NISM CERTIFICATION EXAMINATION WORK BOOK

XXI-A

Portfolio Management Services (PMS) Distributors



National Institute of Securities Markets
A Capacity Building Initiative of SEBI

Workbook for

NISM-Series-XXI-A: Portfolio Management Services (PMS) Distributors Certification Examination

National Institute of Securities Markets
A Capacity Building Initiative of SEBI

This workbook has been developed to assist candidates in preparing for the National Institute of Securities Markets (NISM) Certification Examination for Portfolio Management Services (PMS) Distributors.

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Website: www.nism.ac.in

National Institute of Securities Markets
Patalganga Campus
Plot IS-1 & IS-2, Patalganga Industrial Area
Village Mohopada (Wasambe)
Taluka-Khalapur
District Raigad-410222
Website: www.nism.ac.in

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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.

The NISM certification programs aim at enhancing the quality and standards of professionals employed in various segments of the financial sector. NISM develops and conducts certification examinations and Continuing Professional Education (CPE) programs that aim at ensuring that professionals meet the defined minimum common knowledge benchmark for various critical securities market functions.

NISM certification examinations and educational programs service different securities market 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, wishing to make a professional career in the securities markets.

NISM supports candidates by providing lucid and focused workbooks that assist them in understanding the subject and preparing for NISM Examinations. The book covers about basics of investments, securities markets, investing in stocks, fixed income securities, derivatives and mutual funds. This book also provides an understanding about the role of portfolio managers, operational aspects of portfolio management services, the portfolio management process, performance measurement and evaluation of portfolio managers. The taxation, regulatory, governance and ethical aspects of portfolio managers have also been discussed in this workbook.

Sashi Krishnan
Director

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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-XXI-A: Portfolio Management Services Distributors Certification Examination consisting of industry experts.

About NISM Certifications

National Institute of Securities Markets (NISM) is a capacity building initiative of Securities and Exchange Board of India (SEBI), the securities market regulator. The Institute was established in 2006 pursuant to the Union Budget of 2005-06.

NISM is engaged in developing and administering Certification Examinations and Continuing Professional Education (CPE) Programmes for professionals employed in various segments of the Indian securities markets. These Certifications and CPE Programmes 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. NISM seeks to ensure that market intermediaries meet defined minimum common benchmark of required functional knowledge through Certification Examinations and CPE Programmes on Mutual Funds, Equities, Derivatives, Securities Operations, Compliance, Portfolio Management etc.

These Certifications create quality market professionals and catalyzes greater investor participation in the markets. They also provide structured career paths to students and job aspirants in the securities markets.

About the Certification Examination for Portfolio Management Service Distributors

The examination seeks to create a common minimum knowledge benchmark for distributors of Portfolio Management Services (PMS). The certification aims to enhance the quality distribution and related support services in the PMS.

Examination Objectives

On successful completion of the examination, the candidate should:

- Know the basics of investments, securities markets, investing in stocks, understanding fixed income securities, derivatives and mutual funds.
- Understand the role of portfolio managers; operational aspects of portfolio management services and about the portfolio management process; performance measurement and evaluation of portfolio managers.
- Get oriented to the taxation aspects and regulatory, governance and ethical aspects of portfolio managers.

Assessment Structure

The examination consists of 100 multiple choice questions. The assessment structure is as follows:

Multiple Choice Questions [100 questions of 1 mark each]	100*1 = 100 marks

The examination should be completed in 2 hours. The **passing score for the examination is 60 percent**. There shall be **negative marking of 10 percent** of the marks assigned to a question.

How to register and take the examination

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

Important

• Please note that the Test Centre workstations are equipped with either Microsoft Excel or OpenOffice Calc. Therefore, candidates are advised to be well versed with both of these software for numerical computations

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Syllabus Outline and weightages

Chapters	Chapter Name	Proposed Weightages
1	Investments	7
2	Introduction to securities markets	5
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Total		100

CHAPTER 1: INVESTMENTS

LEARNING OBJECTIVES:

