are impacted by economic cycles
Precious metals such as gold	<ul style="list-style-type: none"> • Physical gold is preferred by Indian families as a secure and stable investment and is 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. • Gold and commodities are susceptible to changes in demand and supply
Other alternative assets	<ul style="list-style-type: none"> • Investment in art/collectibles is being made for reasons which are personal and emotional, generally deriving pleasure • Art/collectibles have a very low correlation with other asset classes and hence, have diversification benefits. • Fine art and other collectibles have a very subjective value. Hence, there may be no exact measure for determination of the same.

	<ul style="list-style-type: none">• Art/collectibles have a very low correlation with other asset classes and hence, have diversification benefits.• This asset class comes with very low level of liquidity and the risks associated with lack of regulation and standardization.
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The existence of asset classes with different risk and return features provide investors the choice of selecting asset classes that meet their requirement for returns and risk tolerance. Investors seeking higher return and willing to take the higher risk and types of risk associated with the asset class will look at equity or commodities; while investors seeking lower income and lower risk will consider debt investments.

The investment horizon suitable to an asset class also varies. Investors who expect to hold the investment for very short periods consider cash and equivalents. Bonds are suitable for intermediate holding period while investors need to have a long investment horizon for holding equity and other asset classes with volatile returns.

Asset classes can further be sub-categorized based on specific asset class features. For example, based on the existence of credit risk bonds can be categorized as those without credit risk (Government securities) and those that have credit risk (Corporate bonds). Or on the basis of residual tenor, bonds can be categorized as short-term (with less than one year to maturity) or long-term bonds (with more than one year to maturity). Similarly, equity shares can be categorized based on the industry they belong to, market capitalization (large, mid and small) and others.

8.1.3 Asset Allocation

A portfolio is made up of several investment options across asset classes to meet the diverse requirements from the portfolio for growth, income and liquidity. The construction of the portfolio involves allocating money to various asset classes. This process is called asset allocation.

In simple terms, asset allocation is the process of deciding how to distribute the investor's savings among the various asset classes with different characteristics for investment purposes. Asset allocation also provides for a direction to the future income and cash flows of the investor in terms of where he should invest to achieve his financial goals.

It is very difficult to determine which particular asset class would be the best performing one in a given year. Investing in only one class of asset in the expectation that it would out-perform all the other investment categories could prove to be risky. A fundamental justification for asset allocation is the notion that since different asset class offers returns that are not perfectly correlated, or in other words see returns moving in the same direction and magnitude, it is possible to mitigate risk by investing across asset classes. This is called diversification. If a portfolio is diversified, then irrespective of which asset class is out-

performing the investor will have some exposure to it. The better performing asset classes in the portfolio will help protect the returns of the portfolio from the poor returns in other assets. 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.

8.2. Portfolio Construction

8.2.1 Asset Allocation Linked to Financial Goals

When a need can be expressed in terms of the sum of money required and the time frame in which it would be needed, we call it a financial goal.

When a financial goal is set, its monetary value and the future date on which the money will be required is first defined. This goal definition indicates the amount of investment value that needs to be generated on a future date. It is normal to include assumptions for expected inflation rate while defining a future goal. Then the return that the portfolio should generate to achieve the targeted sum can be ascertained, after understanding how much the investor can save for the goal.

Example: Arjun is 35 years old and intends to start saving for retirement. To begin with, he needs to ascertain the amount or corpus required by estimating the amount he would require to meet his post-retirement expenses. Hence, he may estimate the household expenses, travel expenses and medical expenses, along with annual inflation rate over the next 25 years. By taking all these into account, he would be able to ascertain the future value of the total amount he would require post-retirement. Thus, he would be able to ascertain the value of his retirement corpus, as his financial goal.

Asset allocation linked to financial goals is 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.

Consider the example above. Arjun's portfolio would need to be long-term oriented, with scope for capital appreciation over an investment horizon of 25 years. Hence, his asset allocation would be over-weight equity as an asset class.

In case of other long-term goals, such as saving for a young child's education or for buying a house, equity will be suitable as the predominant asset class. The invested amount requires growth and capital appreciation and the investment horizon is long enough to mitigate short term volatility in equity.

In case, an investor is saving for a short term goal, such as saving for buying a car, for a holiday and for an older child's higher education, the portfolio would need to have debt as a predominant asset class in order to enable a small but stable growth in the invested amount.

Further, a retired investor looking for a certain amount of regular monthly cash flow in the form of a pension, will invest his retirement corpus in debt that will pay a periodic income with a degree of certainty. Moreover, at the stage in life when capital accumulation is over the investor cannot afford any risk of capital erosion that comes with volatile assets such as equity. Again, an individual who has kept some funds aside as emergency funds would consider cash and money market securities, as they are highly liquid and capital is preserved.

While implementing an asset allocation linked to the investor's financial goals, an advisor may consider 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.
- 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.

8.2.2 Asset Allocation Linked to Life Cycle Stages

Asset allocation may also be linked to the stage of an investor's life. The income levels, ability to save and take risks, investment horizon and requirements from their investment, are seen to vary with the stage of life at which the investor is. Asset allocation can be tailored to the life cycle stages so that it meets the investment expectations of the investor.

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.

a. Childhood Stage

Childhood 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. The primary need for parents would be to plan for the education of the children. The ideal way to give children better opportunities is to start investing money early 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.

b. 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 willing 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 be aggressive and comprise primarily of equity and very small portion into fixed income asset class.

c. Young Couple with Kids

In this stage, the client is married, has children and is in his mid-30s. He has long-term focus and capital growth is of paramount importance. Investors 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.

d. 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 such a 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.

e. 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.

It is very important for an advisor to identify the client's stage in life cycle and accordingly advise on the asset allocation based on it after considering each client's individual risk profile and needs. For example, a young investor with a stable and secure income will have a higher appetite for long-term equity investments as compared to a young investor with a lower degree of income security.

8.2.3 Portfolio Objectives and Constraints

The allocation of investible surplus to various asset classes is not merely based on the risk-return attributes of assets that lead to the risk and return characteristics of the portfolio. Construction of a portfolio has to blend in the objectives and constraints of the investor. It also depends upon the financial goals and objectives of the investor, the time horizon for which the investment is being made and the risk-taking capabilities of the investor.

The investor's needs dictate the objectives for portfolio construction. Consider the following features of asset classes:

Asset Class	Primary Objective
Short term bills	Income
Long term bonds	Income
Gold	Growth
Commodities	Growth
Large cap equity	Growth
Mid cap equity	Growth

Real Estate	Growth
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Asset classes like equity and real estate provide long term growth but come with short term volatility. Using such asset classes to meet short-term requirements will imply that the investor may have to bear capital loss if they liquidate the asset in a period when the prices have fallen. Asset classes like deposits, bonds and other fixed income securities provide income. The allocation between growth and income depends on the investor needs, and therefore, portfolio return is driven by the financial goals of the investor.

The desired combination of assets cannot be chosen based on objective, or return requirements alone. A financial goal that needs a return of 15% to meet the defined goal may be unsuitable to an investor who is unwilling to allocate resources to risky assets. Risk tolerance of an investor imposes constraints on portfolio construction.

Risk tolerance refers to the attitude towards risk. For example, an investor who is unwilling to take on short-term risks for longer term gain in equity may choose a higher allocation to debt. The investor may be willing to enhance the amount invested to reach the goal value, rather than accept higher risk to seek higher return.

Risk tolerance of an investor is a function of both willingness and ability to take risk. Ability to take risk can be objectively measured by financial parameters such as total wealth, income, saving ratio, net worth and time horizon. Willingness to assume risk is subjective and is measured using psychometric testing of attitudes towards risk. The use of a questionnaire to assess risk tolerance is the most commonly used approach.

8.3. Practical Asset Allocation and Rebalancing Strategies

8.3.1 Strategic Asset Allocation

Asset allocation that builds purely on the needs and preferences of the individual over the long term is called strategic asset allocation (SAA). SAA is a long-term strategy where the choice of asset classes that will be part of the investment portfolio is usually based on the short-term and long-term financial goals set in place by the investor. The goal is to generate the targeted return while keeping the risk in the portfolio at levels acceptable to the investor. The strategic asset allocation process is completely tuned to the investor needs and constraints.

The proportional allocation to each asset class is driven by investor objectives and constraints and is rebalanced to the asset allocation that was determined to meet the desired goal.

Strategic asset allocation may involve periodic rebalancing to restore the original proportions to various asset classes, or if the needs and goals of the investor has changed.

Example: Strategic Asset Allocation

A portfolio is strategically allocated 60% to debt and 40% to equity. Equity market has significantly risen in that year and when the portfolio was reviewed at the end of the year, it was found that the debt now represents 50% of the total portfolio value and equity represents 50% of the portfolio value. How will the portfolio be rebalanced?

The portfolio will be rebalanced by selling equity to bring down the equity allocation to 40% and using the funds to buy debt and increasing the debt allocation to 60%.

Strategic asset allocation may also entail a revision of the proportions, based on changes to the investor's situation. For example, an investor may decide to have 80% in equity and 20% in debt when the plan to save for retirement was begun in the early earning years. As the investor nears retirement the desire would be to change the ratio in favour of debt over equity.

Strategic asset allocation has its disadvantages. There is no change in the allocations to assets based on market movements and therefore there is no active call about which asset class is likely to out-perform or under-perform. Strategic portfolios can under-perform during bull runs in certain assets, when it would systematically take out of a winning asset class and invest the proceeds into a losing asset class to maintain a fixed ratio between the two asset classes.

8.3.2 Tactical Asset Allocation

If strategic asset allocation is need-based, tactical allocation is view-based. It brings in the element of market timing to the asset allocation decision. We have seen that different asset classes perform well at different times. If the portfolio is rebalanced based on a view about the relative performance of asset classes, it may actively manage the risk and return, with the objective of outperforming the asset class indices. This strategy is called tactical asset allocation (TAA). Tactical asset allocation involves active portfolio management with the aim of adding value through short term adjustments in asset allocation based on the view for relative asset class performance.

If the expected returns for each asset classes are equal to their long-run expected returns, then the portfolio's strategic asset allocation will be stable. However, from time to time returns will deviate from the long-run returns and create opportunities for value to be added by tactical shifts in asset allocation. TAA involves tactically increasing a portfolio's exposure to those assets that are relatively attractive and reducing a portfolio's exposure to overvalued assets.

TAA is a favoured strategy among advisors and managers as it enables them to outperform underlying benchmarks that are closely aligned to strategic allocations.

TAA involves rebalancing the portfolio based on the market view and may be done at three levels. The investors may themselves take a call on the market performance and make changes in the portfolio. The role of the advisor would be limited to executing the changes. In a more involved advisory mode, the advisors may express their views on the market and recommend over-weighting asset classes which they expect to perform well; under-weighting where they expect under performance; and neutral-weighting where they expect no significant change in performance. At the third level, the product provider, such as a mutual fund may make the tactical shifts in the portfolio without recourse to the investor or advisor.

Example: Tactical Asset Allocation

Consider a portfolio that has a strategic allocation of 60% in debt and 40% in equity. In response to expected continued good performance in equity markets the fund manager increases the allocation to equity to 70% and decreases the allocation in debt to 30%. What is the value add?

Assume equity markets gave a return of 18% and debt markets gave a return of 9%.

The returns from the tactically rebalanced portfolio would be:

$$30\% \times 9\% + 70\% \times 18\% = 15.3\%$$

The returns from the original portfolio would have been:

$$60\% \times 9\% + 40\% \times 18\% = 12.6\%$$

The difference of 2.7% is the value added from tactical asset allocation.

8.3.3 Dynamic Asset Allocation

Tactical rebalancing made by a manager can add or reduce value to the portfolio, depending on whether the call on the asset class performance was right or wrong. There is no formula to market timing, and asset class performance can vary dynamically and not always be amenable to precise tactical calls. When markets crash unexpectedly, tactical asset allocation comes under stress. In such situations, mechanical trigger-based on which changes to asset allocation can be made, become popular.

Dynamic asset allocation (DAA) works on the basis of a pre-specified model which does a mechanical rebalancing between asset classes.

The allocation to each asset class is not a fixed percentage, but varies depending on the performance of chosen asset class variables. Several mathematical models have been

proposed and used in DAA. The main objective of these models is creating a mechanical system that triggers asset allocation and rebalancing. Rebalancing may be done periodically on the happening of an event such as the proportion of an asset class in the portfolio or level of a market going beyond specified limits.

Example: Dynamic Asset Allocation

There are mutual fund products that feature changes to asset allocation triggered by a certain target return being achieved by the portfolio. Some others offer a trigger-option to switch into debt at a chosen level of the market index.

8.3.4 Model Portfolios

Advisors work with model portfolios, or portfolios that capture a standard set of risk, return, liquidity and financial objectives. These model portfolios hold an indicative allocation that may be suitable for investors who fit the indicative risk profile and investment objective. Apart from understanding financial goals and risk preferences, advisors also look for qualitative indicators of investor preferences for risk and return.

A common sense approach to understanding the differences in the risk and return preferences of individuals is to look at the life cycle of the investor. An individual's pattern of earning, spending, saving and acceptance of risk have been seen to follow the life cycle stages.

- Younger investors seek growth from investments and can take a long-term view. They may be willing to take risks.
- Older investors may be unwilling to take risks, given their limited investing horizon and dependence on investment income.

Another approach to understanding risk preferences is to consider where the individual stands in terms of a defined need hierarchy. Individuals may take care of their basic survival needs first, provide for contingencies next, and seek investment and speculative return after the basic needs are taken care of. The return requirements and the ability to bear risks will vary depending on the stage the investor is in.

Investors are classified broadly into categories based on the risk and return profiles. An investor with a short to medium term investing horizon, who is unwilling to take risks on capital and likes regular income may be said to fit a conservative profile. An investor with a longer term investment horizon, but with the need for both income and growth and a moderate level of risk tolerance may be in a moderate profile. A risk-seeking investor with longer term investing horizon, focus on growth and tolerance for short term losses may fit an aggressive profile.

Indicative portfolios for these profiles may be constructed as follows:

	Conservative	Moderate	Aggressive
Short term bills	20%	10%	5%
Long term debt	60%	40%	10%
Gold	10%	10%	5%
Commodities	0%	0%	10%
Large cap equity	10%	30%	30%
Mid cap equity	0%	10%	20%
Real Estate	0%	0%	20%
Total	100%	100%	100%

Financial advisors may use a range of tools to construct a portfolio, from simple intuitive models to sophisticated mathematical models.

A conservative investor likes income and therefore, holds more of income-oriented asset classes; an aggressive investor prefers growth and therefore, holds more of growth-oriented asset classes.

The three portfolios as above will have different levels of risk and return. They will also have to be managed for risk, in terms of an appropriate investing horizon. An investor, who likes income and needs it in the short term, should not choose an aggressive asset allocation. This would expose the capital invested to short term risk and may not generate the income as needed. An investor wary of any risk to capital may have to choose a conservative allocation and settle for a lower level of return as well.

8.4. Portfolio Monitoring and Re-balancing

Monitoring portfolio is the ongoing process of reviewing and valuation of the portfolio composition consisting of various asset classes. 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 and to ensure that the allocation is aligned to the investor's needs

Investors can rebalance their portfolios based either on the calendar or on the basis of performance of the investments. Some 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 the investor has identified in advance. The advantage of this method is that the proportion of the investments in the portfolio will indicate when to rebalance.

In either case, rebalancing tends to work best when done on a periodic but relatively infrequent basis.

There are various ways in which re-balancing may be achieved:

- a. Investor can sell off investments from over-weighted asset categories and use the proceeds to purchase investments of under-weighted asset categories.
- b. Investor can purchase new investments of under-weighted asset categories.
- c. If investor is making continuous contributions to the portfolio, he can alter the contributions so that more investments go to under-weighted asset categories until the portfolio is back into balance.

Before the investor rebalances the portfolio, one should consider whether the action will trigger transaction fees or tax consequences. The role of a financial planner is to identify ways to minimize these potential costs.

Sample Questions

- 1. Which of these asset classes is most likely to meet the objective of generating regular income?**
 - a. Equity
 - b. Cash and equivalents
 - c. Debt**

- 2. Which of these asset classes is primarily used to meet regular needs for liquid cash?**
 - a. Debt
 - b. Cash and equivalents**
 - c. Equity

- 3. The long term goal of a young investor is to build a corpus that is adequate to serve his income needs after retirement. The portfolio when constructed, should have a higher allocation to**
 - a. Debt
 - b. Cash equivalents
 - c. Equity**

- 4. An investor who seeks a high level of return and is willing to bear the risks of such investments is likely to be recommended**
 - a. Aggressive portfolio**
 - b. Conservative portfolio
 - c. Moderate portfolio

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CHAPTER 9: INSURANCE PLANNING

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Need for insurance
- Requirements of an insurable risk
- Role of insurance in personal finance
- Steps in insurance planning
- Life and Non-life insurance products

9.1. Need for Insurance

Insurance is a basic form of risk management which provides protection against the loss of the economic benefits that can be enjoyed from assets. These assets may be physical assets, such as buildings and machinery, or they may be human assets. Assets are subject to the risk that their ability to generate benefits could be lost or reduced due to unforeseen or unexpected events. There is a financial or economic consequence to the risk, and insurance indemnifies or protects against these consequences. For example, the ability of human beings to generate income from occupation may be affected by illness, disabilities and death; factory buildings & machinery may break down or may be destroyed leading to loss of output. The events themselves cannot be avoided. The consequences of the loss can either be borne by the person to whom the benefits accrue (risk retention) or they can be transferred to another (risk transfer).

Insurance enables risk transfer from the beneficiary (insured) to the insurance company (insurer), which undertakes to indemnify the insured for the financial loss suffered. In return, the insured pays a periodic fee, called premium, to the insurer to receive this protection. To be insurable, the event being insured against, such as death, accident or fire must result in a financial loss which can be quantified and insured against. The premium payable will depend upon this expected loss and the probability of the event occurring during the period of contract.

For example, the premium payable on a health policy for an individual whose parents have a history of ill-health that are considered genetic, such as ailment of heart, cancer or diabetes, is much higher than that for an individual coming from healthy stock. This is because the chance that the insurance company will be required to pay medical expenses in the first case is much higher than what it is in the second case.

In the absence of insurance, the loss arising out of the event has to be borne by the person who would have otherwise enjoyed the benefit from the asset.

9.2. Requirements of an Insurable risk

There are certain requirements for a risk to be insurable.

a. Large number of exposure units

Large group of similar, though not necessarily identical, units are subject to the same peril or group of perils. An 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. The entire pool pays premium but the liability for the insurance company will be only to a few in a year. In the absence of a large number of people being exposed to the same risk, the premium payable would be much higher and it would be unviable for the insurer and the insured.

b. Accidental and unintentional

Loss must be accidental, unintentional and uncertain. The only exception is life insurance where the event being insured against, namely death, is certain. However, the time of death is uncertain, which makes it insurable. Loss should be fortuitous and outside the insured's control.

c. Determinable and measurable

Loss should be definite as to cause and amount.

d. No prospect of gain or profit

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.

e. Chance of loss must be calculable

Insurer must be able to calculate with some accuracy, average frequency and average severity of future losses.

f. Premium must be economically feasible

Premiums should not only be affordable but also far less than the value of the policy. Else the option to retain risk will be more feasible than transfer risk through insurance.

9.3. Role of Insurance in Personal Finance

Insurance removes the risks to the income of a household from situations such as loss of income, reduction in income or an unplanned and unexpected charge on income which will upset the personal financial situation of the household. Consider the following situations:

- Siddesh dies young leaving his dependent wife and kids without financial support.

- Arushi is a CAD professional who meets with an accident that makes it difficult for her to sit for long hours at the computer.
- Sindhu's car met with an accident and requires a large sum for repairs.
- Mohit suffers from arthritis and has to spend a large sum each month on physiotherapy.
- Jayant's daughter is getting married in a few days. The house is full of gifts and valuables. There is a burglary in the house and the valuables are stolen.

In all the situations described above, there is either a loss or reduction of income or a large expense that has to be met out of available income. Income is at the base of all financial plans and any event that will affect income of the individual will affect the achievement of the goals that the financial plan seeks to achieve.

Insurance can be used to protect the income so that the financial goals are not at risk. If Siddesh had a life insurance policy for a sum adequate to meet his family's financial needs and goals, then he would have protected them from the financial effects of his death. Similarly, a personal accident insurance would have provided the income that Arushi required till she recovered from her accident and a motor insurance policy would have covered the cost of repairs to Sindhu's car and her income would not have been affected. There are insurance policies available to provide cover against most situations that can cause disruption to the income and therefore the financial situation of the individual.

Insurance is also seen as a way to save and invest. Some insurance policies include a saving component along with the risk protection. The premium collected will be higher, with one portion assigned for risk protection (Insurance component) and the other for the saving component (Investment component). The type of investment envisaged will determine the risk and return from the investment.

9.4. Steps in Insurance Planning

An essential part of financial planning is insurance planning. Just like financial planning, insurance planning is also specific to the individual and their situation. The steps in insurance planning include identifying the protection needs and quantifying them, buying the type of insurance that suits the requirement and setting in place a review of insurance needs periodically.

a. Identify insurance need

Insurance is primarily a tool for protection from financial loss. Identifying insurance needs therefore requires identifying all those situations that can result in a loss of income or an unexpected charge on income. Insurance needs can be broadly categorized as:

- Income replacement needs in the event of risk to the earning ability of an asset, which includes the life of an individual as an asset generating income. Life insurance,

insurance for the maintenance and replacement of plant and machinery, annuities, are all examples of insurance products that meet this need.

- Income protection needs which protect the available income from an unexpected charge. Health insurance and motor insurance are examples of insurance products that will take over such expenses if they occur, and thereby protect the income from a large and unplanned outflow.
- Asset protection needs which include the need to protect assets created from theft or destruction. Household insurance is one such product.

The type of insurance required depends upon the age and stage in the life of the individual. Insurance implies a cost and buying insurance that is not required is a wasteful use of income.