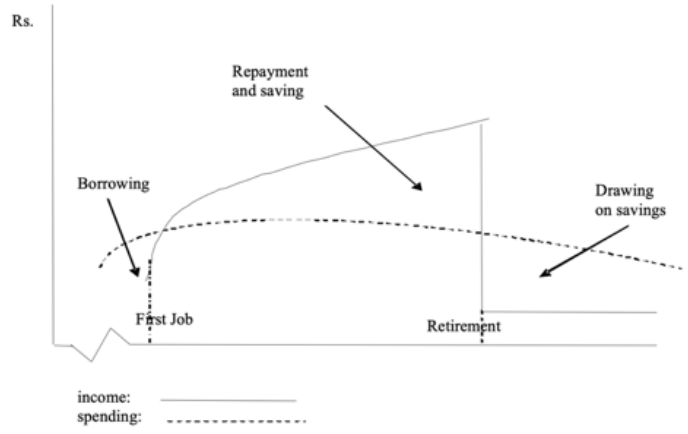
After studying this chapter, you should understand about:

- Meaning of Investments and savings
- Difference between investment and speculation
- Objectives of investments
- Concept of required rate of return
- Types of risks
- Types of investments
- Channels for making investments

1.1 What is Investment?

People earn money and spend money. They pass through various phases in their life cycle. During some phases, they earn more money than they spend. In other phases, they earn less than they spend. Therefore, sometimes they have to borrow money to meet the shortfall and in other times they end up having surplus money. As can be seen in Exhibit 1.1, rarely the income and spending of individuals or households match.

Exhibit 1.1: The Life-Cycle Pattern of Savings for Households



People have, broadly, two options to utilise their savings. They can either keep it with them until their consumption requirements exceed their income, or, they can pass on their saving to those whose requirements exceed their income with the condition of returning it back with some increment. Therefore, those who consume more than their current income must be willing to repay more than what they received, to those who have provided the funds. Essentially, people make a trade-off between postponing their current consumption, and an expected higher amount for future consumption. The difference between the two is referred as return.

1.1.1 Saving versus Investment

It is common to use the terms Savings and Investment interchangeably. However, they are not one and the same. Saving is just the difference between money earned and money spent. Investment is the current commitment of savings with an expectation of receiving a higher amount of committed savings. Investment involves some specific time period. It is the process of making the savings work to generate return.

Hence when people are saving, they use the short-term deposits/short-term securities which are highly liquid assets- on the other hand when people are investing they commit funds to real assets, capital market securities such as stocks and bonds, and other long-term commitments that may not be as liquid as short-term assets. See Box 1.1 to understand the difference between Financial and Real assets. Secondly, the objectives of savers and investors are different. Savers tend to accumulate funds to address short-term goals, whereas investors have longer-term goals, such as building retirement corpus or funding children's college education expenses. Those who save funds have the choice of investing. Hence, every investor is a saver but not vice versa.

Box 1.1: Financial Assets versus Real Assets

Assets can broadly be categorised as ***financial assets*** such as shares, debentures, bank deposits, public provident fund, mutual fund investments and others, and ***physical assets*** such as gold, diamonds, other precious metals and real estate.

Financial assets have the advantage of greater liquidity, flexibility, convenience of investing and ease of maintaining the investments. They are primarily income generating investments, though some of them, such as equity-oriented investments are held for long-term capital appreciation. There is greater ease of investing in such assets as it allows for small and frequent investments.

1.2 Investment versus Speculation

Another term which needs to be distinguished from “Investment” is “Speculation”. Investment and speculation activities are so intermingled that it is very difficult to distinguish and separate them. An attempt can be made to distinguish between speculation and investment on the basis of criteria like investment time horizon and the process of decision making.

Financial transactions occur on a time continuum ranging micro milli-second, micro-second, second, minute, hour, day, week, month, year, decade, century and perpetual time period. There is a tendency to describe short-term activities as speculative in nature and long-term ownership of assets as investments, which is not appropriate.

Another popular way to define speculation is by extending the dictionary meaning of the same. Dictionary meaning of the term speculation is “the forming of a theory or conjecture without firm evidence”. The activity of investment involves carrying out any exercise or process to determine the value of the asset and then buying the one whose intrinsic value is determined to be higher than the current market price. However, while speculating, no cognizance is paid to the value of the asset. Here profit making seems to be the sole purpose without much consideration to the risk involved.

1.3 Investment Objectives

Most of the investors invest with a goal in mind, regarding the value of the investment at the end of the investment period. Investment objectives can be defined as investors’ goals expressed in terms of risk, return and liquidity preferences. Some investors may have the tendency to express their goals solely on the basis of return. They must be encouraged to state their goals in terms of both risk and return, as expressing goals only in terms of return may lead to inappropriate asset allocation and adoption of risky investment strategies. Given to themselves, an investor may want her wealth to double up by the end of the year. However, she must be made to understand that such a goal would entail excessive risk.

The investor must be explained that the “risk leads return” and not the other way around. Hence a detailed analysis of the risk appetite of the investor i.e. her willingness and ability to take the risk should precede any discussion of the desired return.

The return objective may be simplified as follows:

1.3.1 Capital Preservation

Capital Preservation means minimizing or avoiding the chances of erosion in the principal amount of investment. Highly risk averse investors pursue this investment goal, as this investment objective requires no or minimal risk taking. Also, when funds are required for immediate short term, investors may state for capital preservation as the investment objective.

1.3.2 Capital Appreciation

Capital Appreciation is an appropriate investment objective for those who want their portfolio value to grow over a period of time and are prepared to take risks. This may be an appropriate investment objective for long term investors.

1.3.3. Current Income

Current Income is an investment objective pursued when investor wants her portfolio to generate income at regular interval by way of dividend, interest, rental income rather than appreciation in the value of the portfolio. This investment objective is mostly pursued by people who are retired and want their portfolios to generate income to meet their living expenses.

1.3.4. Tax Saving

Sometimes investors do invest in some select investment alternatives, to reduce their tax burden. This is because the Income Tax Act provide tax benefits in terms of deductions from taxable income, or as tax rebate from the tax payable.

1.4 Estimating the required rate of return

Investment is the commitment of rupee for a period of time to earn a) pure time value of money – for investors postpone their current consumption b) compensation for expected inflation during the period of investment for the change in the general price levels and c) risk premium for the uncertainty of future payments.

The price paid for the exchange between current and future consumption is the pure rate of interest. If an investor postpones consumption worth Rs. 1000 today for a guaranteed future consumption worth Rs. 1020, then the pure rate of interest in this exchange is 2%. ((1020-1000)/1000).

The rate of return, the investor demands when there is no inflation and no uncertainty associated with future payments, and hence termed as real risk-free rate. In reality, price level rarely remains the same. The rise in price over a period is defined as 'Inflation'. Hence, if the investor expects a rise in the price level, they will require an additional return to compensate for the inflation.

Further, if there is a risk associated with future payment, investor will demand compensation for bearing the risk.

The compensation for postponement of consumption is the pure time value of money i.e. the real risk-free rate. Real risk-free rate when adjusted for inflation is referred as nominal risk-free rate. Nominal risk-free rate plus risk premium is required rate of return. In simple terms and for smaller values, we can say:

- **Nominal risk-free rate of return** = Real risk-free rate of return + Inflation; and
- **Required Rate of Return** = Nominal risk-free rate of Return + Risk Premium.

Required rate of return is the minimum rate of return investors expect when making investment decisions. It is to be noted that required rate of return is not guaranteed return or assured return. It is also different from expected or forecasted return. It is also different from realized return.

1.4.1 Nominal risk-free rate, real risk-free rate, and expected inflation

The notion that money has time value is a fundamental concept in investments. It is the central theme in calculating the rate of return. It is better to receive a sum of money today than to receive the same sum tomorrow because it can be invested today and earn returns for tomorrow. Investors can invest in investment opportunities like risk-free bonds, where they are promised to receive an amount more than the amount they have invested.[1] For example if an investor invests Rs.100 today at a risk free rate of 5% per year, the value of this investment at the end of one year will be Rs.100 + (Rs.100*5%)=Rs. 105. Thus, Rs.105 is the future value of this current investment, one year from now. The value today is its present value. i.e. Rs.100. Conversely, if an investor is certain of receiving Rs.105, one year from today, then its present value can be calculated as Rs.105/(1+5%)=Rs.100. These calculations substantiate an old age saying that "a dollar today is worth more than a dollar tomorrow", or one needs more money to buy something tomorrow, than what it needs today.