A young individual without any dependents may probably need a personal accident insurance policy that will give him an income in the event of him being incapacitated in an accident, more than a life insurance policy. The life insurance policy will replace his income in the event of his death, but since he has no dependents it may not be as relevant at this stage in his life. For an individual with dependents, the primary need is income replacement to support his family in the event of his death and therefore a life insurance policy that does this will be more relevant. The personal accident insurance is usually available as an addition to the life insurance policy.

b. Estimate the amount of insurance required

The purpose of insurance is to compensate the financial loss suffered from a specified event. It is not to profit or gain from it. The amount of insurance required must be calculated giving due consideration to factors such as the future value of the costs being sought to be replaced, the period for which protection is required and, the ability to bear the cost of insurance. Under-insurance will imply that the beneficiary who is likely to suffer the loss is retaining a portion of the risk with themselves. Over-insurance would impose unnecessary costs in the form of higher premiums.

c. Evaluate the type of policies available for their costs and features

Insurance products can be differentiated on the basis of their features such as premium payment, nature of cover provided, structuring of benefits, among others. A product should be chosen based on the features that are applicable to the individual, and not merely on the basis of multiplicity of features available in it. The cost associated with the insurance is an important parameter while evaluating insurance products. Insurance is a long-term commitment, and exiting midway is difficult and has financial implications. It is therefore essential to consider the suitability of the product, features and cost before signing on.

d. Evaluate insurance needs periodically since needs keep changing

Every change in the lifecycle of the individual will warrant a review of the adequacy and coverage provided by insurance. These include change in status from single to married, having children and approaching retirement. Similarly, changes in financial situation and

commitment such as higher or lower income levels, purchase of home, all trigger an insurance review.

9.5. Insurance Products

Insurance products available to an individual to manage the risk in their personal financial situation can be categorized as life insurance and non-life insurance. Life insurance products provide cover for the life of the insured. Non-life insurance or general insurance includes all the other types of insurance products such as health insurance, motor insurance, household insurance, travel insurance and the like. Insurance Development and Regulatory Authority of (IRDAI) is the regulator of the insurance business in India. All products and their specifications have to adhere to the guidelines issued by IRDAI.

9.6. Life Insurance Products

9.6.1 Elements of Life Insurance Products

Life insurance products can be defined by the benefits that they provide to the insured. The insured would get the following benefits from life insurance products:

- **Death cover:** Where the benefit is paid only on the death of the insured within a specified period. If death does not occur, then no benefit will be paid.
- **Survival benefits:** Where the benefit is paid when the insured survives a specified period.

Most insurance policies are a combination of the above two features. Policies with survival benefits combine saving and protection benefits while policies with only death benefits are pure protection products.

An insurance contract has the following several elements, the definitions of the key ones are as follows:

- **Insured:** This refers to the person whose life is being insured and can be individuals, minors or joint lives. If the life being insured is different from the person buying the insurance policy, such a buyer is called the proposer or policy holder and such person should have an insurable interest in the individual being covered.
- **Term of the contract:** This is the period during which the insurance cover will be available to the insured. In some cases, the insurance company may specify an upper age limit at which the term of the policy would end.
- **Sum assured:** This is the amount being insured. The Insurance Regulatory and Development Authority Regulations require all life insurance products with terms of more than 10 years to provide a minimum sum assured of 10 times the annual premium for individuals below 45 years of age and seven times the annual premium if age is above 45 years. If the term is less than 10 years the minimum sum assured shall be five times the

annual premium for all individuals. The insurance contract may also specify situations, if any, when the sum assured will change. For example, if a term insurance is taken to cover outstanding mortgage payments, the sum assured will decrease as the outstanding loan decreases.

- **Payment of sum assured:** The payment of sum assured will be on the occurrence of a specific event such as death of the life insured or expiry of the term of the policy. The mode of payment of the sum assured, whether in lump sum or as instalments will be specified in the contract.
- **Premium payable:** This will depend upon the sum assured and the term of the policy. The mode of payment of premium, such as monthly, quarterly, half-yearly or annually will be included in contract. Some policies involve the payment of a single premium at the start. Non-payment of premium due on a policy within the grace period allowed will make the policy lapse. The policy can be revived during the reinstatement period by paying the pending premiums and penalty.
- **Bonus:** Bonus is an amount that is added to the sum assured, announced periodically as a percentage of the sum assured. It is paid out along with the maturity value or on the occurrence of the insured event.
- **Guaranteed bonus:** Guaranteed bonus is paid for the first few years of the policy period, say, five years and is paid as a percentage of the sum assured. It forms part of the benefits of the policy and is received at the end of the term.
- **Reversionary bonus:** This is based on the performance of the insurance company and is declared for policy holders at the discretion of the insurer. Reversionary bonus is declared after the completion of the guaranteed bonus period and is applicable to participating policies.
- If the premium due on a policy is not paid, then the policy lapses and no claim is payable on a lapsed policy. However, a traditional policy that has been in force for at least three years (2 years if the term of the policy is less than 10 years), on which full premiums have been paid, may acquire a cash value or surrender value. This value is returned to the policy holder. The minimum surrender value will be 30% of all premiums paid and goes up to 90% in the last two years. For a single premium policy the guaranteed surrender value will range from 70% of total premium paid if surrendered within the first three years to 90% in the last two years. For Ulips the maximum surrender charges is Rs.6000 in the first year and becomes nil from the fifth year onwards. Along with this the insurers may also pay an amount based on the current value of the assets held against the policy. In case of unit-linked plans, the policy has a lock-in of five years and the surrender value is paid only at the end of the lock-in period.
- The other option when there is a lapse in premium is to make the policy paid-up. This means the sum assured is proportionately reduced to the same proportion that the number of premiums paid bears to total premiums due.

- For example, Surinder had taken a 25-year life insurance policy with a sum assured of Rs. 10,00,000 with the premium being paid in a half-yearly mode. After paying the premium for five years, Surinder is unable to continue paying the premium payment. What happens to the policy?
- In the above example the sum assured would be Rs. 10,00,000 if premium is paid for 25 years. On half yearly basis, that would be 50 premium payments. Since 10 premiums have been paid over a period of 5 years, the sum assured will be readjusted to:

$$= 10,00,000 \times 10/50$$

$$= 2,00,000$$

- Nomination is the right of a policy holder to identify the person(s) entitled to receive the policy money, in the event of the policy becoming a claim by death. The nomination can be made at the time of taking the policy or subsequently at any time, and can also be changed any number of times.

9.6.2 Types of Life Insurance Products

Traditional life insurance policies can be categorized based on the benefit patterns. The payment of benefits from the policy at death or on maturity is used to differentiate the policies.

I. Term Insurance

Term insurance is a pure risk cover product. It pays a benefit only if the policy holder dies during the period for which one is insured. Term life insurance provides for life insurance coverage for a specified term of years for a specified premium. 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 policy does not accumulate cash value. It offers the cheapest form of life insurance.

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. 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 survives the term, there is no maturity benefit.

Several variants of this are available in the market such as a term policy with return of premium. In this variant, normally the premium is higher than a regular term policy and if the insured survives the term, the premiums paid is returned.

II. Endowment

Endowment is a level premium plan with a savings feature. At maturity a lump sum is paid out, equal to the sum assured plus any accrued bonus. If death occurs during the term of the policy then the sum assured and any bonus accrued are paid out. There are a number of products in the market that offer flexibility in choosing the term of the policy from 5 to 30 years.

There are products in the market that offer non-participating (no profits) versions of the endowment policy, the premiums for which are cheaper. Endowment policies are quite popular for their survival benefits. The benefits are enhanced by guaranteed and reversionary bonus that is declared on policies. Some policies pay compounded reversionary bonuses, where the bonus amount is added to the sum assured every time it is declared, and subsequent bonus is computed on the enhanced sum assured.

Money Back Insurance Policies are a type of endowment policies that covers life and also assures 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. The rate of return on the policies is quite low.

III. Whole Life insurance

Whole Life insurance provides life insurance cover for the entire life of the insured person or up to a specified age. Premium paid is fixed through the entire period. There are variations to the whole life policy such as shorter premium payment periods and return of premium option. The primary advantages of whole life policies are guaranteed death benefits; guaranteed cash values, fixed and known annual premiums. 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. Whole Life insurance is mainly devised to create an estate for the heirs of the policy holders.

9.6.3 Variable Insurance Products (VIP)

Variable Insurance Products (earlier known Universal Life Plans) are products that combine insurance and investment but are not unit-linked. The premium paid will have a component for risk cover and another portion which is the investment component (after accounting for expenses) which is credited to a policy account. Each policy will have a policy account and it will hold the accruals due to the policy. All VIPs will define a minimum floor rate of return for the policy. Additional return, over and above the floor rate, will depend upon the type of

policy. If it is a linked policy then the additional return will be linked to the performance of an index or benchmark. Non-linked VIPs will have additional returns in the form of bonus in case of participating policies or additional interest in case of non-participating policies. The VIP shall provide a death benefit equivalent to the sum assured plus the balance in the policy account or the higher of the sum assured and balance in the policy account. The minimum maturity benefit shall be equivalent to the balance in the policy account at the guaranteed rate of return and additional returns as specified. The minimum policy term is five years and policies have a lock-in period of three years. The policy can be surrendered and the balance in the policy account of a surrendered policy is paid out after the lock-in period.

9.6.4 Unit Linked Insurance Plans (ULIP)

ULIP is an insurance product that combines protection and investment by enabling the policy holder to earn market-linked returns by investing a portion of the premium money in various proportions in the equity and debt markets. The returns on ULIPs are linked to the performances of the markets. The premium is bifurcated into the premium used for providing the life cover and the rest is invested in the fund or mixture of funds chosen by the policy holder. Since the fund chosen has an underlying investment – either in equity or debt or a combination of the two – the fund value will reflect the performance of the underlying asset classes. Each fund has its own risk and return profile based on the asset class that the fund has invested in. The policyholder is also offered the option of choosing the fund mix based on his desired asset allocation. Different insurers have different names for these funds to reflect their return and risk characteristics. Investors are also given the option to switch between funds.

ULIPs may offer a single premium option where a lump sum premium is paid once. They may also feature limited premium payment period where the premium is paid only for a portion of the term of the policy. The sum assured will be a multiple of the annual premium. Depending upon the sum assured selected, a portion of the premium will be apportioned towards providing the risk cover and the remaining is invested in the fund of choice. The allocation rate refers to the portion of the premium that is invested. This rate tends to be low in the initial couple of years when the charges are high and subsequently rises. In a unit-linked plan investors also have the option to make additional premium payments in the form of 'top-ups' which again gets invested in the funds after the mandatory assignment to risk cover.

The ULIP provides both death and maturity benefits to the holder. At the time of maturity of the plan, the policy holder will receive the value of the fund as on that date. The value of the fund will be the number of units standing to the credit of the policy holder multiplied by the net asset value of the fund as on the day. In the event the policy holder dies during the term of the policy, the beneficiary will receive either the sum assured, the higher of the fund value and the sum assured or the sum assured and the value of the fund, depending on the terms

of the policy. The policy may have guaranteed bonus, especially in the initial years. The additions to the benefits may also be in the form of loyalty bonus at the end of the term.

Insurance companies offer products to meet specific life cycle needs of the insured. This includes products for:

- Protection Needs
- Saving Needs
- Children's Education
- Investment Planning
- Retirement Planning

These products may be broadly structured as either traditional products or unit-linked products. The specific features may be tailored to meet the particular need of the policy holder. For example, a children's plan may either be a traditional money back policy or a unit-linked plan that has periodic pay-outs from the fund value. The pay-out received will meet the need for funds at various stages in the child's life.

Retirement Plans or Pension Plans are normally plans to which contributions are made till retirement or for a specified period. All pension products are required to have a defined assured benefit in the form of guaranteed return on the premiums paid or guaranteed death/maturity/surrender benefit. One-third of the corpus accumulated can be commuted i.e. withdrawn as a lump-sum. The remaining can be used to buy annuity that will make monthly payments to the holder. The following are some of the annuity options available in the market.

- Annuity for Life
- Joint Life last survivor annuity
- Annuity guarantee for certain periods
- Life annuity with return of purchase price
- Increasing annuity

Loan Cover Policy covers the individual's outstanding home loan amount in case of death of the policy holder. 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.

Riders

Riders are add-ons to the basic insurance policy to supplement the insurance cover provided. One can also combine a set of riders and append it to the main policy.

Some of the popular riders that are added to a basic insurance policy are:

- Double sum assured rider, which provides twice the amount insured in case the death happens due to the specific reason such as accidental death while the policy is in force.
- Critical illness rider, which provides a sum that could be double the sum assured on diagnosis of a life-threatening illness.
- Accident or disability rider, which enables the insured to receive a periodic payout if temporarily disabled, for a limited period of time.
- Waiver of premium rider, which is triggered if there is a disability or loss of income that makes it difficult to pay the premium.
- Guaranteed insurability option rider, which enables enhancing the insurance cover without further medical examination

The premiums will be higher, depending on the rider or a combination of them chosen. When combined, these riders provide the flexibility to customize a policy to one's needs.

IRDAI Regulations lay down limits on the benefit of riders that can be availed as follows:

- The premium paid for all health and critical illness riders in case of a term or group policy should not exceed 100% of the premium paid on the base policy.
- In case of all other riders it should not exceed 30% of the premium paid on the base policy.
- The benefit from each rider cannot exceed the basic sum assured.

9.7. Non- Life Insurance

Non-Life insurance provides risk cover from loss or destruction of assets created and to provide for unexpected, large expenses that can be a drain on the available income of the individual.

9.7.1 Elements of Non-Life Insurance Products

- Sum insured is the amount specified in the policy which represents the insurer's maximum liability for claims made during the policy period. The minimum and maximum sum may be specified by the insurer.
- Term of the insurance is typically 1 year. In some cases, such as health policies, the term may be two years.
- Premium payable is a function of the sum insured and the assessed risk. The risk will be determined based on the cover being sought, such as age, gender and health history for medical cover; cubic capacity of the vehicle, place of registration and age of the vehicle for motor insurance. Premium is typically paid at the inception of the policy.
- Deductible is a term used to denote the portion of the claim that is met by the insured.

- No claim bonus is the benefit of lower premiums enjoyed in subsequent years for each year of no claims being made.

9.7.2 Types of Non-Life Insurance Products

a. Property Insurance

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. Wilful destruction of property, loss/ damage due to wear and tear and art and antiques are typically not covered by property insurance.

b. Health Insurance policy

Health insurance policies reimburse the medical expenses incurred for the policy holder and identified family members who are covered under the policy. This policy provides for reimbursement of hospitalization or domiciliary treatment expenses for illness or accidental injury up to the sum insured under the policy. The expenses that can be claimed, such as consultation fees, medicine and treatment costs, room costs, are specified in the policy and sub-limits may be fixed for each head. Claim is typically allowed only for “In-patient” (patients who are admitted in a hospital for treatment that requires at least overnight or 24 hours of 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), according to the terms of the policy. Pre-existing illnesses may be excluded from cover for a fixed period when insurance is being taken for the first time or if it is being renewed after a lapse.

Health policies provide cashless facility too where the bills are directly settled with the hospital and the insured is not required to pay upfront up to the sum approved for this facility. There is also the option to take a family floater policy that will cover multiple family members under the same policy up to the sum insured.

The premium payable on the policy is a function of the sum insured, age and medical history of the insured, among others. Premiums may be adjusted for continued health cover and record of no-claim. Portability of health policies has been introduced under which the benefits of no-claim, bonus and time-bound exclusions for existing conditions can be transferred, if the insured chooses to switch the insurance company. To benefit from portability, the previous policy should have been maintained without a break.

c. 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 be used in a public place without such insurance.

d. 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 defined in the policy. Following types of disablement are covered under this policy:

- Permanent total disablement
- Permanent Partial disablement
- Temporary total disablement

e. 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. It differs from life insurance in that there is no payment on death. Reimbursement is usually subject to a minimum survival period of 30 days. 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.

f. Travel Insurance

Travel insurance provides medical, financial and other assistance in case of an emergency during international travel. The cover will typically be provided for instances such as medical help required, delay in baggage clearance, accident and any additional cover required. The cover will be in the form of reimbursement up to the maximum amount mentioned in the policy. Travel insurance may be mandatory for travel to some countries.

g. 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.

9.8. Life Insurance Needs Analysis

The amount of life insurance cover required depends upon the economic value that can be attached to human life. This is called the human life value (HLV). This is the value that insurance needs to compensate for if there is a loss to the life, or disability which results in a reduction in the ability to generate income. HLV is the present value of the expected income over the working life of the individual that is available for the dependents. That is Human Life

Value and would be the amount of insurance required after considering the future value of assets already available that will contribute to this value. There are different ways in which the HLV can be calculated.

9.8.1 Income Replacement Method

Under the income replacement method, the human life value (HLV) is calculated as 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 income that they would have to forego 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.

Information Required

The information required to calculate HLV based on this method 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, personal costs, insurance premium which is deducted from annual income.
- The rate at which the income is expected to grow over the earning years
- The rate of return expected to be earned on the insurance proceeds or corpus

Example: Siddhartha earns Rs.8 lakhs p.a. He is 28 years old and would like to retire at age 55. Calculate the insurance he needs as per the income replacement method if we assume that his income would have gone up each year by 5% and investment would have earned a return of 8%.

Method of calculation

The amount of insurance required is that sum of money which if invested today at a return of 8% would replace the income that Siddhartha would have earned each year, taking into consideration the annual increment.

The amount required has to take into account two rates that work here: the rate at which the income is expected to rise each year and the rate of return which the corpus will earn during the given period. The rate used in the calculation will be adjusted to reflect the effect of both these rates on the corpus required. Then the PV function can be used to calculate the present value of the corpus required. This will be the amount of insurance taken.

Steps to calculate HLV

1. Calculate the adjusted rate to be used in the calculation of the corpus.
 - a. $((1 + \text{Investment rate}) / (1 + \text{Increment rate})) - 1$ is the formula to be used
 - b. Investment rate given is 8% and increment rate is 5%. The adjusted rate therefore is $((1 + 8\%) / (1 + 5\%)) - 1 = 2.86\%$.

2. Use the PV function in excel to calculate the corpus required by giving the following data
- Rate: This is the adjusted rate calculated i.e. 2.86%
 - Nper: This is the number of earning years. Here it is 27 years. (Retirement age- Current age)
 - PMT: This is the income in each year starting with Rs.8 lakhs in the first year in this example.
 - The amount calculated is the corpus required to generate the income that Siddhartha would have earned over 27 years. In this case it is Rs. 1,53,39,470.

Note: The calculation looks at income replacement from a combination the interest earned on the corpus plus drawdown for each year. At the end of the period the corpus would be used up too.

Calculation of Insurance Need

		Formula
Current income to be replaced	Rs.800000	
Adjusted rate	2.86%	$((1+8\%)/(1+5\%))-1$
Period of earning years	27 years	
Corpus required	Rs.1,53,39,470	$PV(2.86\%,27,- 800000,,1)^*$

*The calculation considers payment at the beginning of each year. This is indicated in excel by putting in '1' in the PV function for the argument 'Type'

9.8.2 Need Based Approach

This is a method of calculating the human life value, and therefore the amount of life insurance required by an individual or family, based on the amount required to cover their needs and goals in the event of the demise of the earning member. These include things living expenses, mortgage expenses, rent, debt and loans, medical expenses, college, child care, schooling and maintenance costs, emergency funds.

The need based approach considers what is already available in the form of investments, assets, and dues such as EPF, gratuity that will contribute to the corpus. Insurance will be taken for the remaining value.

Information Required

- The needs and goals that have to be met and their current value
- Inflation rate applicable
- The current value of the available investments
- The rate at which the investments are expected to grow

Example: Anil currently has a monthly income of Rs. 1,50,000. He pays an insurance premium of Rs. 25,000 per month and an EMI of Rs. 32,000 on a loan of Rs. 40 lakhs that he has taken for this house. His personal expenses are Rs. 10,000. He wants to provide insurance protection for his wife who is currently 49 years old and is expected to live till 80. If the expected inflation

is 6% and return on investment is 8%, what is the insurance cover he should take? His current insurance cover is for Rs.1 Cr and he has other investments amounting to Rs.50 lakhs. His house is worth about Rs.50 lakhs.

Method of Calculation

The first step is to calculate the current value of the income required to be provided for Anil's wife. The next step will calculate the corpus required that will generate the income required. For this the applicable rate will be the rate adjusted for inflation and expected rate of return from the investment of the corpus. To this, the values of any other obligations or needs are added to come to the total funds required to meet needs. The values of the existing investments are deducted to arrive at the corpus that needs to be created. This will be the insurance amount.

Steps for Calculation

1. Calculate the current value of the income required to be provided.
 - a. Total income- (Portion of income used by Anil for personal needs+ EMI payments+ Insurance Premium)
 - b. = Rs. 1,50,000- (Rs. 10,000 + Rs. 32,000 + Rs. 25,000)
 - c. = Rs. 1,50,000 - Rs. 67,000 = Rs. 83,000 per month
 - d. =Rs. 9,96,000 per annum
2. Calculate the applicable rate after adjusting for inflation and investment return
 - a. Inflation rate =6%
 - b. Investment rate= 8%
 - c. Adjusted rate= $((1+8\%)/(1+6\%))-1 = 1.87\%$
3. Use the PV function in excel to calculate the corpus
 - a. Rate is the adjusted rate of 1.87%
 - b. Nper is the number of years for which the income has to be provided. In this case it is 31 years (80 years – 49 years)
 - c. PMT is the income that has to be provided, starting at Rs. 9,96,000
 - d. The value calculated is the corpus that will generate the income required when invested at a rate of 8%. This is Rs. 2,36,54,044.
4. To this corpus value calculated, the loan outstanding of Rs. 40,00,000 has to be added. The total sum required is Rs. 2,76,54,044.
5. From the total amount required, the existing insurance cover of Rs.1,00,00,000 and Rs. 50,00,000 of investments is deducted to arrive at the amount of insurance cover that will be required for Anil so that all the needs are met. This amount is Rs. 1,26,54,044.

Calculation of Insurance Need

		Formula
Current income to be replaced	Rs. 9,96,000	Rs. 83,000 x 12
Adjusted rate	1.87%	$((1+8\%)/(1+6\%))-1$

Period over which income has to be provided	31 years	(80 years- 49 years)
Corpus required	Rs. 2,36,54,044	PV(1.87%, 31,-996000,,1)*
Add loan outstanding of Rs. 40 lakhs	Rs. 2,76,54,044	
Deduct insurance available of Rs. 1 Cr and investments of Rs. 50 lakhs	Rs. 1,26,54,044	
Additional insurance cover required	Rs. 1,26,54,044	

*The calculation considers payment at the beginning of each year. This is indicated in excel by putting in '1' in the PV function for the argument 'Type'

Note: The amount of additional insurance taken along with the existing insurance cover and investment will be adequate to take care of the needs and the value of the corpus created will be drawn down completely by the end of the period.