The certainty of receiving the amount in future makes it a risk free investment. And the rate of return on the same is called a risk-free rate. In this case it is 5%. This risk-free rate is also referred as nominal risk-free rate of return. As can be seen, it ignores the potential change in the purchasing power of rupee. That is, though the investor is certain of receiving Rs.105 after one year, there is no guarantee that rupee will have the same purchasing power a year from now that it has today. From the nominal risk free rate of return, inflation rate can be subtracted to calculate the real risk free rate of return.

Hence Nominal risk free rate of return can be decomposed into: real risk free rate of return and inflation rate.

Real risk free rate is the basic rate of return or interest rate, assuming no inflation and no uncertainty about future cashflows. It is the compensation paid for postponing the consumption.

For example, an investor gives up Rs. 100 today for more than Rs. 100 say Rs. 102 one year from today. If this is a risk-free investment and the expected inflation is zero, the real risk-free rate of interest is 2% ((102/100) – 1).

The desire for current consumption influences the real risk-free rate. The desire for current consumption is influenced by the investment opportunities available in the economy. The availability of investment opportunities is determined by the real growth rate of the economy. Hence, the real risk free rate is determined by an interaction between subjective factors like the desire for consumption and objective factors like the available investment opportunities and the growth rate of the economy.

As noted above, if investors expect the price level to rise during the period of investment, they would require a compensation for the expected rate of inflation. Continuing with the above example, "What if the price level in the economy increases by 6%?" In such situation, the investors should increase the required rate of return by the expected rate of inflation. If they do not do so, then they would be losing money in the real sense rather than getting a real rate of return. To maintain a consumption of Rs.102, the interest earned must be 8.12 per cent. The required nominal risk free rate of return (NRR) would be as follows:

NRR = [(1+Real rate of return) x (1+Expected rate of inflation)] – 1

8.12 % = [(1+ 2%) X (1+6%)] -1

This rate of interest (comprising real rate of return plus the compensation for inflation compensation) is called the nominal risk free rate of return.

1.4.2 Risk Premium

As discussed above, the nominal risk-free rate of return is the rate of return, an investor is certain of receiving on the due date. Investor is certain of the amount as well as the timing of the return. Hence, it is the risk-free rate of return. Some investment opportunities such as government securities (with some caveats) fit this pattern.

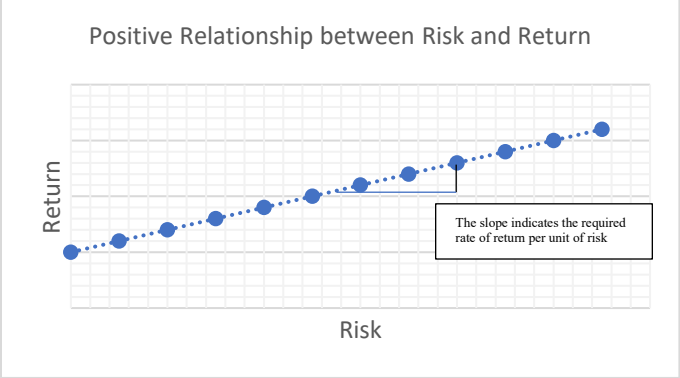
If the return from an investment opportunity is uncertain (i.e. risk is high) due to the uncertain cash flows and timing of such cash flows, then such uncertainty requires additional compensation over the risk-free rate and is known as 'Risk Premium'.

In simple terms, higher the risk, higher would be the risk premium.

1.4.3 Relationship between risk and return

Exhibit 1.1 plots the usual relationship between risk and return. A positive relationship exists between risk and return. The greater the risk, the higher the expected return. The graph demonstrates that investors increase their required rate of return as their expectation about future volatility of returns increases. As a result the risk premium goes up. The graph is just to convey the meaning of a positive relationship, however, in reality, the relationship between risk return is nonlinear, that is there is no proportionate increase in return for every unit increase of risk. Similarly this graph is also different for different individuals, due to their risk appetite or risk aversion.