Sample Questions

1. Which of the following products is a pure insurance product?
 - a. ULIP
 - b. Money back policy
 - c. **Term insurance policy**
 - d. Whole life policy

2. In which of the following situations will the insured not have insurance cover?
 - a. **Surrendered policy**
 - b. Paid-up policy
 - c. Term policy
 - d. Both (a) and (b)

3. The premium payable on a ULIP is higher for the same sum assured as a term policy because
 - a. The period of cover is shorter
 - b. **A portion of the premium is used for investment**
 - c. The pool of insured is smaller
 - d. The risk is higher

4. The term of insurance in non-life insurance is typically
 - a. Decided by the insured
 - b. Decided based on sum insured
 - c. **One year**
 - d. Flexible

CHAPTER 10: RETIREMENT PLANNING

LEARNING OBJECTIVES:

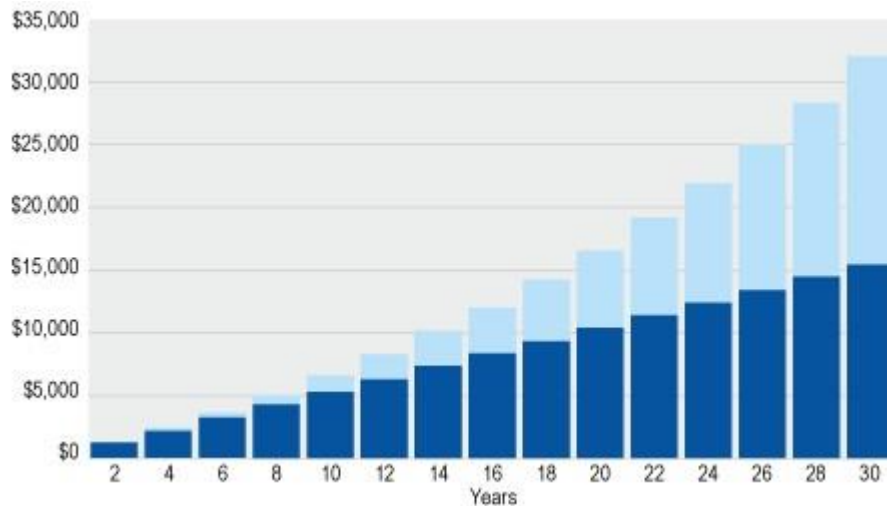
After studying this chapter, you should know about:

- Retirement planning process
- Estimating retirement corpus and the factors for determining retirement corpus
- Different kind of retirement products

10.1. Introduction to retirement planning process

Retirement planning is about ensuring that there is adequate income to meet the expenses in the retirement stage of an individual's lifecycle. The primary income at this stage will be a pension drawn from the employer, or the income drawn from the retirement corpus that has been created during the earning period of the individual's life, or a combination of the two. To have income security in retirement, a portion of the current income has to be saved and invested over the working life of the individual to create the corpus required. Retirement planning involves making an estimate of the expenses in retirement and the income required to meet it, calculating the corpus required to generate the income, assessing the current financial situation to determine the savings that can be made for retirement and identifying the products in which the periodic savings made will be invested so that required corpus is created, and the products in which the corpus will be invested at retirement to generate the required income in retirement.

There are two distinct stages in retirement: the accumulation stage and the distribution stage. The accumulation stage is the stage at which the saving and investment for the retirement corpus is made. Ideally, the retirement savings should start as early as possible so that smaller contributions made can also contribute to the corpus significantly with the benefit of compounding. In the picture below, the light part is the compounded earnings while the dark part is contributions made. In the initial years, the contributions made account for most of the value of the corpus. Over time, the earnings form a greater proportion of the final value. This is the benefit of compounding, which accrues to an investment only with time.



Source: <http://qsuper.qld.gov.au/>

The other benefit of starting to save early (in age) is that the amount which needs to be contributed periodically to reach the retirement corpus is lesser. Take the case of two people who have to save Rs. 1 crore each as their retirement goal. Both want to retire at the age of 60. One starts at 25 years of age and the other at the age of 35. The contribution required is as below if the rate of return is taken as 12% per annum.

Age	25 years	35 years
Period of contribution (Months)	420	300
Contribution per month	1555	5322
Total contribution	653091	1596724

By starting 10 years later, the contribution required to create the retirement corpus of Rs. 1 crore was Rs.16 lakhs while it was just Rs.6.5 lakhs if the savings were started at age 25. The monthly contribution required in case of an early start was just Rs. 1555 as compared to Rs. 5322 for a late start.

If the same amount of Rs. 5000 per month is saved by two people for their retirement at age 60, but one starts at age 25 while the other at age 35, then the corpus created if the investment earned 12% per annum is as below.

Age	25 years	35 years
Period of contribution (Months)	420	300
Contribution per month	5000	5000
Value at retirement	32154797	9394233

By starting 10 years early, the same amount saved and invested for a longer period grew to a value of Rs. 3.2 crores, while a later start meant a corpus that was only 1/3rd of the other at Rs. 94 lakhs.

In the initial earning years it may be difficult to find adequate savings and there may be immediate and closer financial goals that may take precedence over the retirement goal. The

savings plan for retirement should consider the overall financial situation and goals of the individual. It may be necessary to start low and increase the savings as the income grows and the ability to save increases.

Investments made in the accumulation stage should be growth-oriented, since there is a long investment horizon adequate to smoothen out the short-term volatility in returns that such investments display. There is generally a greater ability to take risk, and the portfolio should be invested to earn higher returns.

The distribution stage of retirement is when the corpus created in the accumulation stage is employed to generate the income required to meet expenses in retirement. Investment made at this stage is income-oriented primarily. The ability to take risks is lower since any erosion in the capital created cannot be replaced.

Retirement planning involves the following steps.

- Compute the retirement corpus required based on the estimation of expenses in retirement or income at retirement.
- Determine the periodic savings required to accumulate the retirement corpus
- Analyse the current financial situation to determine the savings possible
- Set in place a long-term savings plan based on the expected income
- Identify the investment products in which the savings will be invested
- Monitor the performance of the investment and the growth of the retirement corpus periodically.
- Review the adequacy of the retirement corpus whenever there is a change in personal situation that has an impact on income or expenses.
- Make mid-course corrections, if required.
- Rebalance the portfolio to reflect the current stage in the retirement plan.

A good retirement plan provides an 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.

10.2. Estimating the Retirement Corpus

The retirement corpus that has to be created to provide retirement income will depend upon the income that has to be generated from it to meet the expenses in retirement. There are two questions that need to be answered by an individual planning retirement:

1. How much is the income required in retirement to maintain a given standard of living?
2. What is the corpus that should be built to be able to generate this income?

Estimating Income Requirement

There are different methods used to estimate the amount of income required in retirement. The Income Replacement method and the Expense Protection Method are two of those methods:

10.2.1 Income Replacement Method

The income replacement ratio is the percentage of the income just before retirement that will be required by an individual to maintain the desired standard of living in retirement. While estimating this ratio, the current income has to be adjusted for a few heads of expenses that may no longer be relevant in retirement. At the same time, there may be a larger outlay on other heads of expense such as medical and healthcare. Some people may like to have a higher discretionary income for travel or entertainment. Some of the expenses that have to be reduced from the income include:

- The portion of the income that is being used towards paying taxes
- The mandatory deduction from income being made, such as provident fund
- The portion of income going to savings for goals
- Employment related expenses, such as those related to transportation

Income replacement ratio is calculated as gross income after retirement / gross income before retirement.

Usually 70% - 90% of the income before retirement is required to maintain the lifestyle of the individual after retirement. However, this number may be lower if a large part of the pre-retirement income was going into savings. This is very likely the case with many individuals who hit a phase of high income in their early 50s and with much of the large-ticket expenses already taken care of; a large portion of the income may go into savings. In such a case, the income replacement ratio is likely to be much lower since the saving and probably tax component would account for a large part of the pre-retirement income. In the initial years of planning, when there is less clarity on the future income, it is more convenient to go with thumb rules. But as the income and expense situation becomes clearer, especially in the last 5-10 years before retirement, it is best to consider the particular situation of each individual while determining the income replacement ratio.

The steps for estimating the income required in retirement under this method are:

- Calculate the current income
- Estimate the rate at which the income is expected to grow over the years to retirement
- Calculate the years to retirement
- Calculate the income at the time of retirement as $\text{Current value} \times (1 + \text{rate of growth})^{\text{(Years to retirement)}}$

- Apply the income replacement ratio to this income to arrive at the income required in retirement.

Example

Pradeep has a current annual income of Rs. 10,00,000. He is 30 years of age and expects to retire at the age of 55. He also expects his income to grow at a rate of 10% and estimates that he will require an income replacement of 75%. What is the income required by Pradeep in retirement?

Current Annual Income (Rs.)	1000000	
Age	30	
Retirement age	55	
Years to Retirement	25	55-30
Annual Rate of Growth in Income	10%	
Income at the time of Retirement	10834706	$1000000 \times (1+10\%)^{25}$
Income Replacement Ratio	75%	
Annual Income required in Retirement	8126029	$10834706 \times 75\%$

10.2.2 Expense Protection Method

In the expense protection method, the focus is on identifying and estimating the expenses likely to be incurred in the retirement years and providing for it. Typically, the expenses required by the person in retirement is taken as a percentage of the 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. On the other hand the expenses incurred on other heads such as health, is likely to be higher.

Expense Protection is a slightly cumbersome method due to the detailed listing out of expenses incurred for the things / services required post-retirement. Estimating this wrongly may make the determination of retirement corpus inaccurate. The process involves preparing a list of pre and post-retirement expenses, and arriving at the total expense list. The expense so calculated has to be adjusted for inflation over the period of time left to retirement to arrive at the expense in retirement.

Example

Pradeep has a monthly expense of Rs. 50,000 of which 60% is for household expenses. He is 30 years old and expects to retire at the age of 55. He expects to incur additional expenses of Rs. 10,000 pm at current prices for discretionary expenses in retirement. If inflation is seen at 6%, what is the expense that has to be met by retirement income?

		Formula
Current monthly expense (Rs.)	50000	
Proportion of household expenses	60%	
Current household expenses (Rs.)	30000	60% of Rs.50000
Additional discretionary expense in retirement (Rs.)	10000	
Total retirement expenses at current prices (Rs.)	40000	
Time to retirement (years)	25	Retirement age(55) – Current age(30)
Expected rate of inflation	6%	
Expense at the time of retirement (Rs.)	171675	$40000 \times (1+6\%)^{25}$

10.3. Determining the Retirement Corpus

The income required in retirement can be estimated using either of the two methods described earlier. Once this has been done, the next step in retirement planning is to calculate the corpus that will generate the income required in retirement. The variables in this calculation are

- The periodic income required
- The expected rate of inflation
- The rate of return expected to be generated by the corpus
- The period of retirement, i.e. the period for which income has to be provided by the corpus.

Impact of Inflation

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 the same amount of money will not be able to purchase as much as it could have earlier i.e. last month or last year. Inflation eats away the purchasing power of money over time.

Inflation impacts retirement planning in two ways:

1. At the time of calculating the income required, the value of the current expenses has to be adjusted for inflation to arrive at the cost of the expense at the time of retirement. 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.
2. This figure is true for the beginning of the retirement period. Over the retirement years, the income required to meet the same level of expenses would not be constant but would go up due to inflation. The corpus created to fund income during retirement will have to consider the escalation in cost of living during the period in which pension is drawn. For example, in the previous example Rs. 171,165 is the monthly expense at the time of retirement. However, this will not remain the same throughout the retirement period but will increase over time, depending upon inflation. The increase in expenses has to be considered while calculating the retirement corpus else there is a risk of the retirement being under-funded. If you're planning to live on Rs. 60,000 a month at the start of retirement, a 6% inflation rate means that in 10 years you would actually need Rs. 1,07,451 a month, and in 20 years you'd need Rs. 1,92,428 a month to cover the same expenses.
3. While the standard rate of inflation may be appropriate to calculate the future cost of living expenses, other expenses such as health costs and travel, typically increase at a higher rate.

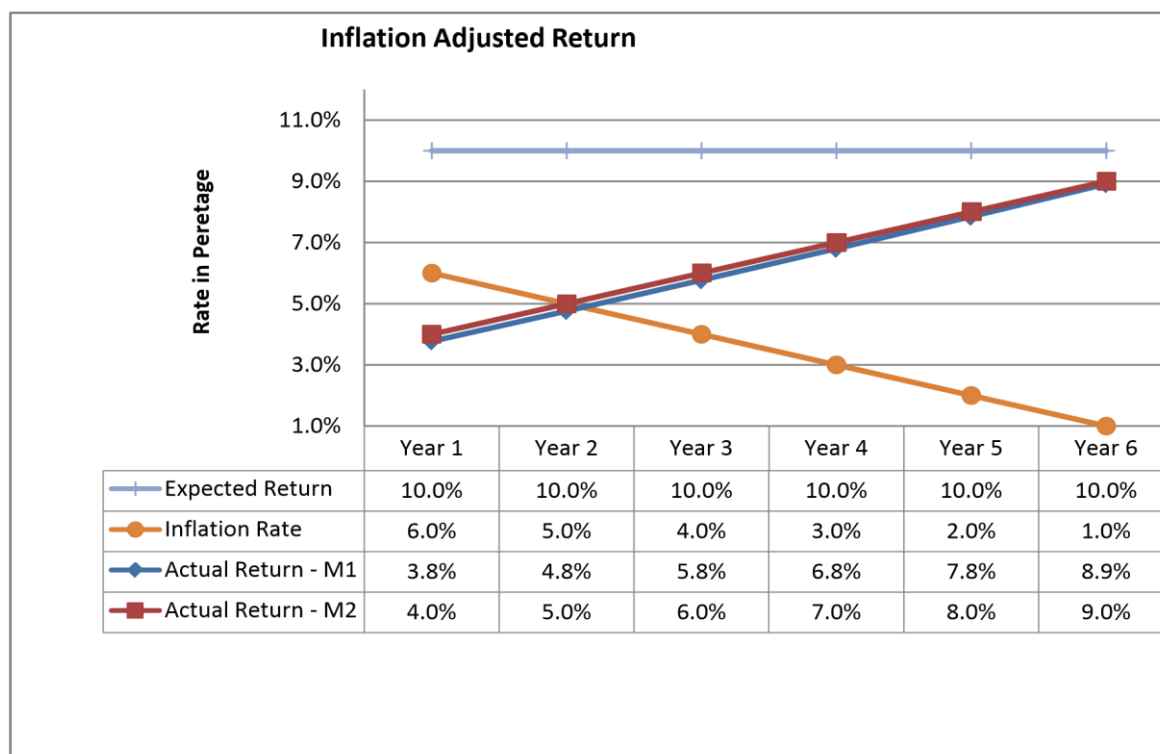
The Expected Rate of Return

While estimating the corpus required to generate the retirement, it has to be kept in mind that this corpus will be invested to earn a return both at the time of accumulation and at the time of distribution and this return will contribute towards the income that has to be provided. The contribution that has to be made towards retirement will be lower to the extent of the return generated, and the size of the corpus that has to be in place at the start of retirement can be lower to the extent that these funds will generate a return through the retirement period. Higher the rate of return that the funds are expected to earn, lower will be the required corpus. However, a higher return will come with a higher risk. Investors may be willing to take higher risk in the accumulation period for higher return. But in the distribution stage of retirement the ability to take risk with the savings will be low.

The rate of inflation and the expected rate of return on investments act in opposite directions on the amount of retirement corpus required. While the rate of inflation pushes up the expenses and therefore the amount of retirement savings required to fund the income in retirement, the return that the investment will generate will reduce the savings required. The real or effective rate of return that the investment will generate will then be the expected return adjusted for inflation.

Inflation Adjusted Rate or real rate of return is the periodic rate of return on an investment after adjustment for inflation.

$$\text{Inflation - Adjusted Return} = \frac{(1 + \text{Return})}{(1 + \text{Inflation Rate})} - 1$$



Actual Return – Method 1: Calculation is done on the basis of discounting the investment return with the inflation rate (using the formula above).

Actual Return – Method 2: Calculation is done by simply subtracting the inflation from the expected return.

For example, if the rate of return on a bank fixed deposit is 8 % p.a. and the current inflation rate is 6 % p.a., calculate the real rate of return on the bank FD.

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.

Calculation of Retirement Corpus

Example

Rani requires a monthly income of Rs.35000 by today's value for her retirement 25 years away at the age of 60. She expects to live up to 80 years. What is the retirement corpus required if the bank's deposit into which she will invest her retirement savings is likely to yield 8% and the rate of inflation is 6%?

There are two stages to calculating the retirement corpus: in the first step the income required to meet expenses at retirement should be calculated and in the next step the corpus that will generate this income has to be computed.

Step 1: Calculation of income at retirement

		Formula
Income required at current value (Rs.)	35000	
Time to retirement (Years)	25	
Expected inflation	6%	
Income required at retirement (Rs)	150215	$35000 \times (1+6\%)^{25}$

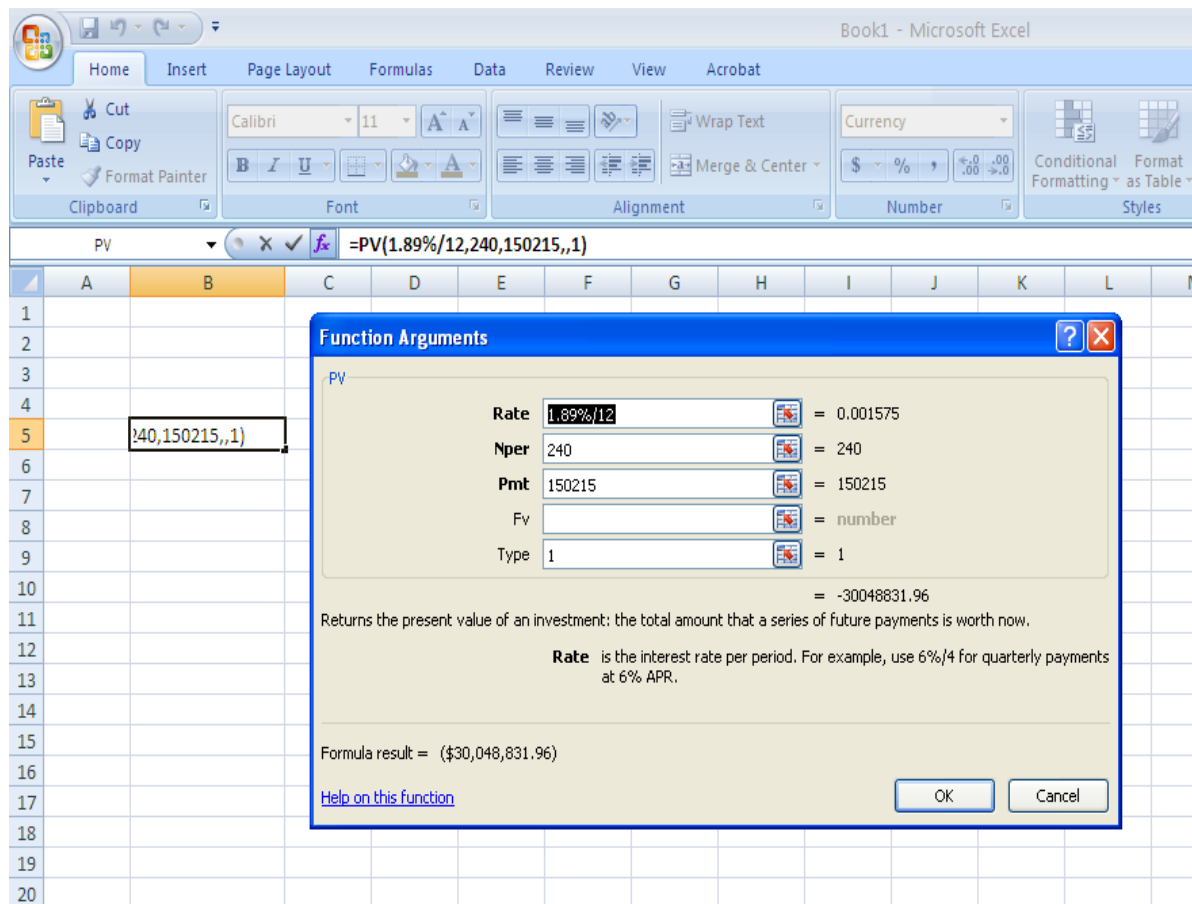
Step 2: Calculation of retirement corpus

		Formula
Income required at retirement (Rs.)	150215	
Retirement Period	20	(80-60)
Rate of return on corpus	8%	
Inflation rate	6%	
Inflation adjusted rate of return	1.89%	$((1+8\%)/(1+6\%))-1$

The retirement corpus can be calculated using the PV formula in excel. The inputs required are

- Rate (inflation adjusted rate of return) : 1.89%/12
- Nper (retirement period in months) : 240
- PMT (inflation adjusted monthly income at retirement) : Rs. 1,50,215
- Type (0 for payment at end of year and 1 for beginning) : 1

The corpus required to generate a monthly income of Rs. 1,50,215 at the start of the retirement period of 20 years is Rs. 3,00,48,832.



The corpus of Rs. 30,048,832 will be invested at Rani's 60th year at a rate of 8% to generate a monthly income of Rs. 150215. The monthly income required will go up through the period of retirement as a result of inflation. But this has been taken care of while creating the corpus, since the calculation considered inflation adjusted return on investment. The income will be provided for 20 years required, after which the corpus will be exhausted.

Saving & Investment Plan to Create Retirement Corpus

Once the retirement saving required is estimated, it has to be created over the working years of the individual by setting in place a saving and investment plan. Retirement is one of the important goals for which an individual saves. The amount of saving required will depend upon the corpus required, the time available to accumulate the savings and the return that will be generated by the investment avenue into which the savings being made will be channelized.

The retirement planning decisions taken have to be in conjunction with the other financial goals of the individual. Very often saving for immediate and urgent goals take precedence over long-term goals like saving for retirement. Given the importance of the goal it is recommended that atleast some savings for retirement, such as the mandatory deductions from salary, if employed, or minimum voluntary savings, if self-employed, be assigned to

retirement and allowed to compound and grow over time. The shortfall in the corpus should be made up as soon as the financial situation allows it, though the contributions have to now be larger to make up for lost time.

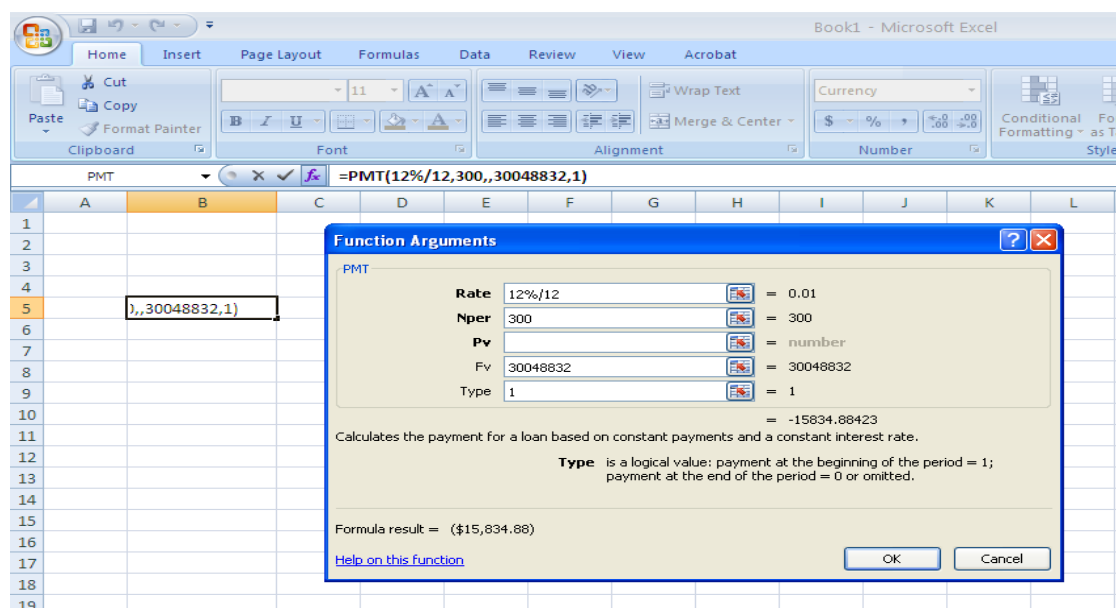
The investments into which the savings are channelized should reflect the risk profiling done for the investor as part of the financial planning exercise and the long investment horizon available in the accumulation stage of retirement.

Example

In the previous example, what is the monthly saving that Rani must make to create the retirement corpus if she expects a return of 12% per annum on her investments?

The amount of monthly savings required can be calculated using the PMT function in excel. The inputs required are:

- Rate (return on investment expected) : 12%/12
- Nper (period in months available to create the corpus : 300 months (25 x 12) which is the period between now and retirement date)
- Future Value (retirement corpus required) : Rs. 30,048,832
- Type (0 for investment at end of year and 1 for beginning) : 1



The monthly savings required is Rs. 15,835. If this sum is invested at an annual rate of 12% for 25 years, then the savings will compound to a value of Rs. 30,048,832, which is the retirement corpus required.

What will be the effect if Rani had 30 years to save for the same amount? The amount of monthly savings will come down to Rs. 8512 since there is a longer period over which Rani can make contributions, and the money can be invested and grow to the corpus required.

Similarly, what will be the effect if Rani decides to invest in a lower yielding investment such as a bank fixed deposit that generates a return of 8%? The monthly savings required will double to Rs. 31387 to generate the same corpus since the funds saved will be earning at a lower level.

The monthly saving required is therefore a function of the corpus required, the period available for saving and the return that the investments will earn. Each individual makes a trade-off between these three factors depending upon their situation.

If Rani is unable to save the Rs. 15,835 required each month, she can choose to postpone her retirement age to 65 instead of 60. This will give her an additional 5 years to contribute to the savings.

Income required at retirement will now be Rs.201022 since inflation would have pushed up costs for another 5 years. The period of retirement is lower at 15 years. The retirement corpus required will be Rs. 31,535,237. The monthly savings required over a period of 30 years, now that Rani has postponed her retirement by five years, is Rs. 8934.

Rani can reduce the monthly saving required if she invests in an investment giving a higher yield than the 12% she has currently estimated. For example, if she invests in an instrument which gives her a 15% yield, then instead of the Rs. 15,835 she needed to save, she now needs to save only Rs. 9150 each month over the 25 years to retirement. However, the higher return will come at a higher risk and Rani should be able to find investments that will generate the yield she requires at a level of risk that she is comfortable with. Making unrealistic estimations of the return that can be earned will result in the corpus growing at a lower than expected rate, and Rani finding that her retirement savings is not adequate when she is ready to retire.

Rani can also choose to reduce her income requirement in retirement so that the retirement corpus required will come down and therefore the savings that she has to make too will reduce. But while she may be able to cut down on her discretionary expenses in retirement, reducing her expected expenses unrealistically will mean that she may not be able to live comfortably and will probably find her retirement corpus inadequate. This is too big a risk to take in retirement and a better option for Rani would be to find additional ways to save during her earning years or to postpone her retirement.

Review and Monitoring

Retirement planning is an on-going process. The plan requires periodic review to make sure that the estimates for income and expenses in retirement are relevant or need to be changed. Typically, every time there is a significant change in current income and lifestyle or expenses that are likely to continue into retirement, it is necessary to make changes to the plan. The

change in income or expense will imply a change in the retirement corpus being accumulated and the periodic savings and investments that have to be made to achieve the new target.

The performance of the investments that have been made also needs to be monitored to ensure that the retirement savings are growing as expected. Unless a periodic check is made, under-performance will not be detected early enough and making corrections may become difficult.

The allocation of the savings being made to various types of investment will depend upon the age and stage of the individual. For example, in the accumulation stage, the focus will be on growth-oriented products. As the individual comes closer to retirement the portfolio has to be periodically rebalanced to shift away to less risky assets so that the corpus accumulated over the years is protected from a fall in value when it has to be available for generating the retirement income.

A review will also identify underfunding of the corpus. If identified early enough investors can take steps to correct it. Increasing allocation to the goal, if finances allow, is the way to make sure that an adequate corpus is built. Other measures that can help include postponing the retirement by some years, which will give a longer time for the accumulation and shorten the distribution stage. This option may be considered if the underfunding is spotted late leaving less time for additional contribution to the corpus. Augmenting retirement income by post-retirement employment is another way to manage an underfunded retirement corpus.

10.4. Retirement Products

Retirement products are used to invest the savings to create the retirement corpus in the accumulation stage and to generate regular income in the distribution stage. The retirement stage will define the type of retirement product suitable to the investor. In the accumulation stage, the focus of the product should be on growth while it will be income in the distribution stage.

Retirement pension products may be classified as Defined Benefit (DB) plans or Defined Contribution (DC) plans. In a defined benefit plan, the pension amount or value of retirement benefit is known beforehand. Or, the formula based on which the pension amount would be calculated is known. A contribution is made by the employee, employer or both towards the benefits, which is invested to generate returns. The investor is assured of the pension amount as defined, irrespective of the returns that is generated by the pension fund.

In a defined contribution plan, the pension amount is not known beforehand. In a DC plan, a defined amount is contributed by employee, employer or both, towards a pension fund over a period of time. The final corpus of the pension fund determines the retirement benefit,

which can be taken in a lump sum or as an annuity bought from the funds received, or a combination of the two.

Conventional retirement products have been DB plans. The biggest risk a DB plan runs is that it could become 'under-funded' or unable to make the defined payments, if the portfolio in which the contributions are invested does not generate the returns required to make the payments over the retirement period. New pension products are DC plans which are more flexible. Since the pension depends upon the returns made on the investment, the contributing individual usually gets some say in the way the amount is invested.

This is done by providing multiple options in the way the funds may be invested – like equity focused (high risk, high returns), debt focused (low risk, low returns) or anything in-between (medium risk, medium returns). The decision on allocation of funds to various options and periodic re-allocation is usually taken by the contributing individual. The retirement corpus of the individual depends on both the value of the contributions made and the returns generated through their investment. A portion of this (usually around one-third of the fund value) can be withdrawn as a lump sum. The remaining portion is used to buy an annuity that provides a regular income through the retirement years. The National Pension System (NPS) applicable for central government employees who joined service on or after January 1, 2004 is a defined contribution pension plan.

Retirement Products in the Accumulation Stage

Saving for the retirement can be done through mandatory saving avenues such as the employee provident fund or the NPS (for central government employees who joined service on or after January 1, 2004) or through voluntary savings schemes such as the PPF, Mutual fund schemes, and retirement products from insurance companies or a combination of the two.

10.4.1 Mandatory Retirement Benefit Schemes

The Employees' Provident Fund and Miscellaneous Provisions (EPF & MP) Act of 1952 requires employers covered under the act to offer the following schemes to the workers

a. Employee Provident Fund Scheme

Under this scheme, the employee and the employer each contribute 12% (10% in some special cases) of the basic emoluments and allowances to the employee's EPF account. Employees can contribute over and above the statutory rate of 12%. However, employer's contribution is fixed at 12%. Contributions are credited to individual employee accounts. Each year the government declares the rate of interest applicable to the scheme. Annual statements which give information on the opening balance, contributions during the year, interest credited at the end of the period, withdrawals if any and closing balance is sent to each account holder

through his/her employer. Partial withdrawals are allowed to members for specified purposes, including housing and marriage. The balance in the employee's account is paid out as a lump sum on retirement, or total and permanent disablement or death in service or early retirement.

b. Employee Pension Scheme

This scheme is run by the Employees Provident Fund Organization (EPFO) and is guaranteed by the government. 8.33% from the employer's contribution of 12% to the Employee Provident Fund is diverted to the EPS. The scheme provides pensions for life to members or their family upon retirement at the age of 58. The central government also contributes one and one-sixth percent of the wages.

c. Employee Deposit-Linked Insurance Scheme

Employer contributes 0.5% of the total wages. No contribution is made by the employee. The benefit provided under the Employees' Deposit Linked Insurance Scheme is called assurance benefit. On the death of the member while in service, the nominee or any other person entitled to receive the provident fund benefits will, in addition to the provident fund, receive the assurance benefit under Employees' Deposit Linked Insurance Scheme.

d. Gratuity

The Payment of Gratuity Act, 1972 requires gratuity to be paid to an employee at the time of termination of employment where the employee has been in continuous service for not less than five years. The condition of completion of five years' continuous service is not applicable where termination is due to death or disablement. The benefit is paid in lump-sum. Section 4(3) of Payment of Gratuity Act, 1972, deals with the limit on gratuity payable to an employee.

For government employees, all retirement and gratuity benefits received is exempt from tax u/s 10(10)(i). For non-government employees, any gratuity received by such employees is exempt from tax to the extent of the least of the following:

- a) Half month's average salary for each completed year of service.
- b) Rs. 10,00,000
- c) Actual Gratuity received

The exemption is, however, not available for payment of gratuity when the employee is still in service.

e. Superannuation Benefit

The existing mandatory retirement benefits are very often found to be insufficient to meet the income replacement required at retirement. Employers provide superannuation plans to augment the benefits available by contributing to a superannuation fund. The company has

to appoint trustees to administer the scheme and get the scheme approved by the Commissioner of Income Tax.

A company can offer a group superannuation scheme in two ways:

- Through the constitution of a trust fund where fund managers are appointed by the trustees to manage the fund.
- Through investment in a superannuation scheme from a life insurance company.

On retirement the employee is allowed to take one third of the accumulation in his account as commutation. Commutation refers to the exercise of the facility of taking a portion of the annuity corpus in a lump sum. The balance in the corpus is used to purchase an annuity. Apart from LIC, all other life insurance companies allow its customers to purchase annuity from any annuity provider. Income Tax rules restrict the employer's contribution, whether to the PF or superannuation fund or a combination of both, to 27% of the employee's earnings.

National Pension System (NPS) for Government Employees

All central government employees who joined service after January 1, 2004, are enrolled into the NPS which is a defined contribution pension plan. 10% of the employee's basic salary is credited to the individual account with the government making a similar contribution. The individual account is identified by a unique Permanent Retirement Account Number (PRAN). The contribution is currently invested in the default scheme where the contribution is equally allocated between three pension fund managers: SBI Pension Funds Private Limited, UTI Retirement Solutions Limited and LIC Pension Fund Limited. The funds are invested in the proportion of 85% in fixed income securities and 15% in equity instruments. The balance in the individual account can be withdrawn on retirement at 60, resignation or death while in service. On retirement, a minimum of 40% of the corpus has to be used to buy a life annuity and the remaining can be taken as a lump sum. On resignation, 80% has to be annuitized and the remaining can be withdrawn. In case of death, the balance in the account is paid out to the nominees.

10.4.2 Voluntary Retirement Schemes

The mandatory retirement benefits are available only to employees of covered establishments as defined in the respective regulations. This leaves people in other establishments, self-employed persons and others out of the coverage of the benefits. Retirement plans are available that an individual can subscribe to independently. Such schemes can be used to save for retirement by people who do not have mandatory cover and also by persons who are covered to augment their retirement benefits. Voluntary retirement schemes include the National Pension System, Public Provident fund, Schemes of mutual funds and insurance companies.

a. Voluntary Provident Fund (VPF)

Persons covered under the Employee Provident Fund (EPF) can choose to contribute over and above the mandatory 12% of the basic and dearness allowance, to their EPF account under the Voluntary Provident Fund. There will be no employer contribution to match any contribution made by the employee under the VPF. The investment into the VPF will also be deducted by the employer from the salary and deposited in the EPF pool. The employer must be given instructions on the percentage of additional deduction that has to be made from the salary for the VPF. The rate of contribution can be changed by the employee which will be given effect to from the beginning of the next accounting period of the fund. The VPF will earn the same returns as the EPF. There is no upper limit on the percentage of salary that can be contributed to the VPF. Investment in the VPF has tax benefits under Sec 80 C of the Income Tax Act, 1961. Interest earned is exempt from tax.

b. National Pension System (NPS)

The NPS is a defined contribution scheme launched in May 2009 by the government of India for all citizens on a voluntary basis. The contributions made by an individual to the fund are managed to create a retirement corpus. The NPS system consists of the NPS trust, central recordkeeping agency, pension fund managers, trustee bank and custodian.

- **NPS Trust**

A trust set up under the Indian Trusts Act, into which the contribution of subscribers is pooled and held in their beneficial interest. The trust has the fiduciary responsibility for taking care of the funds and protecting the subscriber interests.

- **Points of Presence (PoPs)**

A PoP is the first point of interaction between the subscriber and the NPS. Subscribers open their NPS accounts by completing the documentation and formalities with the PoPs. The registered PoPs have authorized branches to act as collection points and extend services to customers.

- **Central Record-keeping Agency (CRA)**

The CRA is the back-office for maintaining subscriber records, administration and customer service functions. NSDL e-Governance Infrastructure Ltd has been designated the CRA for the NPS.

- **CRA- Facilitation Centres**

These are entities appointed by the CRA to provide various services to PoPs. CRA-FCs will typically have multiple branches around the country.

- **Pension Fund Managers**

These are professional fund managers appointed to invest the corpus in a portfolio of securities and manage them. Currently the fund managers are –ICICI Prudential Pension Funds Management Company Ltd., LIC Pension Fund Ltd, Kotak Mahindra Pension Fund Ltd., Reliance Capital Pension Fund Ltd., SBI Pension Fund Pvt. Ltd., UTI Retirement Solutions Ltd, and HDFC Pension Management Co Ltd.

- **Trustee Bank**

The trustee bank handles the funds side of the transactions between various entities. Axis Bank Ltd is the designated bank to facilitate fund transfers across subscribers, fund managers and the annuity service providers.

- **Annuity Service Providers (ASP)**

ASPs are appointed by the PFRDA to provide the annuity to the subscribers through their various schemes. Investors can choose any ASP from which to buy the annuity and the ASP will provide the monthly pension to the subscriber for the rest of their lives.

- **Custodian**

The custodian handles the security side of the transactions. The securities bought for the NPS trust are held by the custodian, who also facilitates securities transactions by making and accepting delivery of securities. The NPS has appointed the Stock Holding Corporation of India Ltd as the custodian.

PFRDA (Pension Funds Regulation and Development Authority) is the designated agency responsible for the regulation and development of pension products.

- **Joining the NPS**

Any Indian citizen not less than 18 years of age and not more than 60 years of age can join the NPS by registering at any of the PoPs. On enrolling, the CRA (NSDL) will allot a Permanent Retirement Account Number (PRAN) to the individual. The first contribution to the account has to be made at the time of registration. The minimum amount per contribution is Rs.500 and the minimum contribution in a year is Rs.6000. The minimum number of contributions in a year is 1. There is no maximum limit. The contributions can be made by cash, local cheque, and demand draft or through electronic transfer. If the minimum annual contribution of Rs.6000 is not made to the account, the account becomes dormant. The account can be revived by depositing the minimum required amount for each year of default along with the penalty specified from time to time.

Companies registered under the Companies Act, Central and State Public Sector Enterprises and other specified entities can register under the corporate model. The corporate may directly approach a PoP as an entity for its employees to join the NPS. The employees enrolled

by the corporate (employer) will be registered as subscribers and will each have an account. Choice of fund manager and scheme may be made by the employer or employee, as agreed.

Contribution made by an assessee to their NPS account is allowed as deduction up to a limit of 10% of basic and DA or 10% of gross total income if self-employed, up to Rs. 1,50,000. Contribution made by employer to the employee's account is also deductible under section 80CCD (2) up to a limit of 10% of basic + DA. This is outside the one lakh limit specified earlier.

There are two types of accounts that the NPS offers - Tier I account where the contribution cannot be withdrawn and a Tier II account where the contribution can be withdrawn at anytime. To have a Tier II account the individual must have a Tier I account.

- **NPS – Investment Fund Options**

The funds contributed will be managed according to the investment mix selected by the contributor. The portfolio thus selected will be created and managed by the fund manager selected at the time of registering from among the approved fund managers.

Investors can select from between the Active choice and the Auto choice. The fund options available under the Active choice are

E: High return, High risk – Investments predominantly in equity market instruments

C: Medium return, Medium risk - Investments predominantly in fixed income instruments

G: Low return, Low risk - Investments purely in fixed investment products

A subscriber can choose to invest the entire corpus in C or G. However, investment in E is capped at 50 per cent. Any combination of the funds can be chosen to apportion the corpus within the limits specified.

Investors who cannot make the choice between options can opt for the default option. The default option, called auto choice lifecycle fund, will see the investment mix change according to the age of the subscriber. Between the age group of 18 years and 36 years the funds will be allocated as 50% in E, 30% in C and 20% in G. After 36 years of age, the ratio of investment in E and C will decrease annually, while the proportion of G rises till it reaches 10% in E and C and 80% in G at the age of 55.

At present, the equity investment will include investment in index funds that track the BSE Sensitive Index or the CNX Nifty index. The C segment includes liquid funds, corporate debt instruments, fixed deposits, public sector bonds, municipal bonds and infrastructure bonds. The pure fixed investment instruments include state and central government securities.

Asset Allocation in the Life Cycle Choice

Age	Asset Class E	Asset Class C	Asset Class G
30-35 years	50%	30%	20%
36 years	48%	29%	23%
37 years	46%	28%	26%
38 years	44%	27%	29%
39 years	42%	26%	32%
40 years	40%	25%	35%
41 years	38%	24%	38%
42 years	36%	23%	41%
43 years	34%	22%	44%
44 years	32%	21%	47%
45 years	30%	20%	50%
46 years	28%	19%	53%
47 years	26%	18%	56%
48 years	24%	17%	59%
49 years	22%	16%	62%
50 years	20%	15%	65%
51 years	18%	14%	68%
52 years	16%	13%	71%
53 years	14%	12%	74%
54 years	12%	11%	77%
55 years	10%	10%	80%

On reaching the fixed retirement age of 60 years, the contributor has to use at least 40% of the accumulated corpus to buy an annuity. The remaining funds can be withdrawn as a lump

sum either at once or in a phased manner before 70 years. Any balance in the account on reaching 70 years of age will be paid-out as a lump sum. The annuity selected can be one that pays survivor pension to the spouse. A subscriber can also choose to invest more than 40% in an annuity.

Exit before turning 60 years is possible through an option to withdraw 20 per cent of the accumulated savings and compulsorily buy an annuity with the remaining 80 per cent. In the event of the death of the subscriber, the entire corpus standing in the account will be paid-out to the nominee(s) as a lump sum. If the balance in the pension fund account is Rs. 2 lakhs or lower at the time of retirement, the subscriber can opt to withdraw the full amount as a lump sum.

The NPS follows the EET regime for taxation. This means that the contribution made to the NPS will receive tax benefits in the form of deduction from taxable income, the gains made in a year will not be taxed in the year in which it is earned but the amount will be taxed at the time of withdrawal.

c. Public Provident Fund (PPF)

The details of PPF have been covered in Section 4.1.1 of Chapter 4 in this workbook.

d. Pension Plans from Insurance Companies

Insurance companies offer individual pension plans both as traditional plans and as unit-linked plans. In traditional plans, the sum assured is the corpus (along with additions and bonus, whether guaranteed or otherwise) and is fixed at the time of taking the policy. In a unit-linked pension plan the corpus would be the value of the fund. The value of the fund in turn, would depend upon the type of fund (combination of equity and debt in various proportions) chosen by the policy holder. An assured benefit in the form of rate of return disclosed upfront has to be provided.

The pension plans are usually structured as deferred annuity plans where the policy holder contributes premium over the term of the policy and the corpus so created is used to buy an annuity on vesting. Depending upon the type of annuity purchased, the annuitant receives a pension over their life time.

Apart from the elements of an insurance contract such as the sum assured, premium details, the minimum and maximum age at entry into the plan, insurance companies specify the minimum and maximum age at vesting. Vesting refers to the age at which the corpus has to be used to buy the annuity. The policy holder has to decide the sum assured and the vesting age that is required. Based on these factors and the age of the policyholder the applicable premium will be decided in a traditional plan. In a unit-linked plan, the premium that the policy holder can pay is decided first and is invested in the fund of choice to create the corpus.

Unlike a traditional plan, the value of the fund on maturity is not known in a unit-linked plan, though there is an assured minimum rate of return in all pension plans.