Exhibit 1.1 Relationship between risk and required rate of return



1.5 Types of Risks in Investments

In investment, risk is defined as the possibility that the actual earnings could be different from what is expected to be earned. Mathematically, risk is defined as the dispersion around the average expected return, which is represented by Standard Deviation.

Let us look at the different types of risk in investing, which results into difference between the expected and the actual results.

1.5.1 Business risk

Business risk refers to the potential for a company to fail in generating sufficient revenue or profits, leading to lower returns or even losses for investors. It arises due to internal and external factors that impact a company's ability to operate efficiently and remain competitive.

Some of the factors which impact business are change in market demand, economic conditions, operational inefficiencies, failure to keep pace with innovation, technological obsolescence or financial instability.

For example, If a retail company fails to adapt to e-commerce trends, it may lose customers, reducing revenue and profitability. Investors holding its stocks or bonds may face lower returns or capital losses.

1.5.2 Financial risk

Financial risk refers to the possibility of losing money on an investment due to various factors such as market fluctuations, credit defaults, interest rate changes, inflation or liquidity constraints. It affects both individual investors and businesses, influencing returns and capital preservation.

1.5.3 Liquidity risk

Liquidity risk refers to the difficulty of buying or selling an investment without significantly affecting its price. It impacts both equity and debt markets, influencing how quickly investors can exit an investment. In such cases, investors may struggle to sell shares at the desired price due to lack of buyers.

For example, Penny stocks or bonds of lesser-known issuers may have fewer buyers and difficult to sell significant quantities at the desired price. On the other hand, Treasury bills have no liquidity risk as they can be sold in a fraction of minute at a price worth their economic value. Liquidity risk can impact portfolio flexibility, making it essential for investors to understand it before investing.

1.5.4 Exchange rate risk

Exchange rate risk, also known as currency risk, arises when the value of an investment fluctuates due to changes in foreign exchange rates. It primarily affects investors holding foreign assets, such as stocks, bonds,

or mutual funds denominated in a different currency. A depreciation in the investor's home currency increases returns, while appreciation reduces them.

For example, if an Indian investor holds U.S. stocks and the rupee strengthens against the dollar, the returns in INR may decline.

1.5.5 Political Risk

Political risk refers to the potential for investment losses due to government actions, policy changes, or political instability in a country. It affects both domestic and foreign investors, particularly in emerging markets. Risks include regulatory changes, taxation policies, trade restrictions, nationalization, and geopolitical tensions.

For example, a sudden change in foreign investment regulations or imposition of a new tax can impact investor returns. Political instability, such as elections, protests, or war, can also create market volatility. Investors mitigate political risk by diversifying globally, investing in stable economies, and monitoring policy trends before making investment decisions.

1.5.6 Geopolitical Risk

Geopolitical risk refers to the potential impact of international conflicts, diplomatic tensions, trade disputes, or political instability on financial markets and investments. Events such as wars, sanctions, terrorism, or strained international relations can disrupt global trade, supply chains, and investor confidence, leading to market volatility.

For example, a trade war between major economies can affect stock prices, while an oil supply disruption due to geopolitical tensions can increase energy costs, impacting businesses and consumers. Investors mitigate geopolitical risk by diversifying globally, investing in safe-haven assets (gold, bonds), and staying informed about global developments to adjust their portfolios accordingly.

1.5.7 Regulatory risk

Regulatory risk refers to the potential impact of changes in laws, policies, or government regulations on businesses and investments. It can affect various sectors, influencing profitability, compliance costs, and

market stability. Examples include new tax laws, stricter financial regulations, environmental policies, or industry-specific restrictions that may alter business operations and investor returns.

For instance, a sudden increase in capital gains tax can reduce investor profits, while new banking regulations may affect financial sector stocks. To mitigate regulatory risk, investors diversify across industries and geographies, monitor policy changes, and invest in companies with strong compliance frameworks to adapt to evolving regulations.

1.6 Types of Investments

There are many investment avenues, financial or non-financial. Financial investments such as equity, bonds etc. are essentially claims on future cash flows. Non-financial investments include real estate, gold, commodities etc. Non-financial investments are also called Real Investments.

The term 'Securities' in the financial market is generally referred for equity, bonds, derivatives etc. and are transferrable.

1.6.1 Equity

Equity investing involves purchasing shares in companies, giving investors ownership stakes and the opportunity to share in the company's growth and profits. Through equity investing, individuals can benefit from capital appreciation and dividend income. Empirically, equities offer higher returns compared to other asset classes over long periods, although they tend to exhibit greater volatility and risk.

A diversified equity portfolio reduces risk by spreading investments across various sectors, geographies, and market capitalizations. This diversification helps mitigate the impact of adverse performance in any single stock. Moreover, equity investors must stay informed about economic conditions, regulatory changes, and global events that may influence market behavior.

Equity investing offers a compelling opportunity for long-term wealth creation. While it requires diligent research, patience, and a tolerance for market fluctuations, disciplined investors can capitalize on growth prospects and generate substantial returns over time. Embracing a balanced and informed approach to equity investing is essential for building a resilient portfolio that can withstand market uncertainties and deliver sustainable financial success.

Investors analyze equities using fundamental analysis, which assesses a company's financial performance, competitive position, management quality, and growth prospects. Investors continuously review and adjust

their portfolios carefully to align with evolving market conditions and their individual risk tolerance levels, which is also known as Rebalancing of Portfolio.

1.6.2. Fixed income securities

Fixed income securities are those investment instruments which provide investors with regular interest payments and the return of principal at maturity. Common examples include government bonds, corporate bonds, municipal bonds, and treasury bills. These instruments are typically less volatile than equities and serve as an essential component of a diversified investment portfolio.

One of the primary advantages of fixed income investing is the predictable income stream it offers. Investors receive periodic interest payments, often referred to as coupons, which provides steady cash flow. This makes fixed income securities especially attractive to conservative investors, retirees, or those seeking to balance the risk in a portfolio.

Another key benefit is capital preservation. When held to maturity, fixed income securities generally return the original investment amount and the assured coupons, provided the issuer does not default. Government bonds, in particular, are considered low-risk investments due to the backing of sovereign guarantees, while corporate bonds offer higher yields in exchange for a higher credit risk, when compared with Government bonds.

However, fixed income investing is not without its risks. Interest rate risk is a critical factor, as bond prices tend to fall when market interest rates rise. Credit risk is also present, especially in corporate bonds, where the risk of default can affect the security's value. Additionally, inflation risk may erode the real value of fixed returns over time.

To manage these risks, investors diversify across different types of bonds and maturities. By carefully selecting a mix of high-quality fixed income securities, investors can achieve a balance between steady income, capital preservation, and risk mitigation, making fixed income a fundamental component of a well-rounded investment strategy.

1.6.3 Commodities

Soft commodities such as corn, wheat, soybean, soybean oil and sugar etc. and Hard commodities such as gold, silver, oil, copper and aluminium are other investment avenues available to investors.

Soft commodities are perishable hence they exhibit high volatility in their prices. These commodities are subject to high business-cycle risks as their prices are determined by the demand and supply of the end

products in which they are consumed. Soft commodities historically have shown low correlation to stocks and bonds. Hence, they provide benefits of risk diversification when held in a portfolio along with stock and bonds. Exposure to these commodities can be taken through derivative contracts like forwards or futures. Hence, investors must carefully understand the risk involved in the same. For example, prediction of weather is an important factor while investing in soft commodities

Hard commodities such as gold and silver have been the investments avenues for centuries, as reserve assets. Due to its global acceptability, gold has acquired the status of a “safe haven” asset and assumed to be a good hedge against inflation. It is, therefore, viewed as an attractive investment in times of economic uncertainty and geopolitical crisis. Historically, Gold has shown diversification benefits too. Unlike most of the financial investments, commodities do not generate any current income and the investor in these commodities would have to count only on capital appreciation. Prices of hard commodities are determined by the interaction between global demand and supply.

1.6.4. Real Estate

Real estate investment is a popular avenue for wealth creation, offering tangible assets and the potential for steady returns. There are various types of real estate investments, including residential properties; commercial properties; industrial and manufacturing real estate and specialized segments such as healthcare facilities and student housing.

One of the primary opportunities in real estate investing is the potential for both income generation and capital appreciation. Rental income can provide a consistent cash flow, while property values may increase over time, leading to significant profits upon sale. Additionally, real estate serves as a hedge against inflation, as rents and property values often rise with increasing prices.