Death and Maturity Benefits

If the policy holder dies during the term of the policy when the corpus is being accumulated, the death benefit would depend upon the terms of the policy. If the pension plan offers life cover, the death benefits in case of a traditional policy will be the sum assured. In case of unit linked pension plans, the death benefit will be the higher of the sum assured and fund value, only the fund value or fund value and sum assured, depending upon the terms of the policy. The maturity benefit will be the sum assured along with benefits such as bonuses in case of traditional plans and the value of the fund in case of a unit-linked plan. All benefits paid will be subject to the minimum assured return specified by the policy. One-third or one-fourth of the corpus may be withdrawn as a tax free lump sum. Commutation refers to the exercise of the facility of taking a portion of the annuity corpus in a lump sum. The balance has to be used to buy an annuity which will provide the pension.

If death occurs during the period when annuity is being drawn, then the benefit will depend upon the type of annuity that has been bought. This can either be cessation of pension, continuation of pension to spouse, repayment of annuity purchase price or a combination. If the nominee is the spouse, then the death benefits may be taken as a lump sum or in combination with an annuity. If the nominee is not the spouse, then the benefits are paid out as a lump sum.

The premiums paid towards pension plans are eligible for benefits of deduction under Section 80C and 80CCC. Similarly, the amount received on commutation and other benefits received on maturity or death is also subject to exemption under the Income Tax Act.

e. Pension Schemes from Mutual Funds

Investment in designated pension plans from mutual funds allows accumulating a corpus for retirement. Currently there are two pension plans on offer: UTI Retirement Benefit Pension Fund (RBPF) & Templeton India Pension Plan (TIPP).

Pension schemes work just like other mutual fund schemes. Funds contributed by different investors are pooled together and invested in a portfolio of securities. The investor's share of the pool is determined by the number of units held. The fund will define the minimum investment. The investment objective of the fund would be to build a retirement corpus for the investor over a long period of time, by using a combination of equity and debt securities.

These funds differ in the exit options available to investors. Since the corpus is being accumulated for retirement, mutual funds penalize or restrict withdrawals from the fund before the specified retirement age of 58 years.

After the specified age, the funds accumulated can be freely withdrawn. Investors can choose to remain invested and receive a periodic payment in the form of dividend or redemption while the rest of the funds continue to remain invested and grow. Or the corpus can be withdrawn to buy an annuity. The returns from mutual fund schemes, including pension plans, cannot be assured according to SEBI's guidelines.

Investments made into these funds are eligible for deduction from total income under section 80C of the Income Tax Act. At the time of redemption they will be subject to capital gains tax applicable to debt-oriented funds.

The products described above are designed primarily for accumulation of the retirement corpus. Apart from these products, an individual can also invest the savings being made periodically for retirement into any other investment products discussed earlier in chapters on investment products including mutual fund schemes, equity shares, debentures and bonds, deposits with banks, savings schemes of the government and create the corpus required.

10.4.3 Drawing on the Corpus: Investment Products for the Distribution Stage

In the distribution stage the individual requires the retirement corpus that has been accumulated to generate the income required to meet expenses in retirement. This is the stage at which the drawing down of the corpus created takes place. The investments must be primarily income-oriented and must feature a lower risk. This is because the individual will not be able to take the risk of losing the corpus that has been accumulated. The income needs, and risk and return requirements in retirement can be further divided into two stages: the first 10 to 15 years of retirement, where the retiree is expected to be active, healthy and may have higher lifestyle expenses on travel and such. They may also be supplementing retirement income with income from some employment. At this stage in life, some exposure to equity can be taken primarily to protect the investment corpus from higher than expected inflation and higher than expected expenses. In the second stage of retirement, the level of activity and lifestyle expenses significantly reduces. At this stage, the investor prefers safe income generating investment avenues.

Ideally, the retirement corpus should be distributed among different types of income generating investments with different features. It is good for the retiral income to be generated from multiple sources rather than just one. The features of risk, return, liquidity, flexibility and taxability will be different in the different investment avenues. For example, annuities generate pre-determined income but the returns are low. The Post Office Monthly Income Schemes and the Senior Citizens' Savings Schemes generate guaranteed but lower returns. Monthly Income Plans of mutual funds give higher returns with greater flexibility to manage the investment and liquidity. But the risk is higher in mutual funds. At least that

portion of income required to meet the necessary monthly expenditure must come from a source or investment where the income is pre-defined and there is no uncertainty.

The taxability of the retirement income should also be considered while selecting the investments to generate retiral income. Some, such as dividends from mutual funds are exempt from tax while interest income earned on deposits and other investments are taxed at the marginal rate of tax applicable to the individual.

a. Annuity

An annuity is special type of insurance contract under which a corpus sum is created either as a lump sum or in instalments over a period of time, in return for which the insurance company undertakes to make a periodic payment to the purchaser of the annuity. An annuity is useful in income and retirement planning as it can generate a regular income over a long period of time, on investment of a corpus amount. The annuity paid will depend upon the annuity rate applicable at the time of purchase of annuity. The annuity rate is guaranteed for the entire period. The annuity rates are reviewed periodically with the approval of IRDAI. The rates of different providers need to be compared before buying an annuity.

The holder of the annuity, called the annuitant, can decide the mode of annuity payment. . The options available are monthly, quarterly, half-yearly or annual mode. The annuity provider may specify the minimum and maximum age of entry, minimum purchase price and the minimum annuity payable

An annuity may be an immediate annuity or a deferred annuity. In an immediate annuity the annuity payments begin immediately on purchasing the annuity, depending upon the frequency of payment chosen. In a deferred annuity the vesting age is some time away. In the deferment period the corpus is built. The corpus is used to buy the annuity on the vesting age at the rates applicable at the time of buying the annuity.

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. 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 will decline over time.

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, is more likely than a fixed annuity to outpace inflation. However, higher returns mean higher risks too. For instance, if

the value of the underlying security declines, the value of the annuity will also decline - resulting in lower pay-out.

Annuity providers offer various options for the pay-out which help to tailor the annuity to suit the investor's requirement. The annuity rate will depend upon the option chosen.

Some of the annuity options that are popularly offered are:

- Annuity payable for remainder of life
- Annuity payable for a guaranteed period (5/10/15/20 years) and life after that
- Joint life and last survivor annuity to the annuitant and spouse under which annuity payable to the spouse on death of the purchaser will be either 100% or some other fixed percentage of the annuity payable to the annuitant.
- Life annuity with a return of purchase price on death of the annuitant
- Life annuity increasing at a specified simple rate every year

IRDAI requires the minimum pay out in an annuity to be Rs.1000 per month.

b. Senior Citizens' Saving Scheme (SCSS)

The details of SCSS have been covered in Section 4.1.3 of Chapter 4 in this workbook.

c. Post Office Monthly Income Scheme (POMIS)

The details of POMIS have been covered in Section 4.1.1 (a) of Chapter 4 in this workbook.

d. Monthly income plans (MIPs)

MIPs of mutual funds seek to provide a regular monthly income (without any guarantee to do so) by creating a portfolio that invests pre-dominantly in debt instruments. Children's education plans designed for older children whose educational goals are not too far away, invest pre-dominantly in debt markets to protect the capital, and a small proportion in equity to provide the benefit of growth.

The overall portfolio tends to feature a low level of risk. Debt-oriented hybrids are designed to be a low risk product for an investor who likes to earn the short term debt market return - enhanced by a small equity component that does not significantly add to the risk of the portfolio.

Investors can structure the income from the mutual fund either as dividends received from the scheme or by setting in place a systematic withdrawal of units. Dividend received is exempt from tax in the hands of the investor. In case of withdrawal or redemption of units, the gains made will be taxed as short-term or long-term capital gains.

e. Other Schemes of Mutual Funds

Investors willing to take more risk with their investments for better returns can look to invest in other hybrid schemes of mutual funds which take greater exposure to equity. However, as the equity component in the portfolio increases, the ability of the fund to generate regular periodic income that may be required in the retirement stage will be lower, since equity investments tend to be volatile in the shorter periods. Income funds of mutual funds also provide market-linked returns from investments in debt securities. The drawback for a retired investor is that there is no assurance of the return or income that they will receive and its periodicity.

f. Bank Deposits & Other Deposits

Bank deposits and other deposits will generate the regular income that will be required to meet expenses. Since bank deposits are seen as risk-free institutions, there is a high degree of safety in the investment and the returns committed. The drawback is that deposit products available have a maximum tenor of 5 to 7 years after which the funds have to be re-invested at the rates prevailing in the future. This may be lower or higher than current rates and this causes uncertainty in the retirement income of the individual. Deposits, other than those with banks and financial institutions, have a high degree of risk of default and must form a small part of the portfolio. They are also highly illiquid. Interest received on deposits is taxed at the marginal rate of tax applicable to the individual.

g. Debentures and Bonds

Debentures, bonds and other debt instruments of various issuers can be used to generate a portion of the periodic income that will form part of the retiral income. The choice of the bonds should be made with care to reduce the risk of default by the issuer. The interest earned will depend upon the market rates at the time of issue and the default risk associated with the borrower. The interest is typically paid annually or semi-annually and is taxed in the hands of the investor.

h. Income from Real Estate

Rental income from real estate property held provide a source of income that is adjusted for inflation. The income also has the advantages of being periodic and known in advance to plan and use. Rental yield earned depends upon the price at which the property was purchased. If the property that was purchased at a lower price earlier on is now generating good rental income, it adds to the financial security of the individual. Real estate provides appreciation in value as well as income. However, in the distribution stage of retirement, its ability to generate good rental yields is what is important. The drawback of real estate comes from the

low liquidity that it has. If there is an emergency and funds are required immediately, it will be difficult to liquidate the investment fast, though it is possible to get a loan against the property. Real estate can be one more asset class for generating income in retirement provided the investor has adequate investments in financial assets that are liquid and provide regular income.

The self-occupied home can also become a source of income in the extreme situation of the retirement corpus being inadequate to fund a comfortable retirement. The reverse mortgage scheme is offered by housing finance companies and banks.

The important features of Reverse Mortgage are summarized below:

- a. 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 property 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.
- b. Eligibility Criteria
 - I. Indian citizen of 60 years or more,
 - II. 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.
 - III. 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.
 - IV. The residential property should be free from any encumbrances.
 - V. The residual life of the property should be at least 20 years. There is no minimum period of ownership of property required.
 - VI. The prospective borrower(s) should use that residential property as permanent primary residence.
- c. 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.
- d. A reverse mortgage loan cannot be availed against commercial property.
- e. 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 lakhs, to be used for medical treatment for self, spouse and dependants, if any. The balance loan amount would be eligible for periodic payments.
- f. All receipts under RML shall be exempt from income tax under Section 10(43) of the Income-tax Act, 1961.

- g. The rate of interest and the nature of interest (fixed or floating) will be decided by the lender.
- h. The maximum tenure of an RML will be 20 years.
- i. An RML will become due and payable only when the last surviving borrower dies or permanently moves out of the house. 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.
- j. 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.
- k. 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.
- l. 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.
- m. The Reverse Mortgage Loan Enabled Annuity (RMLEA) is an extension of the reverse mortgage scheme. The scheme ensures a life time payout to the senior citizens through an annuity bought from an insurance company using the reverse mortgage loan amount disbursed by the primary lending institutions.
 - I. The primary lending institutions (housing companies and scheduled commercial banks) will be the interface for the individual. They will assess the property for the eligible loan, disburse it and source a life time annuity with the loan amount from eligible insurance companies.
 - II. The operational guidelines of the National Housing Bank (NHB) defines the loan to value (LTV) ratio to determine the quantum of loan. It starts at 60% between the age of 60 years and 70 years and goes up to 75% for age 80 years and above.
 - III. The borrowing individual has to choose between a lifetime annuity without return of purchase price and a life time annuity with return of purchase price. The scheme also provides for an annuity cover for the spouse of the primary borrower.
 - IV. The amount of annuity received will be a function of the loan value and type of annuity chosen. The borrower can decide on the periodicity of the annuity payment from the options provided such as monthly, quarterly or annual.
 - V. The annuity received is exempt from tax in the hands of the borrower.

The physical and financial assets that are accumulated in the income earning years are used to generate a passive income to support expenses in retirement. Planning early and executing

the plan in a way that considers changing situations ensures that the financial security required for a comfortable retirement is achieved.

Sample Questions

1. **Growth-oriented investments are suitable for which stage of retirement savings?**
 - a. **Accumulation stage**
 - b. Distribution stage
 - c. Income stage
 - d. Investment stage

2. **Inflation does which of the following to retirement planning?**
 - a. Reduces the periodic savings required
 - b. Reduces the return generated by an investment
 - c. **Increases the retirement corpus required**
 - d. Increases the value of the corpus created

3. **The retirement corpus may require review**
 - a. Every year
 - b. **Every time there is a significant change in financial situation**
 - c. Closer to the distribution period
 - d. Not at all

4. **Which of the following is a solution to manage inadequacy of retirement corpus closer to retirement?**
 - a. Invest in riskier assets
 - b. **Postpone retirement**
 - c. Reduce periodic savings
 - d. Increase corpus target

CHAPTER 11: TAX AND ESTATE PLANNING

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Income tax principles
- Tax aspects of investment products
- Wealth Tax Act and implications for clients
- Estate Planning

11.1. Understand Income tax principles

11.1.1 Heads of Income

An individual may have received income from several sources in a year. Income of an individual that is chargeable to tax has to be classified under one of the following heads of income:

- Income from salary:** Salary income refers to remuneration received from the employer for services rendered by the employee. In order to be treated as income from salary, it is essential for an employer-employee relationship to exist. Salary is taxed in the year it is due or received, whichever is earlier. Components of salary income include wages, annuity, pension, gratuity, retirement benefits, fees, commissions and perquisites, profits in lieu of salary, advances and allowance. Elements of salary income, which are exempt from tax, but only up to a specific limit, are taxed to the extent that they exceed the exemption available.
- Income from house property:** Income under this head is taxable if the assessee is the owner of a property consisting of building or land appurtenant thereto and is not used by him for his business or professional purpose. Income earned from a house property is chargeable to tax in the hands of the owner/ deemed owner under the head Income from house property. It is therefore essential that the assessee should be the owner of the property. If a property is transferred to a spouse or minor child, without adequate compensation, it is not valid. The transferor is the deemed owner and income from property is taxable in his hands. The income that is taxed will be computed as:

Gross Annual Value of the property

Less Municipal Taxes and Unrealized rent

=Net Annual Value

Less Standard deductions and/or interest payable

=Income from House Property

- c. Profits and gains from business or profession:** The income charged to tax under this head, is not the income from business or profession, but, the profit or losses from business or a profession, after deducting allowed expenses. Income from business or profession carried on by an individual in a previous year, after adjusting for expenses, is chargeable to tax. Income under this head includes interest, commission, salary, bonus received or accruing, or profits earned from the business. The value of any benefits or perquisites arising out of income or profession is also charged under this head. From the income thus computed, expenses are deducted. The Income Tax Act specifically indicates the expenses that are expressly deductible, generally deductible and expenses that are not allowed to be deducted.
- d. Capital gains:** A capital asset may have changed in value over time, leading to a gain or loss when it is sold. The profits or gains from the sale or transfer of a capital asset is referred to as capital gain and is chargeable to tax. Capital gains are charged to tax in the year of transfer. Capital asset includes movable or immovable property but excludes personal assets except jewellery, paintings, sculptures or works of art. Capital gains accrue when there is a valid transfer. This can be through sale, exchange, relinquishment of right, or a compulsory acquisition under law. However, transfer does not include the following:
- Gift
 - Transfer under a will or irrevocable trust
 - Distribution of the assets of an HUF

Categorisation of Capital Gains

Capital gains are categorized, as short-term and long-term gains based on the period, for which they were held before transfer. The tax treatment differs based on the type of asset and the type of capital gains. If the asset has been held for period not exceeding 36 months, immediately before transfer, the gains, if any, is considered short-term in nature. For units of equity-oriented mutual funds, securities listed on a stock exchange, zero coupon bonds holding period of not more than 12 months is considered for short-term capital gains. Long-term capital gain is that which is not short-term capital gain.

- e. Income from other sources:** Income that cannot be categorized under any of the other heads of income is accounted under this head. It includes the following:
- Dividends
 - Winnings from lotteries, races and other games of chance or skill
 - Contributions received towards PF, superannuation
 - Interest on securities
 - Deemed gifts
 - Where the sum of money received without consideration exceeds Rs. 50000
 - Where the fair value of the movable or immovable property transferred without consideration exceeds Rs. 50000

- Movable property transferred with inadequate consideration, where the difference between fair value and consideration exceeds Rs. 50000
- Gifts received from specified relatives or on the occasion of marriage or under a will or inheritance is not taxed.

Total income for the purpose of tax, is computed by including the income under each of these categories, to the extent, that they are taxable.

11.1.2 Exemptions and Deductions

a. Exemptions

Not all income earned by a person is taxable. Incomes described in section 10 of the Income Tax Act, are not included in the calculation of total income of an individual, for the purpose of determining tax liability. Section 10 of the Income Tax Act list out the sources of income that are exempt from tax. Some important types of income exempt under Section 10 are produced as under:

- Section 10(1) exempts agricultural income, subject to conditions, from tax.
- Section 10(2) exempts share of income from HUF
- Section 10(2A) exempts the income representing the share of a partner in a firm from tax.
- Section 10(5) exempts from tax concession received by an employee for proceeding on leave to any part of India, subject to prescribed conditions.
- Concession received for travel to any place following retirement or termination from service is also exempt
- Any amount received as retirement dues by way of gratuity, commutation of pension, leave encashment, retrenchment compensation and voluntary retirement compensation is exempt. This exemption will be up to prescribed limits. Any amount above the limits will be taxed under the head 'Income from salary'. This is exempt under various sub-sections of section 10(10)
- Section 10(10D) exempts from tax any amount received from an insurance policy, including bonus.
- Section 10(11), 10(12), 10(13),10(13A) exempt receipts from provident funds, superannuation funds and on account of house rent allowance up to prescribed limits.
- Section 10(15)(i),(iib),(iic),(iv)(h),(iv)(i), (vi) and (vii) deal with exemption on interest earned from notified bonds and debentures, capital gain bonds, relief bonds, specified schemes, gold deposit bonds among others
- Section 10 (32) exempts from tax, the income of a minor child clubbed with that of the parent, to the extent of the lower of Rs.1500 or actual income.
- Dividends received from a company or mutual funds, on which dividend distribution tax has already been paid, are exempt from tax in the hands of the investor.

- Long-term capital gains realized from the sale of shares of a company or units of equity-oriented mutual funds, are exempt from tax provided they are sold through a recognized stock exchange or redeemed by mutual fund and securities transaction tax (STT) has been paid as applicable.

b. Deductions

The Income Tax Act allows certain deductions that can be claimed for certain expenses or payments made by the assessee from his total income. Deductions that can be claimed by an assessee are covered under chapter VI –A of the Income Tax Act.

- Section 80 C allows for expense incurred under certain heads or investments made to be deducted from the total income. 100% of the amount invested or Rs.1,50,000, whichever is less, is available as deduction from total income.
 - a. Life insurance premium paid towards life of self, spouse or any child in case of an Individual and members in case of a Hindu Undivided Family.
 - b. Payment towards a deferred annuity contract on life of self, spouse or any child in case of an individual.
 - c. Contribution towards statutory provident fund, recognized provident fund, approved superannuation fund.
 - d. Contribution towards Public Provident Fund Scheme, 1968 in the name of self, spouse or any child in case of an individual or member in case of HUF.
 - e. Any sum deposited in a 10 year or 15 year account under the Post Office Savings Bank (CTD) Rules, 1959.
 - f. Subscription to the NSC (VIII Issue).
 - g. Subscription to units of mutual fund Equity Linked Savings Scheme notified by the central government.
 - h. Contribution by an individual to any pension fund set up by any Mutual Fund referred u/s 10(23D).
 - i. 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.
 - j. 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.
 - k. 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.

- l. 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".
- m. 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.
- n. Term Deposit (Fixed Deposit) for 5 years or more with Scheduled Bank in accordance with a scheme framed and notified by the Central Government.
- o. Subscription to any notified bonds of National Bank for Agriculture and Rural Development (NABARD) (applicable from the assessment year 2008-09).
- p. Account under the Senior Citizen Savings Schemes Rules, 2004.
- q. Five year term deposit in an account under the Post Office Time deposit Rules, 1981.
- Section 80CCC allows deduction from total income for premium paid for an annuity plan of LIC or other insurers within the overall limit of Rs. 1,50,000. 80CCD provides deduction for contribution to pension account subject to a limit of Rs. 1,50,000. Section 80CCD (2) allows contributions made by an employer to the NPS account of an employee as deduction up to a limit of 10% of basic +DA. This deduction is excluded from the earlier mentioned limits, and will be available as further deduction to the assessee.
- Section 80CCG pertains to Rajiv Gandhi Equity Savings Scheme, 2012 (RGESS). The scheme allows retail investors who are investing for the first time to avail a tax benefit on 50% of the investment made up to Rs. 50,000 directly into RGESS eligible securities.
- Premium paid on health insurance policies is allowed as deduction from total income, within the limits specified by section 80D.
- Section 80DD allows deduction on expenses of maintenance of disabled persons up to a limit of Rs. 75,000 or Rs. 1,25,000 depending upon the severity of disability.
- Section 80DDDB allows deduction of the expenditure on medical treatment for very senior citizens, up to a limit of Rs. 80,000 for senior citizens and Rs. 40,000 for others.
- Section 80E allows the entire interest paid on education loan as deduction from the assessment year relevant to the previous year in which the assessee begins paying interest and seven subsequent years.
- Section 80G allows all assessee's to claim deduction up to specified limits for contributions made to charitable organisations.
- Section 80GG provides deduction to an assessee not receiving HRA for rent paid by him up to specified limits.
- Section 80U allows deductions for persons with disabilities of Rs. 75,000 for normal disability and Rs. 1,25,000 for severe disability.
- Section 80TTA provides deduction for interest earned from savings bank account up to a limit of Rs. 10000.