However, investing in real estate also involves several risks. Market fluctuations can affect property values and rental income, while changes in interest rates can influence financing costs. Liquidity risk is another consideration, as real estate assets are not as easily sold as stocks or bonds. Furthermore, managing properties requires time, expertise, and can entail unforeseen expenses such as maintenance, repairs, or regulatory compliance issues. Other challenges of investing in real estate are high upfront costs, financing costs in rising interest rate environment and local regulations.

To navigate these challenges, investors need thorough market research, effective risk management strategies, and sometimes professional property management services to help mitigate these issues and ensure a more stable investment experience

1.6.5. Structured products

Structured products are innovative financial instruments that combine traditional investments like bonds or equities with derivatives to create customized risk-return profiles. They offer opportunities for enhanced returns, downside protection, and exposure to specific market movements that may not be possible through conventional assets. Investors can benefit from capital protection, fixed or variable income, and tailored strategies to meet their financial objectives.

However, structured products come with several challenges and risks. They are complex and often lack transparency, making them difficult for retail investors to fully understand. Liquidity, too can be a risk, as they are not always easily tradable before maturity. Additionally, investors are exposed to credit risk from the issuing institution, as structured products are dependent on the financial health of the issuer. Market volatility and derivative pricing can also impact returns, making these products sensitive to external factors, too.
Structured products are best suited for sophisticated investors who have a clear understanding of financial markets and derivatives. High-net-worth individuals, institutional investors, and those looking for tailored risk management strategies can benefit from structured products. Given their complexity, thorough due diligence and professional advice are recommended before investing in structured products.

1.6.6 Other non-traditional investment opportunities

Non-traditional investing offers a compelling alternative to conventional asset classes, allowing investors to diversify their portfolios and tap into unique value drivers. Alternative assets such as art, paintings, horses, and distressed assets provide opportunities for both financial gain and personal fulfilment.

Fine art and paintings can appreciate over time, often serving as a hedge against inflation and market volatility, while also offering cultural and aesthetic value. Investing in horses, whether for racing or breeding, can yield returns through prize earnings, stud fees, and eventual resale, though these ventures require specialized expertise and management. Distressed assets, including undervalued properties or businesses, allow investors to acquire assets at a discount, potentially realizing significant gains during market recoveries.

However, these non-traditional investments also come with challenges, including illiquidity, complex valuation methods, high transaction costs, and niche market risks. Success in these areas demands thorough due diligence, professional advice, and a long-term perspective.

1.7 Channels for making investments

Investors can own assets either buying them directly or indirectly through regulated intermediaries providing various managed portfolio solutions.

1.7.1 Direct investments

Direct investments are when investors buy the securities issued by companies and government bodies and commodities like gold and silver. Investors can buy gold or silver directly from the sellers or dealers. However, in case of financial securities, financial intermediaries facilitate investors to buy or sell securities for fees or commission. These intermediaries include distributors, brokers, advisers etc.,.

Let us know a brief about these intermediaries.

Distributors

Distributors play a crucial role in the financial ecosystem by helping investors access various investment products such as mutual funds, bonds and other investment products. They act as intermediaries between asset management companies and retail or institutional investors, facilitating investment transactions and providing necessary information. Distributors earn commissions or fees based on the products they sell. They offer convenience and access to multiple financial instruments. Investors should ensure that distributor aligns their financial goals and risk appetite before providing investment services.

Brokers

Brokers are financial intermediaries that facilitate the buying and selling of securities such as stocks, bonds, and derivatives on behalf of investors. They operate through stock exchanges and earn revenue through brokerage fees or commissions. Brokers provide market access, research insights, and advisory services. They can be full-service brokers, offering investment advice and portfolio management, or discount brokers, providing low-cost trading platforms with minimal advisory services. Investors must choose brokers based on their investment needs, fees and service offerings.

Regulatory oversight ensures fair trading practices and investor protection in brokerage services.