11.1.3 Types of Assesseees

The categories of persons chargeable to tax under the Income Tax Act, 1961 include

- Individuals
- Hindu Undivided Family
- Company
- Firm
- Association of persons
- Local authority
- Other persons not included above

The residential status of the assesseees is determined for each previous year for the purpose of taxation. Except for individual assesseees, the primary factor determining the residential status of the other assesseees is if the control and management of the affairs of the assessee was situated in India or outside.

a. Individual Assessee

An individual assessee may be a resident individual or a non-resident individual in a previous year. A resident individual is an assessee who has been in India in the previous year for 182 days or more or he has been in India for 60 days or more in the previous year and 365 days or more in the four years immediately preceding the previous year.

b. Non Resident Individuals

An Indian citizen or a person of Indian origin, who is not a resident as defined above, is called an NRI (Non-Resident Indian) for the purpose of taxation.

NRIs have the option of being covered by the special provisions of chapter XII A of the Income Tax Act, for investment income earned on assets. Interest earned on NRE accounts, FCNR and RFC deposits are exempt from tax. Any investment income from specified assets is taxed at the rate of 20% and long-term capital gains at the rate of 10%. Specified assets include shares, debentures, government securities, deposits and other notified assets acquired out of foreign exchange. The NRI will not have the benefit of deduction under chapter VIA or benefit of cost indexation for capital gains, if they chose to use the concessions of this chapter. They do not have to file income tax return if the income covered under this head is the only income for the year and tax has been deducted at source.

NRIs can choose not to be governed by the provisions of unit XII A. They have to give a declaration to this effect, along with the return of income. In this case, they will be assessed under the normal provisions of the Act. They will, however not be allowed deductions under Section 80. They also will not be eligible for indexation benefits. However, Capital gains exemption for investing in specific assets is available to them.

The special provisions applicable for NRI investors may continue to be available even after an NRI becomes a resident, for specified assets, financed by convertible foreign currency.

c. Person of Indian Origin (PIO)

An NRI under Indian Income Tax Act is defined as a Person of Indian Origin (PIO) if he or she:

- Has held an Indian passport at any time, or
- Is a grandchild of citizens of India, or
- Is a spouse of an Indian citizen, or
- Is a spouse of a person covered under the first two points above

d. Hindu Undivided Families

Hindu undivided family (HUF) is an Indian structure where the assets belonging to a family is managed centrally. To form a HUF, ancestral property or specific income that can be attributable to the HUF and not an individual, should be in existence to begin with. Other assets including investments can then be acquired by the HUF, using the funds at its disposal.

A HUF is defined under the Hindu Law as a family that consists of all persons lineally descended from a common ancestor, including wives and unmarried daughters. The Karta is the head of the HUF and has to be the senior-most male member of the family, unless he gives up his right in favour of another senior male member of the family. The male members of the HUF are called co-parceners and female members are called members.

For purposes of taxation, an HUF is treated like an individual investor, provided it has at least three co-parceners. The income of the HUF should accrue from its own assets. Any income arising from assets transferred by a member or co-parcener will be clubbed to their respective incomes and taxed as such. They will not be treated as the income of the HUF.

Gross Total Income

The Gross Total Income of an individual comprises of the income under all the various heads. After arriving at the gross total income, adjustments are made for set-off and carry forward provisions as applicable. Section VI-A, of the Income Tax Act, specifies the deductions allowed from the total income of an individual. These deductions are provided under sections 80C to 80U of the Income Tax Act. Such deductions are allowed only against specific expenditures and payments made during the financial year. Deductions allowable under the Income Tax Act cannot exceed the total income of the individual.

11.1.4 Rates of Taxation

After arriving at the net income liable to tax, after taking into account all deductions allowable, one needs to apply the respective tax rate to arrive at the income tax payable. Rates of taxation are different for different types of assesses and are declared each year in the Finance Bill which is further approved and passed as the Finance Act. Income tax rates are structured slab wise, based on lower tax for lower income and higher rate of tax for highest of income.

Rates applicable to financial year 2015-16 are as follows:

a. Individuals below 60 years of age

Income Slabs	Income Tax Rates
Where total income does not exceed Rs. 250000	Nil
Where total income exceeds Rs. 250000 but does not exceed Rs. 500000	10% of the amount by which the income exceeds Rs. 250000
Where total income exceeds Rs. 500000 but does not exceed Rs. 1000000	Rs. 25000 + 20% of the amount by which the income exceeds Rs. 500000
Where total income exceeds Rs. 1000000	Rs. 125000 + 30% of the amount by which the income exceeds Rs. 1000000

b. Individuals of 60 years and above but below 80 years of age

Income Slabs	Income Tax Rates
Where total income does not exceed Rs. 300000	Nil
Where total income exceeds Rs. 300000 but does not exceed Rs.500000	10% of the amount by which the income exceeds Rs. 300000
Where total income exceeds Rs.500000 but does not exceed Rs. 1000000	Rs. 20000 + 20% of the amount by which the income exceeds Rs. 500000
Where total income exceeds Rs. 1000000	Rs. 120000 + 30% of the amount by which the income exceeds Rs. 1000000

c. Individuals of age 80 years and above

Income Slabs	Income Tax Rates
Where total income does not exceed Rs. 500000	Nil
Where total income exceeds Rs. 500000 but does not exceed Rs. 1000000	20% of the amount by which the income exceeds Rs. 500000

Where total income exceeds Rs. 1000000	Rs. 100000 + 30% of the amount by which the income exceeds Rs. 1000000
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Education cess at 2% and higher education cess at 1% will apply to all rates. For incomes greater than Rs. 1 crore, a surcharge of 12% shall apply.

11.1.5 Obligation for Filing and Reporting

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:

a. 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.

b. 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.

c. 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.

d. Alternate Minimum Tax (AMT)

Any person, other than a company, who has claimed deduction under chapter VI-A shall be liable to pay AMT if the regular income tax payable by them is less than the AMT. AMT is

calculated on the adjusted total income at the rate of 18 ½ %. The adjusted total income is the total income before taking the benefits of deduction under chapter VI-A and section 10AA (deduction on profits derived from export of specified goods and services, subject to conditions). The provisions of AMT shall not apply if the adjusted total income does not exceed Rs. 20 lakhs.

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 2013-14 the due dates would be September 30, 2014 or July 31, 2014, as the case may be.

a. 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.

b. 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.

c. 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.

11.2. Tax aspects of investment products

Income from investments is subject to tax as per the provisions of the Income Tax Act, as amended from time to time. The following heads of income from investments are subject to tax, unless specifically exempt:

- Dividend income
- Interest income
- Realized capital gains

Dividends and interest are paid out by the issuers of securities, while capital gain (or loss) is realized when investors make the decision to sell or redeem their investment. If the sale or redemption is at a price that is higher than the cost of purchase, there is a capital gain. If the redemption price is lower than the cost, there is a capital loss.

Interest and dividend income is taxable as income from other sources. Realized gains are taxable as capital gains. Bank and post office deposits, securities including bonds and shares, and units of mutual funds are exempt from Wealth Tax in India.

11.2.1 Types of tax benefits

The form in which a tax benefit may be offered can vary. The following are the three types of tax benefits that have been offered on investments.

a. Exemption

Certain types of income are exempted from tax. In other words, one need not pay any tax on such income. Dividend received from equity shares and mutual funds is fully exempt from tax.

b. Deduction

Either the investment made, or the income received on the investment, or both, can be deducted (usually up to a certain limit) from the taxable income. In other words, the income on which tax will be calculated gets reduced to the extent that some income received or investment made. There is a list of eligible investments provided under Section 80C. Investments in these instruments made up to a maximum limit of Rs. 1,50,000 in a financial year, are available as deduction.

c. Rebate

After income tax is computed, the actual tax payable is reduced, if a rebate is allowed on account of specific investment that was made. In other words, based on a pre-defined formula, the amount of tax payable is reduced, since the investor has made certain investments that are eligible for such rebate. For example, section 87 A provides a rebate of Rs. 2000 for all individual assessee whose income does not exceed Rs. 500000.

d. Exempt-Exempt-Taxable (EET) Regime

Tax benefits are available to investors either on the amount of investment made, or on the income earned from their investments, or both. In order to rationalize the tax benefits the government has introduced a deferred taxation regime for several investments.

The logic is that investors would enjoy a tax deduction on their investments, earn a tax-free income on the investment, but pay income tax on the investment when it is redeemed. Such a tax regime would encourage long term saving, so that the incidence of tax is deferred or postponed to a later date.

This regime is called EET, because:

- Investment made is Exempt
- Income earned is Exempt
- Redemption or sale proceeds are Taxable

e. Marginal Rate of Tax

The First Schedule of Finance Act passed by the government every year (as part of the Union Budget exercise) indicates the rate of income tax applicable to various categories of tax payers.

The income tax rates applicable to individuals, HUFs, NRIs, Indian and foreign companies may vary, as these are recognized as different categories of tax payers.

Usually income tax rates are indicated in slabs. The marginal rate of tax refers to the rate applicable at the highest slab, given the taxable income of the investor.

Problem: Arun's taxable yearly income is Rs.15 lakhs. He is told that the interest income of Rs. 50,000 that he earned from his bank deposits will be taxed at the marginal rate of tax applicable to him. What does this mean?

Solution: Lets us assume that the income tax rates that apply to Arun are based on the following slabs:

Up to Rs.250000	Nil
>Rs.2,50,000 but <Rs.5,00,000	10%
>Rs.5,00,000 <Rs.10,00,000	20%
>Rs.10,00,000	30%

No tax on the first	Rs.250,000	-
10% tax on the next	Rs.250,000	25000
20% tax on the next	Rs.500,000	100000
30% tax on the balance	Rs.500,000	150,000

The Rs. 50,000 of interest income earned by Arun cannot be added the first slab and considered exempt, or subject to tax at 10% or 20%. If the interest income is taxable at the marginal rate, it refers to the highest rate applicable for his level of taxable income.

Arun's marginal rate of taxation is 30%, which is the rate that will apply on his interest income from bank deposits.

f. Effective Rates of Tax

The actual income tax to be payable may be increased by imposing a surcharge or a cess. The effective rate of Income Tax goes up when such charges are imposed.

Problem: Amudha learns that she has to pay 30% of his interest income as tax. She is also told that a surcharge at 12% and educational cess at 3% will also apply. What is the effective rate at which her interest income will be taxable?

Solution: The base rate is 30%. The surcharge and cess will not be added to this rate. Assuming that the effective tax rate is 30%+12%+3% is wrong. The surcharge and cess will apply as a percentage of the base rate.

In Amudha's case, the base rate is 30%

Adding surcharge at 12% the effective rate will be

30% +12% of 30%

= 33.6%

Adding surcharge at 12% and cess at 3% the effective rate will be

= 33.6% +3% of 33.6% =34.60%

The same result can be obtained by doing

$30 \times (1.12) \times (1.03) = 34.60\%$

The effective rate of taxation is 34.60%

11.2.2 Taxation of Dividends

Dividends are exempt from tax in the hands of the investor. They are however subject to additional tax on dividends which is paid directly by the company or the mutual fund before it distributes dividends to the investor. In case of dividends distributed by companies, it is

called Corporate Dividend Tax (CDT). The rate of CDT for companies is currently 15%. In case of dividends distributed by mutual funds, it is called Dividend Distribution Tax (DDT). The rate of DDT differs for different types of funds. The tax on dividends is paid directly by the company of the mutual fund which declares the dividend. Sections 115-O and 115-R have been amended so that the rate of tax is now applicable on the gross amount and not on the dividend paid or distributed. The effective rate of tax on dividends has thus gone up. The impact on the investor is that the return would be lower to the extent of the tax so paid. The change is applicable from October 1, 2014.

Mutual funds offer both equity and debt funds. A mutual fund however pays no interest. All distributions by a mutual fund to its investors are in the form of dividends. However, the source of income from which such dividend is paid, may be interest or dividend. This means, technically a mutual fund may earn interest income on its debt fund portfolio and pay it out as tax-exempt dividend to its investors. This creates a tax-arbitrage for investors. Instead of investing in bonds and earning taxable interest income, investors could buy debt funds. The debt funds in turn could invest in the same bonds, earn and interest income, but distribute it to the investors as tax-exempt dividend. The DDT payable by mutual funds will therefore depend on the type of fund and whether its chief source of income is dividends or interest income.

For purposes of determining DDT, mutual funds are classified into three categories (Section 115R (2)):

- a. Equity-oriented funds, having at least 65% of their assets in equity and equity-oriented securities
- b. All other funds that are not equity-oriented as per (a) above

Equity-oriented funds are deemed to be receiving most of their income from dividends. These dividends are paid by companies, which have already paid the corporate dividend tax. Therefore equity-oriented mutual funds are not subject to DDT.

Other funds (liquid funds and other funds that are not equity-oriented funds) are deemed to be receiving most of their income as interest. They are subject to DDT as follows:

- 25% if the dividend is paid to individuals or HUFs
- 30% if the dividend is paid to all other categories of investors

Any profit or gain arising from the sale or transfer of a capital asset is taxable as capital gains. If a sale or transfer of a capital asset results in a loss, such loss is called capital loss.

11.2.3 Taxation of Interest Income

Income from an investment may be in the form of interest or dividend. The tax treatment for both these types of income is different.

Interest is taxable, unless specifically exempt from income tax. If a bond or deposit is specifically issued as a tax-free instrument, the interest income may be exempt. Interest

income is taxable at the marginal rates of tax applicable to the investor. Sometimes specific products are created for a certain category of investors who may earn a tax free interest. Interest on bank deposits offered to NRI investors, for example, is exempt from tax, but interest on bank deposits is taxable for all other categories of investors.

Interest may also be subject to tax deduction at source (TDS). TDS is collected to ensure that at least a portion of the tax due on the income subject to tax, is collected upfront. Whether an interest income is subject to TDS is stated by the issuer. The rates at which TDS will apply are notified by the government. The interest income is paid only after the deduction of TDS, where applicable. TDS will apply only if the interest being paid out exceeds a minimum amount as indicated by the government.

Section 197A of the Income Tax Act provides relief to individuals who can seek exemption from deduction of tax at source. Such individuals have to submit a declaration in Form 15H (senior citizens) or Form 15G (others) to the issuer. The income of such depositors in the previous year has to be lower than the exemption limit. Form 15H and 15G are downloadable from websites of banks. The TDS on interest paid will not be deducted in these cases.

11.2.4 Taxation of Capital Gains

Capital Assets

Capital asset is defined under Section 2(14) of the Income Tax Act as a property of any kind, whether connected with the business or not, movable or immovable, tangible or intangible except for the following, which are not capital assets:

- Any stock-in-trade
- Consumable stores or raw materials held for the purpose of business or profession
- Certain personal effects that are movable and are held for personal use
- Agricultural land in India
- Certain gold bonds
- Special bearer bonds issued in 1991

Investments in securities will classify as capital assets, as per the above definition. Gold, jewellery, paintings, sculptures and immovable property are also classified as capital assets.

A capital gain (or loss) from the sale or transfer of an asset can be a short term capital gain (or loss) or long term capital gain (or loss) depending upon the period for which it was held by the investor.

a. Short and Long Term Capital Gains

A capital asset held by an investor for not more than 36 months before sale is short term capital asset. However, the following financial assets if held for not more than 12 months are treated as short term capital assets:

- Securities (other than units) listed in a recognized stock exchange in India,
- Units of UTI and units of mutual funds of equity-oriented schemes specified under section 10(23D) Zero coupon bonds issued on or after June 1, 2005.

A capital asset that is not a short term capital asset is a long term capital asset. If an investor redeems or sells his holdings in investments specified above after a period of 12 months from the date of purchase, the capital gains are taxed as long-term capital gains (LTCG). Any redemption or sale of such investments on or before a period of 12 months is over is treated short term capital gains (STCG). The rates of taxation for the two are different.

Problem: Amrita invests in an equity-oriented mutual fund on January 31, 2012, buying 1000 units at Rs. 10 each. The NAV of the fund on December 31, 2012 was Rs.15; and on December 31, 2013 it was Rs. 25 per unit.

What is the nature of her gains if she sells the units in December 2012 itself, and if she sells the units in December 2013?

Solution: If she sells the units on December 31, 2012, she will realize a capital gain of Rs. 5000. This is a short term capital gain.

If she sells her units on December 31, 2013 at Rs. 25 per unit, she makes a long term capital gain of Rs. 15000.

b. Indexation

Long-term capital gains can avail the benefits of indexation to rationalize the tax payable on it. If investors held an investment for the long term, they could claim that the increase in the price of the investment was from the effect of inflation, and that no real gains have been made.

The Central Board of Direct Taxes (CBDT) seeing the merit in this claim publishes a standard indicator of inflation rate, called the Cost of Inflation Index (CII). An investor making a long term capital gain can adjust the cost of acquisition for inflation using the numbers provided in the CII. This process is called indexation. If the inflation is positive the CII will show an increasing trend. Therefore adjusting the cost for inflation will increase the indexed cost of acquisition, thus bringing down the long term capital gain that is subject to tax.

Indexed cost of a long term capital asset

= Cost of acquisition x (Index in the year of sale/Index in the year of purchase)

Problem: Anil bought listed debentures at Rs. 100 in the year 2011 and sold them at Rs.120 in the year 2014. If the cost of inflation index for 2011 was 785 and for 2014 it was 939, what is the indexed capital gain for Anil?

Answer: The long term capital gain without indexation is $(Rs.120 - Rs.100) = Rs.20$ per unit.

The cost of acquisition adjusted for inflation is

$$= 100 \times (939 / 785)$$

$$= 119.6$$

His indexed capital gain is

$$Rs. 120 - Rs. 119.6$$

$$= Re. 0.04$$

The long capital gain has come down from Rs.20 to Re.0.04 due to indexation.

c. Double Indexation

The indexation of long-term capital gains is a benefit that is available based on the CII, for all capital asset transactions in a financial year. Therefore acquiring an asset at the end of financial year and selling it at the start of the next financial year can create a double indexation benefit.

Rates of Taxation

Short-term capital gains (STCG) for equity shares and equity-oriented funds are taxed at 15% (Section 111A). In case of all other securities and funds, STCG is taxed at the marginal rate of tax applicable to the investor.

Long-term capital gains (LTCG) are exempt from tax in the case of equity shares and equity-oriented funds (Section 10(38)). In the case of all other securities they are taxed at 10% without indexation or 20% after indexation (Section 112). LTCG from units of non- equity oriented mutual funds will be taxed at 20% after indexation. The rates of tax have to be increased by surcharges and cess where applicable.

No TDS is deducted at source by mutual funds on capital gains of resident investors at the time of redemption of units.

Exemptions

In the calculation of capital gains for tax, certain exemptions are provided by the Income Tax Act. These exemptions are available as deductions from taxable income.

- Section 54 exempts long-term capital gains from sale of residential house from tax to the extent that the gains have been invested in another residential property purchased or constructed in India. This exemption is applicable only to individuals and HUFs. The other residential property should have been purchased within one year before or two years after of sale of the first residential house.

- Section 54EC, exempts long-term capital gains on the transfer of any capital asset if they are invested in bonds specified for this exemption within a period of six months after the transfer in the financial year of the transfer or the subsequent financial year. This exemption is available up to a limit of Rs. 50 lakhs. The lock in period is of 3 years.

11.2.5 Set off and Carry forward of Losses

Set off refers to reducing the income of a year, with expenses or losses, as may be allowed by the Income Tax Act. Losses can be carried forward and set off against income from the same head in a specified number of years after the previous year in which it was incurred. Losses incurred in a previous year can be set off against income earned under the same head or other heads of income, subject to rules. Losses can also be carried forward, to be set-off against income from subsequent years.

- Losses from house property can be carried forward and set-off against income from other house properties or other income for a period of 8 years.
 - Losses from business or profession can be set off against income from the same head or other heads of income. Losses can be carried forward for a period of 8 years.
 - Losses from speculative business can be set-off against profits under the same type. Losses can be carried forward for a period of 4 years.
- a. Set off of capital loss:** Investors, who make a capital loss from their investments, are allowed to carry forward the loss for eight years from the date of the loss. Investors can deduct the loss that is carried forward, from the capital gains made in the subsequent years reducing the capital gains tax. This act of reducing the capital gains by deducting the capital loss is called set off. The rules for set off are as under:
- Loss arising from a short-term capital asset can be set off against the gains arising from the sale of a long or short-term capital asset.
 - Loss arising from a long-term capital asset can be set off only against the gains from the sale of long-term assets.
 - Any loss under the head capital gains, either short or long term, can be set off only against income from the same head (capital gains).
 - Short or long term capital losses cannot be set-off against any other source of income.

Securities Transaction Tax

The exemption provided to long term capital gains from taxation led to the introduction of a new tax for equity shares and equity-oriented mutual funds, called the securities transaction tax (STT). STT is applicable on:

- Purchase and sale of equity shares on the stock exchange @ 0.10% for deliver based transactions and 0.025% by seller in case of an intra-day transaction.
- Sale of an option in securities @ 0.017% payable by the seller.

- In case of an option in securities, where option is exercised @ 0.125 payable by the purchaser and 0.017% by seller on premium value.
- Sale of futures in securities @ 0.01% payable by the seller.
- Redemption and switch of units from equity-oriented schemes @ 0.001%.

STT is applicable irrespective of the tax status of the investor. It is computed on the amount of redemption or sales value and is reduced from the redemption or sales proceeds paid to the investor. STT is paid to the government and the redemption or sale proceeds are paid to the investor.

11.3. Wealth Tax Act and its implication for clients

Wealth Tax has been abolished with effect from 1st April, 2016.

11.4. Estate Planning

Estate planning refers to the organized approach to managing the accumulated assets of a person in the interest of the intended beneficiaries. Wealth may be accumulated with a specific purpose of being passed on to heirs, to charity, or to any other intended purpose. Without formal structures that ensure that these purposes are met, there could be disputes, conflicting claims, legal battles, avoidable taxes and unstructured pay-offs that may not be in the best interest of the beneficiaries.

Estate planning covers the structural, financial, legal and tax aspects of managing wealth in the interest of the intended beneficiaries.

11.4.1 What constitutes estate?

The term 'estate' includes all assets and liabilities belonging to a person at the time of their death. This may include assets as well as claims a deceased is entitled to receive or pay. The term estate is used for assets whose legal owner has deceased, but have not been passed on to the beneficiaries and other claimants. Once transferred, the estate becomes the assets of the beneficiary who has received the legal ownership. Estate can also be passed on to a trust and managed by trustees, in which case ownership is with a distinct entity, but periodical benefits from the estate is passed on to beneficiaries.

11.4.2 Consequences of dying Intestate

If person dies without making a will, he is said to have died "intestate" and in such case his property will be inherited by his heirs in accordance with laws of succession applicable to him. The end result may not be what the person would have intended. If the dependents include minor or incapacitated children, more than one spouse, elderly parents or in-laws, or siblings and siblings-in-law, there may be disputes in distribution of property. Distribution of estate

may also suffer due to lengthy legal procedures and administration costs. This could add both inconvenience and financial burden to the family. Succession is governed by personal laws, which will apply in the case of intestate death. Different personal laws apply as follows:

- The Hindu Succession Act, 1956
(Applicable to Hindus, Buddhists, Jains and Sikhs)
- Indian Succession Act, 1925
(Applicable to Christians, Jews and Parsis)
- Mohammedan Personal laws
(Governing inheritance of Muslims)

The prolonged dispute, legal battles and costs can be avoided, if intestate death is prevented through timely estate planning.

11.4.3 Elements of Estate Planning

Estate planning involves the following broad set of activities:

- Identifying the beneficiaries and their claim to the estate through a comprehensive documentation such as the legal Will.
- Creating tax-efficient structures such as trusts to manage the estate and make periodic payouts to beneficiaries.
- Creating organizational structures including trustees, executors, guardians, power of attorney to perform identified functions in administering, protecting and managing the estate.

11.4.4 Tools for Estate Planning

Estate planning tools can be classified as those that take effect during the life of a person and after death of a person.

a. During the lifetime of the individual:

- Trust
- Joint Holding
- Gift
- Family Settlement
- Power of attorney
- Mutation

b. After the death of the individual

- Will
- Nomination

11.4.5 Wills

“Will” is defined in Section 2(h) of the Indian Succession Act 1925 to mean the *“legal declaration of the intention of the testator with respect to his property, which he desires to be carried into effect after his death.”*

The person making the will is the testator, and his rights extend to what are legally his own. The will comes into effect only after the death of the testator.

The person who is named in a will to receive a portion of the deceased person’s estate is known as a legatee.

The person named in the will to administer the estate of the deceased person is termed as an Executor.

a. Essential Features of a Will

- A testator can only dispose-off what he owns and what is essentially legally transferable.
- Example: Arvind and his wife are joint owners of their house, funded by a joint loan. Arvind wills the house to his only son, who asks his mother to vacate the house after Arvind’s death. Arvind’s wife can contest this will on the grounds that she is the joint legal owner of the house, having paid valid consideration. Arvind cannot bequeath to his son, what he does not own.
- A testator can change the contents of the will any number of times, before his death. Such changes to the will are called ‘Codicils’. A will can also be revoked by the testator at any time before his death.
- A will can only be made by a person competent to make it. A minor or a person of unsound mind cannot make a will.
- Only using the words ‘will’ without making reference to disposal of property upon death of testator is not a will.
- A will has to be written and signed in the presence of two witnesses. However, subject to certain conditions, persons working in the armed forces can make an oral Will.

b. Contents of a Will: A will must have the name and address of the testator and a statement that the will is being made voluntarily. The beneficiaries under the will must be clearly listed as must the property that is being bequeathed. The will have an executor. It must be signed by the testator and attested by two witnesses.

A will has to be unambiguous and certain as to its intent to bequeath. To avoid disputes only a single copy of latest valid will should be in existence, witnesses should sign in the presence of each other, a residuary clause that leaves all assets that remain uncovered in the bequests to an identified beneficiary should be included in the will and a statement stating that the current will revokes all previous bequests of any nature should be included in the will.

- c. Registration of Wills:** It is not compulsory to register a will. However, it is usually a good practice to register a will. A registered will cannot ordinarily be tampered with, destroyed, mutilated, lost or stolen. If a will is registered, no person can examine the will and copy the contents without an express permission in writing of the testator.
- d. Probate:** Probate is defined in section 2 (f) of the Indian Succession Act to mean the copy of a will certified under the seal of a court or competent jurisdiction. A probate certifies that a particular will was proved on a certain date and is given attaching copy of the will of which probate has been granted.

11.4.6 Gifts, Joint Holding and Nomination

a. Gifts

A gift is a transfer of movable or immovable property made voluntarily and without consideration. The person making the gift is called donor; the person receiving a gift is called the donee. Any person capable of making a contract can make a gift. A gift is usually an irrevocable transfer, but it can however be revoked if the donee agrees to do so.

Gifts are taxable as income from other source, subject to exemptions provided u/s Sec 56 (2) (vii) of the Income Tax Act. This includes gifts received from relatives such as spouse, siblings of self and spouse, parents, grandparents, children, grandchildren, among others. Any gift received on the occasion of marriage or inherited under a will is exempt from tax.

Gifts are routinely used to transfer wealth from donor to donee; especially where the exemptions mentioned above would apply, thereby exempting the gift from tax in the hands of the donee. However, any income earned from the gift after such transfer will be subject to tax routinely in the hands of the donee.

b. Joint Holding

It may be procedurally easy to enable specific family members, such as the spouse or children, easily access assets through the simple method of joint holding. Joint holding means the property is held by more than one person and can be accessed by such joint holders subject to the mode of operations. Bank accounts, property, demat accounts, shares, mutual funds and specific saving schemes can all be held jointly. The operation of a joint account can be jointly, where all joint holders have to approve all transactions, or on either of survivor, or anyone or survivor basis. The specific procedural aspects for joint holding, with respect to how many joint holders are permitted, what kind of operational choices are available, and what type of transactions need all joint holders' assent, can vary across different types of assets. It is usually the case that the first holder would be the registered holder of the asset and entitled to receive information and benefits of holding the asset. The joint holders can, subject to terms of holding, access the asset after the death of the first holder. The procedures for accessing the asset are simpler in the case of a joint holding. However, it should be remembered that if there is a legal contest among the heirs, joint holders right to the asset can be superseded by laws of succession as they may apply.

c. Nomination

Nomination is the right conferred upon the holder of an investment product to appoint the person entitled to receive the monies in case of the death. A nomination is seen as a formal bequest authorized by the holder of the asset, though in the event of a dispute the nominee's position is reduced to being the trustee of the bequest, the final owners being decided according to the applicable laws of succession.

Only an individual can nominate. Non-individuals including corporate bodies, partnership firms, trusts, Karta's of Hindu Undivided Families (HUFs) and power of attorney holders, cannot nominate. Nomination can be done either at the time of making the investment or entering into an insurance contract or subsequently at any time. Nominations can be modified any number of times.

Nominee can be an individual, company or trust, depending on the terms of investment or asset. A minor can be a nominee, but a guardian will have to be named. Nominations to NRIs will be honoured subject to repatriation rules. Multiple nominees may be allowed, with percentage of interest defined for each nominee.

Different rules for nomination apply for different types of assets.

The purpose of nomination is simplification of payment process in the event of the death of the holder and not the equitable distribution of estate.

Payment to nominee is valid discharge in case of all financial products. The onus of proving any rights to legacy of the investment so transmitted is on those that contest such transmission. A will supersedes a nomination, but the company or mutual fund can still make payment of proceeds to the nominees. The nominee is not a legatee or beneficiary under the Indian Succession Act. The nominee takes the amount subject to any claim or right of the owners/heirs or other persons. The nominee may only receive the proceeds, but title to the assets is not absolute.

11.4.7 Family Settlement and Trusts

a. Family Settlement

A family settlement is an instrument used to achieve peace and harmony in the family when there is a dispute or rival claims to property that can lead to a long drawn out litigation. The dispute must be between members of the same family and a settlement entered must be between persons having title, claim or interest in the property. It must be entered into voluntarily and in good faith and with the purpose of accomplishing tranquillity and accord in the family.

The advantages of a family settlement are

- Family arrangements are not treated as transfer and hence capital gains tax will not arise.

- It is not treated as a gift.
- The clubbing provision will not be applicable.

A family settlement agreement may be oral or in writing. It may be stamped and registered, if required.

b. Trusts

“A trust” is an obligation annexed to the ownership of property, and arising out of a confidence reposed in and accepted by the owners, or declared and accepted by him, for the benefit of another or of another and the owner. The trust is managed by trustees. The person(s) for whose benefit the trust is created is the beneficiary. The trustee holds the legal title and exercises control over the trust property in the interest of the beneficiary. The trust deed defines the purpose of the trust, the beneficiaries, the property of the trust and power of the trustees, among others. The trustees sign the trust deed to indicate their willingness to accept the responsibility for the trust.

Based on the constitution, trusts can be classified as public trust or private trust. Private trusts are increasingly used as a tool for estate planning to benefit the dependents of the settler of the trust as well to plan taxes. No probate is required for assets transferred through a trust.

Private trust is a private document as compared to a Will which gets published in the newspapers when executed. Private trust does not require any registration unless it involves any immovable property. Private Trust offers an insolvency protection, provided it is an irrevocable trust and assets are transferred to a trust 2 years prior to insolvency and the trust is formed with a genuine objective. Private trust offers stepwise access to the family legacy.

The property of the trust may be movable or immovable property. The ownership of the property has to be transferred to the trust when the trust is created.

11.4.8 Power of Attorney and Mutation

a. 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:

- **General POA:** Enables the donee to act on all matters for the donor. The general list of matters covered in this category includes management of bank accounts, sale of property, attending dealings in court, etc.
- **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.

b. 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.

Sample Questions

1. Commission received from business forms part of income from _____.
 - a. Business and profession
 - b. Capital Gains
 - c. Salary
 - d. Other sources

2. Long term capital gain from sale of shares is _____.
 - a. Taxed at 10%
 - b. Exempt from tax
 - c. Taxed at 20%
 - d. Taxed at 15% with indexation

3. The Rajiv Gandhi Equity Savings Scheme, 2012 allows exemption up to _____ for investments made in eligible securities up to Rs. 50,000.
 - a. 100%
 - b. 50%
 - c. 40%
 - d. 60%

4. For a person to be qualified as a NRI, he must have stayed outside India for more than _____ days in a previous financial year.
 - a. 365
 - b. 280
 - c. 182
 - d. 150

CHAPTER 12: REGULATORY ENVIRONMENT AND ETHICAL ISSUES

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- SEBI (Investment Advisers) Regulation, 2013
- Role of regulators and SROs
- Prevention of Money Laundering Act, 2002
- Ethical issues in providing financial advice
- Investor Complaint Redressal System

12.1. Regulation for Investment Advisers

SEBI notified the SEBI (Investment Advisers) Regulation, 2013 in January 2013 with a view to regulate the activity of providing investment advisory services in various forms by independent financial advisors, distributors, banks, and other such entities. The said Regulations become effective from April 2013.

12.1.1. Definition and Requirement to Register

a. Certificate of registration

Any person who proposes to provide investment advice as defined under the regulations or who qualifies under the definition of “Investment Adviser” shall be required to obtain a registration certificate from SEBI in order to continue to do this activity. A six month period has been allowed for existing investment advisers to apply for certification. These investment advisers may continue to provide advisory services till their application is processed. The certificate of registration granted by SEBI is valid for a period of five years from the date of its issue. An investment adviser needs to apply for renewal of his registration certificate, three months before expiry of the original certificate of registration.

b. Investment advice and Investment adviser

The term “investment advice” has been specifically defined under the regulations. It means any form of advice provided in relation to investment, purchase, sale or dealing in securities or investment products. It also includes advice on a portfolio of securities or investment products and financial planning. Such advice may be provided as a written advice or an oral recommendation or through any other mode such as email aimed at the benefit of the client. However, advice that is widely available to the public through newspapers or internet or magazines is not considered as investment advice under the regulations.

12.1.2 Exemptions

Any person who provides investment advice to his clients is known as an investment adviser. However, the investment adviser regulations have exempted certain categories of persons from the requirement of registration. These include:

- Any person who gives general comments on financial trends, economic situation which is not stock/product specific.
- Insurance agents or brokers providing investment advice only in insurance products,
- Pension advisors offering investment advice only on pension products,
- Mutual fund distributor, who provides investment advice incidental to distribution of mutual fund products
- Advocates, Solicitors, member of Institute of Chartered Accountants of India, member of Institute of Company Secretaries of India, Institute of Cost and Works Accountants of India, Actuarial Society of India or any other professional body providing investment advice incidental to their professional service.
- Stock broker or sub-broker, portfolio manager registered under SEBI (Portfolio Manager) Regulations, 1993, merchant banker providing investment advice incidental to their primary activity.
- Fund managers of mutual funds, alternative investment funds.
- A person providing investment advice only to clients based out of India, not being Non Resident Indians or Persons of Indian Origin.

12.1.3 Qualification & Certification Requirements and Capital Requirement

- a. Qualifications:** The Regulations specify certain minimum qualifications for a person to be eligible to be known as an investment adviser. If an individual seeks registration as an investment adviser, or a partner or representative of an investment adviser registered under the Regulations must possess these qualifications.
- A professional qualification or a post graduate degree or post graduate diploma in finance, accountancy, business management, commerce, economics, capital market, banking, insurance or actuarial science from a university or an institution recognized by the central government or any state government or a recognised foreign university or institution or association OR
 - A graduate in any discipline with an experience of at least five years in activities relating to advice in financial products or securities or fund or asset or portfolio management.
- b. Certification Requirement:** An investment adviser must obtain valid certification on financial planning or fund or asset or portfolio management or investment advisory services from NISM or from any other organization or institution including Financial

Planning Standards Board India or any recognized stock exchange in India provided that such certification is accredited by NISM.

Existing investment advisers seeking registration must ensure that their partners and representatives obtain such certification within two years from the date of commencement of the Regulations.

c. Capital Requirement

In order to ensure financial stability of an investment adviser, the Regulations have mandated that investment advisers must have net worth above a minimum threshold at all times. For investment advisers which are body corporate, net worth of not less than Rupees Twenty Five Lakhs has been stipulated rupees. Investment advisers who are individuals or partnership firms shall have net tangible assets of value not less than Rupees One Lakh.

Investment advisers in existence before commencement of the Regulations must comply with the capital adequacy requirement within one year from the date of commencement.

12.1.4 Obligations and Responsibilities of Investment Advisers

a. General Obligations

The nature of service that is provided by investment advisers is directly related to the financial situation of their clients. The relationship between the investment adviser and client is that of trust and the investment adviser, while performing his role, should act in good faith in the best interests of the client. The Investment Adviser Regulations have cast upon investment advisers certain obligations and responsibilities while providing investment advisory services.

- **Conflicts of interest:** It is imperative that the investment adviser discloses all conflicts of interest to the client as and when they arise.
- **Only advisory income:** An investment adviser must not receive any consideration or remuneration from anyone except the client in respect of securities or investment products for which he has provided advice.
- **Segregation of other activities:** There must be segregation of other business activities from investment advisory activity of the investment advisor. An arm's length relationship must be maintained between investment advisory activity and such other activities. If a conflict of interest arises, the same shall be disclosed to the client.
- **Confidentiality:** The investment adviser must maintain strict confidentiality with respect to the information received from the client.
- **Own transactions:** The investment adviser should not carry out transaction contrary to his advice to clients on his own account unless 15 days have passed from the date of providing the advice. However, during the 15 day period, if in the opinion of the adviser the situation has changed, he should first make a revised assessment to client at least 24 hours before carrying out such a transaction. An advisor must also not act

on its own account, knowingly to sell securities or investment products to or purchase securities or investment product from a client.

- **KYC compliance:** An investment advisor shall follow Know Your Client procedure as specified by SEBI from time to time.
- **Code of Conduct:** An investment adviser must abide by the Code of Conduct as specified in Third Schedule of the Investment Adviser Regulations.
- **Reporting to SEBI:** The investment adviser must file periodic reports or information to SEBI as may be required from time to time and take prior approval from SEBI if there is a change in control of the investment adviser.
- **Certification and Qualification:** It shall be the responsibility of the Investment Adviser to ensure that its representatives and partners comply with the certification and qualification requirements stipulated by the Investment Adviser Regulations at all times.

There are specific areas in which an investment adviser needs to put systems and procedures in place in order to comply with the responsibilities cast by the Regulations.

b. Risk Profiling

The investment advice and asset allocation for an investor would have to be customized to the ability and willingness of the investor to assume risk. This is determined by a risk profiling exercise, which seeks to assess the attitude towards risk and possible loss in the portfolio and the willingness to pursue an investment plan, after understanding the underlying risks.

- **Information:** It is the responsibility of the investment adviser to ensure that he obtains from the client, such information as is necessary for the purpose of giving investment advice. This information includes age, investment objective, investment horizon, income details, existing assets and liabilities and risk appetite. Information provided by clients and their risk assessment must be updated periodically.
- **Risk assessment:** There must be a process in place for assessing the risk that a client is willing and able to take. Risk profile of the client must be communicated to the client after risk assessment completed. Risk assessment includes the following aspects:
 1. Assessing a client's capacity for absorbing loss;
 2. Identifying whether client is unwilling or unable to accept the risk of loss of capital;
 3. Appropriately interpreting client responses to questions and not attributing inappropriate weight to certain answers.
- **Risk profiling tools:** The investment adviser may use various tools such as surveys, questionnaires, proprietary tools to generate risk appetite scores of clients. Where such tools are used for risk profiling, the investment adviser must ensure that the tools are fit for the purpose and any limitations have been identified and mitigated. Such

tools should not be too complex or misleading for the client to understand and express a fair opinion.

c. Suitability

It is the responsibility of the Investment adviser to ensure the following:

- Investment advice and related investments are appropriate to the client's risk profile.
- The adviser has a documented process for selecting investments based on client's investment objectives and financial situation.
- The adviser must understand the nature and risks of products or assets selected for clients.
- The adviser must have a reasonable basis for believing that a recommendation or transaction entered into:
 - a. meets the client's investment objectives;
 - b. is such that the client is able to bear any related investment risks consistent with its investment objectives and risk tolerance;
 - c. is such that the client has the necessary experience and knowledge to understand the risks involved in the transaction.
- When an advice or recommendation is given to a client to purchase a complex financial product, such a recommendation or advice must be based upon a reasonable assessment that the structure and risk reward profile of financial product is consistent with clients experience, knowledge, investment objectives, risk appetite and capacity for absorbing loss.

d. Disclosures to Clients

It is the responsibility of the Investment Adviser to make certain disclosures to the client in order for the client to take an informed decision whether or not to avail its services. These disclosures include the following:

- Material information about the adviser, the business, history, terms and conditions, affiliations with other intermediaries.
- Consideration received/receivable by it or any of its associates from any distribution or execution services for securities or products for which investment advice is provided.
- Any consideration receivable by investment adviser on recommendation of a stock broker or other intermediary to the client if the client decides to avail services of such entity.
- Own holdings in respect of products or securities that are subject matter of advice.
- Actual or potential conflicts of interest with issuer of product/security.
- Material facts relating to key features of the products/securities, its performance track record, warnings and disclaimers, and advertising material.

e. Record Maintenance

An investment adviser is required to maintain the following records in physical or electronic format for a minimum period of five years:

- Know Your Client records of the client;
- Risk profiling and risk assessment of the client;
- Suitability assessment of the advice being provided;
- Copies of agreements with clients, if any;
- Investment advice provided, whether written or oral;
- Rationale for arriving at investment advice, duly signed and dated;
- A register or record containing list of the clients, the date of advice, nature of the advice, products / securities in which advice was rendered and fee, if any charged for such advice.

The adviser must conduct yearly audit in respect of compliance with regulatory requirements from a member of Institute of Chartered Accountants of India or Institute of Company Secretaries of India.

f. Segregation of execution services

Investment advisers which are banks, NBFCs and body corporate providing distribution or execution services to their clients must keep their investment advisory services segregated from such activities. Distribution or execution services can only be offered subject to the following:

- The client is not under any obligation to avail the distribution or execution services offered by the investment adviser.
- The investment adviser maintains arms-length relationship between its activities as investment adviser and distribution or execution services.
- All fees and charges paid to distribution or execution service providers by the client are paid directly to the service providers and not through the investment adviser.

g. Other responsibilities

- A compliance officer must be appointed by an investment adviser which is a body corporate or a partnership firm for monitoring the compliance by the investment adviser in respect of the requirements of the SEBI Act, Regulations and notifications issued from time to time.
- The investment adviser must have an adequate client grievance redressal mechanism and should redress client grievances promptly.

12.1.5 Code of Conduct for Investment Adviser

The SEBI (Investment Advisers) Regulations, 2013 has set out a code of conduct to be followed by all Investment Advisers at all times. The provisions of this code of conduct state as follows:

I. Honesty and fairness

An investment adviser shall act honestly, fairly and in the best interests of its clients and in the integrity of the market.

II. Diligence

An investment adviser shall act with due skill, care and diligence in the best interests of its clients and shall ensure that its advice is offered after thorough analysis and taking into account available alternatives.

III. Capabilities

An investment adviser shall have and employ effectively appropriate resources and procedures which are needed for the efficient performance of its business activities.

IV. Information about clients

An investment adviser shall seek from its clients, information about their financial situation, investment experience and investment objectives relevant to the services to be provided and maintain confidentiality of such information.

V. Information to its clients

An investment adviser shall make adequate disclosures of relevant material information while dealing with its clients.

VI. Fair and reasonable charges

An investment adviser advising a client may charge fees, subject to any ceiling as may be specified by the Board, if any. The investment adviser shall ensure that fees charged to the clients are fair and reasonable.

VII. Conflicts of interest

An investment adviser shall try to avoid conflicts of interest as far as possible and when they cannot be avoided, it shall ensure that appropriate disclosures are made to the clients and that the clients are fairly treated.

VIII. Compliance

An investment adviser including its representative(s) shall comply with all regulatory requirements applicable to the conduct of its business activities so as to promote the best interests of clients and the integrity of the market.

IX. Responsibility of senior management

The senior management of a body corporate which is registered as investment adviser shall bear primary responsibility for ensuring the maintenance of appropriate standards of conduct and adherence to proper procedures by the body corporate.

12.2. 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 enable 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. These 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 idea of regulating an industry is to optimize the benefits for all its stakeholders and at the same time protecting the interests of the consumers. The financial sector in India is regulated by several regulatory authorities. The Central Government has created separate entities to regulate different sectors of the financial system.

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

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.

12.3. Role of Regulators

12.3.1 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:
 - Public sector banks.
 - Term-lending financial institutions.
 - Life Insurance and General Insurance.
 - 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.

12.3.2 The Ministry of Corporate Affairs

It is mainly concerned with the administration of the Companies Act, 2013 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, the Companies (Donations to National Funds) Act, 1951 and Societies Registration Act, 1980.

12.3.3 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 of India (IRDAI) 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.

a. 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.

b. Securities and Exchange Board of India (SEBI)

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

SEBI regulates capital market intermediaries such as stock exchanges, brokers, trustees of trust deeds, merchant bankers, bankers to an issue, underwriters, portfolio managers, mutual funds, depositories, depository participants, venture capital funds, and alternative investment funds, Foreign Institutional Investors, custodians and Registrars & Transfer agents in the country. Market intermediaries are regulated by SEBI by prescribing registration norms for intermediaries, issue of regulations, notifications and circulars from time to time for

compliance by the intermediaries, calling for information from the intermediaries, carrying out inspections, and taking action against non-compliance.

The website of SEBI (www.sebi.gov.in) holds updated and comprehensive list of regulations, rules, circulars and notifications issued there under by SEBI. A useful download is a Master Circular, which captures the essence of various circulars issued for a calendar year.

Functions of SEBI

The SEBI Act, 1992 spells out the functions that SEBI shall perform. These include the following:

- **Regulating and registration:** SEBI regulates the business in stock exchanges and other securities markets. It registers and regulates the working of intermediaries associated with the securities market such as 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 depositories, participants, custodians of securities, foreign institutional investors, credit rating agencies, venture capital funds, collective investment schemes, mutual funds and such other intermediaries as may be specified by SEBI. SEBI is also involved in promoting and regulating self-regulatory organisations. The Regulations specify the net worth, experience, infrastructure and other requirements necessary for an intermediary to be eligible for registration.
- **Prohibition of unfair trade practices:** An important function of SEBI is to prohibit fraudulent and unfair trade practices relating to securities markets. SEBI also prohibits insider trading in securities which is detrimental to the interests of the investors. 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.
- **Conduct inquiries/inspections:** If SEBI is of the opinion that some intermediary is involved in such activities, or is not complying with the SEBI Regulations, it has the power to call for information, undertake inspection, conduct inquiries and audits, summon witnesses from

such intermediaries. SEBI can take any of the following measures in the interest of investors:

- Suspend the trading of any security in a recognized stock exchange;
 - Restrain persons from accessing the securities market and prohibit any person associated with securities market to buy, sell or deal in securities;
 - Suspend any office-bearer of any stock exchange or self-regulatory organization from holding such position;
 - Impound and retain the proceeds or securities in respect of any transaction which is under investigation;
 - Attach, after passing of an order on an application made for approval by the Judicial Magistrate of the first class having jurisdiction, for a period not exceeding one month, one or more bank account or accounts of any intermediary or any person involved;
 - Direct any intermediary or any person associated with the securities market in any manner not to dispose of or alienate an asset forming part of any transaction which is under investigation:
- SEBI is also involved in promoting investor education and training of intermediaries of securities markets.
 - SEBI regulates substantial acquisition of shares and take-over of companies.

c. Insurance Regulatory and Development Authority of India (IRDAI)

IRDAI'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. IRDAI 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:

- Issuing a certificate of registration or renewing, modifying, withdrawing, suspending or cancelling such registration.
- 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.
- Spelling out the required qualifications, code of conduct and practical training for intermediaries including insurance intermediaries and agents.
- Specifying the code of conduct for surveyors and loss assessors.
- Seeking information, undertaking inspection, conducting inquiries and investigations including audit of the insurer, intermediaries and others.
- 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.

- Regulating the investment of funds by insurance companies.

d. Pension Fund Regulatory and Development Authority (PFRDA)

The PFRDA is the authority entrusted with the following responsibilities under the PFRDA Act, 2013:

- To promote old age income security by establishing, developing and regulating pension funds
- To protect the interests of subscribers to schemes of pension funds and related matters

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

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

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

The PFRDA shall have search and seizure powers to investigate any instance of contravention of the provisions of the Act. The Act gives the PFRDA the authority to ensure compliance of intermediaries and others associated with the scheme, and if found to be in violation impose penalties and other corrective measures. The PFRDA will be subject to the directions of the Central Government on all matters of policy. It shall also submit periodical reports on various aspects of its functioning, the pension sector, and other matters required by the government.

12.4. Role of Self-Regulatory Organizations (SRO)

An SRO is a regulatory authority of an industry, appointed by the regulator to perform specific functions. SRO in India is governed by the SEBI (Self-Regulatory Organizations) Regulations,

2004. An SRO is an organization of intermediaries which represents a particular segment of the securities market and which is duly recognized by SEBI.

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 example, stock exchanges perform some of the regulatory functions on behalf of SEBI. The mutual fund industry does not have an SRO, yet. The Institute of Chartered Accountants of India (ICAI) regulates its own members.

An amendment to the Regulations in January 2013 has brought within its purview, an SRO formed by distributors of mutual funds and portfolio management services.

An SRO needs to be registered and recognized by SEBI after following a registration process that lays down norms for professional competence of the Board, infrastructure and capital requirements. The SRO Regulations lay down certain obligations and responsibilities on SROs. An SRO must always abide by the directions of the SEBI and act in the best interest of investors. It is responsible for specifying a code of conduct for its members and ensuring implementation of the same. The SRO can also conduct inspection and audit of its members. It is bound to report any violations or non-compliance by any of its members to SEBI. The SRO conducts screening, certification tests and training programmes for its members and endeavours to promote best business practices amongst its members.

12.5. Prevention of Money-Laundering Act, 2002

Money laundering involves disguising financial assets so that they can be used without detection of the illegal activity that produced them. Through money laundering, the launderer transforms the monetary proceeds derived from criminal activity into funds with an apparently legal source.

The Prevention of Money-Laundering Act, 2002 (PMLA), is an act to prevent money-laundering and to provide for confiscation of property derived from, or involved in, money-laundering and for related matters. Chapter II, section 3 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.

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.

The records 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.

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 lakhs.

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
- Interviewing clients who have declared wealth above Rs.10 lakhs or intend to trade (intraday) above Rs.2 crore in a month or who have given initial margin of Rs.4 to 5 lakhs 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.

12.6. Code of Conduct and Ethics

1. 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 standards of service, exercise due skill and diligence over persons employed or appointed by it, ensure proper care and exercise independent professional judgment and shall not at any time act in collusion with other intermediaries in a manner that is detrimental to the investor(s).

d. Fees

An intermediary shall not increase charges/ fees for the services rendered without proper advance notice to its clients/investors.

II. Disbursal of Amounts

An intermediary shall be prompt in disbursing dividends, interests or any such accrual income received or collected by it on behalf of its clients/investors.

III. Disbursal of Information

- An intermediary shall ensure that adequate disclosures are made to the clients/investors in a comprehensible and timely manner so as to enable them to make a balanced and informed decision.
- An intermediary shall not make any misrepresentation and ensure that the information provided to the clients/investors is not misleading.
- An intermediary shall not make any exaggerated statement whether oral or written to the client/investor, either about its qualification or capability to render certain services or its achievements in regard to services rendered to other clients/investors.
- An intermediary shall not divulge to anybody, either orally or in writing, directly or indirectly, any confidential information about its clients/investors, which has come to its knowledge, without taking prior permission of its clients/investors except where such disclosures are required to be made in compliance with any law for the time being in force.

2. AMFI Code of conduct - Code of Conduct for Intermediaries of Mutual Funds

The AMFI code of conduct prescribes the following for the intermediaries in the mutual fund industry in the conduct of their business.

1. Consider investor's interest as paramount and take necessary steps to ensure that the investor's interest is protected in all circumstances.
2. Adhere to SEBI Mutual Fund Regulations and guidelines issued from time to time related to distributors, 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. Comply with SEBI guidelines / requirements issued from time to time in preparation of sales, promotional or any other literature about any schemes. Performance disclosures should also comply with the requirements specified by SEBI. Provide full and latest information of schemes to investors in the form of SAI, SID, addenda, performance reports, fact sheets, portfolio disclosures and brochures; and recommend schemes appropriate for the investor's risk profile and needs.
4. Highlight risk factors of each scheme, desist from misrepresentation and exaggeration and urge investors to go through SAI / SID/ KIM before deciding to make investments.
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.
6. Abstain from indicating or assuring returns in any type of scheme, unless the SID is explicit in this regard.
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's Mutual Fund Regulations.
8. Desist from colluding with investors in faulty business practices such as bouncing of cheques, wrong claiming of dividend/redemption cheques, splitting of applications in the schemes to circumvent regulations for any benefit, etc.
9. Abstain from commission driven malpractices such as:
 - recommending inappropriate products solely because the intermediary is getting higher commissions there from.
 - encouraging over transacting and churning of Mutual Fund investments to earn higher commissions.
 - Splitting of applications to earn higher transaction charges / commissions.

10. Abstain from making negative statements about any AMC or scheme and ensure that comparisons, if any, are made with similar and comparable products along with complete facts.
11. Intermediaries shall keep themselves abreast with the developments relating to the Mutual Fund Industry as also changes in the scheme information and information on mutual fund / AMC like changes in fundamental attributes, changes in controlling interest, loads, liquidity provisions, and other material aspects and deal with the investors appropriately having regard to the up to date information.
12. Maintain confidentiality of all investor details, deals and transactions.
13. Intermediaries shall keep investor's interest and suitability to their financial needs as paramount and that extra commission or incentive should never form the basis for recommending a scheme to the investor.
14. Intermediaries shall not rebate commission back to investors and abstain from attracting investors through temptation of rebate/gifts etc.
15. To protect the investors from potential fraudulent activities, intermediary should take reasonable steps to ensure that the investor's address and contact details filled in the mutual fund application form are investor's own details, and not of any third party. Where the required information is not available in the application form, intermediary should make reasonable efforts to obtain accurate and updated information from the investor. Intermediaries should abstain from filling wrong / incorrect information or information of their own or of their employees, officials or agents as the investor's address and contact details in the application form, even if requested by the investor to do so. Intermediary should abstain from tampering in any way with the application form submitted by the investor, including inserting, deleting or modifying any information in the application form provided by the investor.
16. Intermediaries, including the sales personnel of intermediaries engaged in sales / marketing, shall obtain NISM certification and register themselves with AMFI and obtain an Employee Unique Identification Number (EUID) from AMFI apart from AMFI Registration Number (ARN). The Intermediaries shall ensure that the employees quote the EUID in the application form for investments. The NISM certification and AMFI registration shall be renewed on timely basis. Employees in other functional areas should also be encouraged to obtain the same certification.
17. Intermediaries shall comply with the Know Your Distributor (KYD) norms issued by AMFI.
18. Co-operate with and provide support to AMCs, AMFI, competent regulatory authorities, due diligence agencies (as applicable) in relation to the activities of the intermediary, or any regulatory requirement and matters connected thereto.
19. Provide all documents of its investors in terms of the Anti-Money Laundering / Combating Financing of Terrorism requirements, including KYC documents / Power of Attorney / investor's agreement(s), etc. with Intermediaries as may be required by AMCs from time to time.

20. Be diligent in attesting / certifying investor documents and performing In Person Verification (IPV) of investor's for the KYC process in accordance with the guidelines prescribed by AMFI / KYC Registration Agency (KRA) from time to time.
21. Adhere to AMFI guidelines and Code of Conduct issued from time to time related to distributors, selling, distribution and advertising practices.
22. Intimate the AMC and AMFI any changes in the intermediary's status, constitution, address, contact details or any other information provided at the time of obtaining AMFI Registration.
23. Observe high standards of ethics, integrity and fairness in all its dealings with all parties – investors, Mutual Funds/ AMCs, Registrars & Transfer Agents and other intermediaries. Render at all times high standards of service, exercise due diligence, and ensure proper care.
24. Intermediaries satisfying the criteria specified by SEBI for due diligence exercise, shall maintain the requisite documentation in respect of the "Advisory" or "Execution Only" services provided by them to the investors.
25. Intermediaries shall refund to AMCs, either by set off against future commissions or payment, all incentives of any nature, including commissions received, that are subject to claw-back as per SEBI Regulations or the terms and conditions issued by respective AMC.
26. In respect of purchases into any fund with effect from January 1, 2013, in the event of any switches from Regular Plan (Broker Plan) to Direct Plan, all upfront commissions paid to distributors shall be liable to complete and / or proportionate clawback.
27. Do not indulge in fraudulent or unfair trade practices of any kind while selling units of schemes of any mutual fund. Selling of units of schemes of any mutual fund by any intermediary directly or indirectly by making false or misleading statement, concealing or omitting material facts of the scheme, concealing the associated risk factors of the schemes or not taking reasonable care to ensure suitability of the scheme to the investor will be construed as fraudulent / unfair trade practice.

Note: SID should be read in conjunction with SAI, and not in isolation.

Norms by SEBI

Over the last few years, SEBI has been introducing new regulations and procedures to comply with various regulatory requirements as well as those laid down under the Prevention of Money Laundering Act, 2002. These new regulations are applicable to distributors registered under AMFI as well as persons who wish to invest in Mutual funds.

a. KYC for investors (Know your Client)

In order to prevent money laundering and terrorist financing, strict norms were required for identifying such people who enter into financial transactions under the Prevention of Money

Laundrying Act, 2002. SEBI accordingly issued guidelines for financial institutions and financial intermediaries (including mutual funds) to know their clients.

Every individual who wishes to invest in a mutual fund, whether lump sum or by SIP, has to be KYC compliant. An individual has to provide personal details such as name, address, financial status, occupation and other personal information in the prescribed KYC form. Along with the same, individual investors are required to produce proof of identity and proof of address, as prescribed, in the form. Non-individual investors are required to produce documents relating to its constitution/ registration to fulfil the KYC process.

A centralized platform has been carved out to carry out the KYC procedures across all market intermediaries. Various Points of Services (PoS) have been provided where the KYC application forms along with the verification documents are accepted and the KYC acknowledgement is provided to the investor. Once the KYC procedure is duly completed in all regards, the investor needs to produce a copy of the acknowledgement when investing for the first time with a mutual fund or any other market intermediary.

KYC is mandatory for all investors (individuals and non-individuals) in a mutual fund scheme, irrespective of the amount invested. In case of joint applications for a fund, all the joint holders need to be KYC compliant. For investments by a minor, the Guardian should be KYC compliant. The minor, upon attaining majority, should immediately apply for KYC compliance in his/ her own capacity and intimate the concerned mutual funds. Investors who wish to invest through a Power of Attorney (PoA) holder have to ensure that both the investor and the PoA holder should be KYC compliant.

b. KYC Registration Agencies

SEBI has issued the KYC Registration Agency Regulations, 2011 in exercise of the powers conferred under the SEBI Act.

Under the said Regulations, a KYC Registration Agency (KRA) is a company formed and registered under the Companies Act, 2013 and which has been granted a certificate of registration under the Regulations.

The KRA shall obtain the KYC documents of the client from the intermediaries. The KRA maintains the KYC records of an investor centrally, on behalf of the capital market intermediaries registered with SEBI. It is also responsible for retaining the original KYC documents of investors in both physical and electronic form for the prescribed period.

KRA accepts the KYC forms and documents pertaining to proof of identity and proof of address received from intermediaries. It scans, digitalizes the documents and thereafter issues acknowledgements/ conveys rejections to the investor.

c. KYD for distributors (Know your Distributor)

Under SEBI's advice, AMFI had to review the existing registration procedure for mutual fund distributors and initiate necessary action to strengthen the same to ensure correctness of information furnished in the registration application and also to have in person verification of the ARN holders.

AMFI has therefore introduced the Know Your Distributor (KYD) process for the mutual fund distributors with effect from September 1, 2010. The KYD procedure consists of document verification and Bio-metric process. Every mutual fund distributor is therefore required to apply for KYD simultaneously along with application for registration of the ARN code.

The KYD norms is similar to the KYC norms for investors, requiring the distributors to submit identity proof, address proof, PAN and bank account details with proof for verification.

AMFI has engaged Computer Age Management Services Ltd. (CAMS) to carry out the KYD process through their centres across the country. Once the said process is done, the distributor would have to obtain the acknowledgement from CAMS confirming the completion of the KYD process.

12.7. 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, there are many products with complexities which the common man/the small investor may not understand. It is the financial intermediary who should take the most suitable product to the retail investor that would serve the needs of the investor best and help in fulfilling his financial goals. The intermediary plays a key role in the successful achievement of financial goals of many Indian families.

The financial intermediary should realize that he would be very successful if he focuses on his clients and the clients' needs rather than on his own needs. It would be useful for the intermediary to keep in mind this following very famous quotation of Zig Ziglar, the world renowned corporate motivator: *"You can have everything in life you want; if you will just help other people get what they want"*.

The intermediary many times works on targets and goes about selling financial products aggressively to achieve the targets within a time frame. While doing this sometimes the

suitability of the product to the investor is lost sight of. The investor should be centre of the activity and his interest should be uppermost in the minds of the advisors. It is important for the advisor/intermediary to nurture and take care of the financial well-being of his clients to reap long term benefits.

The main problems/investor grievance areas in the advisory business can be highlighted as under:

1. Advisor's lack of focus on understanding client specific situations 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 to increase earnings from 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

12.8. Investor Complaint redressal systems

Different regulators have developed different systems and platforms to provide a redressal mechanism to investors for grievances that they may have against market intermediaries.

SEBI has developed a centralized web based system for lodging and tracking investor complaints which is known as SCORES (SEBI Complaint Redress System). Any person, who has a grievance against a listed company (e.g. non-payment of dividend or issues related to transfer of securities) or against any market intermediary, can file a complaint using SCORES.

SCORES can accept complaint against any market intermediary that is registered with SEBI. This includes R&T Agents, Portfolio Managers, Depositories and its participants, Debenture Trustees, Credit Rating Agencies, Custodians, Stock Exchanges, Merchant Bankers, Asset Management Companies, Collective Investment Schemes, Bankers to an Issue and Brokers. The market entities are required to prominently display in their office the grievance redressal mechanism available to investors.

A complaint registered on SCORES is scrutinized by SEBI to determine if the subject matter falls under its purview. If it falls under SEBI's purview, it will forward the complaint to the concerned entity/intermediary, with an advice to send a written reply to the investor. The entity or intermediary also needs to file an action taken report in SCORES within a reasonable period, not later than 30 days.

Stock exchanges have been directed by SEBI to resolve disputes at their end within 15 days, failing which the conciliation process of the exchange would start. The Investor Grievance Redressal Committee shall be allowed 15 days to amicably resolve the issue. Else the IGRC will estimate the claim value, in case the claim is admissible to the investor, and the investor will be given monetary relief from the Investor Protection Fund in a phased manner, till the arbitration process opted for by the member is complete

The Insurance Regulatory and Development Authority of India (IRDAI) have launched an online grievance redressal mechanism called the Integrated Grievance Management System (IGMS). The facility can be used to register complaints against insurers, brokers, intermediaries and others. The nature of complaints that can be registered include those relating to processing the proposal, servicing a policy and claims. Complaints against life and non-life insurers can be registered on the portal.

The National Pension System (NPS) has a multi-layered Grievance Redressal Mechanism. An NPS subscriber who is not satisfied with the services offered, or has any other grievance, can lodge his complaint using the Central Grievance Management System (CGMS) for complaint resolution and grievance redressal for NPS subscribers.

Customers of banks who face a deficiency of service can apply to the banking ombudsman for redressal under the Banking Ombudsman Scheme of the RBI. The scheme covers customers of scheduled commercial banks and primary cooperative banks if their complaints are not addressed by the concerned bank or if they are unsatisfied with the response of the bank.

Sample Questions

1. Which of the following persons is expected to comply with registration requirement under SEBI (Investment Advisers) Regulations, 2013:
 - a. Fund Manager of an AMC
 - b. A distributor of a mutual fund who only receives commission from the AMC.
 - c. **An IFA who charges advisory fees to investors**
 - d. A Chartered Accountant practicing his profession

2. The minimum tangible assets to be maintained by an individual investment adviser are Rs. _____.
 - a. **1 lakh**
 - b. 25 lakhs
 - c. 5 lakhs
 - d. 10 lakhs

3. Registration and regulation of securities market intermediaries is the function of _____.
 - a. AMFI
 - b. **SEBI**
 - c. PFRDA
 - d. SRO

4. A person who has a complaint against an insurance company must lodge his complaint with _____.
 - a. SCORES
 - b. **IGMS**
 - c. CGMS
 - d. RBI

Indicative Reading List

- Bogle John C, "Bogle on Mutual Funds", Dell Publishing
- Bogle John C, "Common Sense on Mutual Funds", John Wiley & Sons
- Fredman & Wiles, "How Mutual Funds Work", Prentice-Hall
- Gibson Roger C, "Asset Allocation – Balancing Financial Risk", Tata McGraw Hill
- Income Tax Ready Reckoner (Latest)
- Jacobs Bruce, "All about Mutual Funds", Probus Publishing
- Mutual Funds Guide 2012, Value Research
- Pozen Robert C, "The Mutual Fund Business", The MIT Press
- Rowland Mary, "The New Commonsense Guide to Mutual Funds", Vision Books
- Sadhak H, "Mutual Funds in India", Response Books / Sage Publications
- SEBI, Investor Grievances - Rights & Remedies
- Scott David L, "How to Manage Your Investment Risks and Returns", Vision Books
- Sundar Sankaran, "Indian Mutual Funds Handbook", Vision Books (2012 3rd edition)
- Sundar Sankaran, "Wealth Engine: Indian Financial Planning & Wealth Management Handbook", Vision Books (2012)

Indicative Browsing List

- AMFI (www.amfiindia.com)
- BSE (www.bseindia.com)
- Care Ratings (www.careratings.com)
- Credence Analytics (www.credenceanalytics.com)
- CRISIL (www.crisil.com)
- ICRA (www.icra.in)
- IRDAI (www.irda.gov.in)
- Lipper (www.lipperweb.com)
- MSEI (www.msei.in)
- Morning Star (www.morningstar.com)
- Mutual Fund India (www.mutualfundindia.com)
- NSE (www.nseindia.com)
- PFRDA (www.pfrda.org.in)
- RBI (www.rbi.org.in)
- SEBI (www.sebi.gov.in) - Mutual Funds Section
- Value Research (www.valueresearchonline.com)

Note: The above mentioned Reading and Browsing list is only indicative and is provided only as a guide to readers.

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NATIONAL INSTITUTE OF SECURITIES MARKETS

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Plot No. 82, Sector 17, Vashi, Navi Mumbai - 400 703

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