Registered Investment Advisers

Investment Advisers provide investment guidance, wealth management, and financial planning services tailored to individual or institutional needs. They match investors' financial goals, risk appetite with suitable investment options under a given market condition. Some advisers earn commissions from product sales or charge advisory fees. However advisors are prohibited from earning both the commission and fees to the same investor. SEBI-registered Investment Advisers (RIAs) in India follow fiduciary standards, ensuring client-first recommendations. Choosing a qualified and unbiased advisor helps investors navigate complex financial markets, optimize portfolios, and achieve long-term financial success.

1.7.2. Indirect investments through managed portfolios

Investors can invest through various regulated investment vehicles, which are professionally managed by experts for a fees or profit-sharing or both.

Investors often use different managed fund structures such as Mutual Funds, Portfolio Management Services (PMS), and Alternative Investment Funds (AIFs) to grow their wealth. Each of these investment vehicles has distinct roles, responsibilities, and regulatory frameworks. Also, each such structure comes with its own level of risk, regulation, and investor suitability.

Mutual Funds

Mutual Funds pool money from multiple investors and invest in a diversified portfolio of stocks, bonds, or other assets, managed by professional fund managers. They are highly regulated by SEBI in India to ensure investor protection and transparency. Some of the key features are:

- Fund managers make investment decisions based on the scheme's objective.
- They ensure diversification to mitigate risks.
- Mutual funds provide liquidity, as investors can buy or sell units easily.
- They disclose NAV (Net Asset Value), portfolio holdings, and other key metrics regularly.

Investors prefer Mutual funds due to its professional management, diversification, transparency and lower costs.

Portfolio Management Services (PMS)

PMS offers customized investment solutions for high-net-worth individuals (HNIs), providing greater flexibility and control over portfolio decisions. Unlike mutual funds, PMS creates tailor-made portfolios for each investor. Some of the key features are:

- Portfolio managers make discretionary or non-discretionary investment decisions.
- They actively manage portfolios with a personalized approach.
- PMS typically has a higher minimum investment requirement (Rs. 50 lakh in India).
- Though managed by a Portfolio Manager, investors receive direct ownership of stocks or assets in their portfolio.

PMS is best suited for HNIs seeking customized strategies, higher risk exposure, and active management.

Alternative Investment Funds (AIFs)

AIFs are privately pooled investment vehicles that invest in non-traditional assets like private equity, hedge funds, venture capital, and distressed assets. SEBI categorizes AIFs into:

- *Category I:* Startups, VC funds, social ventures.
- *Category II:* Private equity, debt funds.
- *Category III*: Hedge funds, long-short funds.

Some of the key features of AIF are:

- AIF managers handle sophisticated investment strategies.
- They ensure compliance with SEBI regulations and risk management.
- They provide long-term investment opportunities with limited liquidity.
- Higher minimum investment (Rs. 1 crore in India) makes AIFs suitable for institutional and HNI investors.

Chapter 1: Sample Questions

1. If there is an uncertainty with respect to the future payment, the investor would require return more than the nominal required rate of return. The additional component is called _____.

    a. Alpha
    b. Risk free rate of return
    c. Risk premium
    d. Both b & c

2. Future value of the investment is influenced by _____.

    a. Time period
    b. Rate of return
    c. Both a & b
    d. None of the above

3. _____ represent ownership in a company that entitles its holders to participate in its profits and the right to vote on the company's affairs.

    a. Bonds
    b. Commercial Papers
    c. Equity Shares
    d. All the above

4. Which of the following statements about Speculation is FALSE?

    a. It is investment without any significant analysis or thought
    b. Speculation is based on some conjectures without evidence
    c. Profit is the strongest motivation for Speculation
    d. Speculation always leads to higher returns

CHAPTER 2: INTRODUCTION TO SECURITIES MARKETS

LEARNING OBJECTIVES:

After studying this chapter, you should understand about:

- Basics of securities market
- Primary and Secondary markets
- Various market participants and their activities

2.1 Securities Market

The securities market provides an institutional structure that enables a more efficient flow of capital in the economy. If a household has some savings, such savings can be deployed to meet the capital requirement of a business enterprise, through the securities markets. The businesses issue securities, raise 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.

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

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

b) derivative [2];

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

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

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

e) units or any other such instrument issued to the investors under any mutual fund scheme (securities do not include any unit linked insurance policy or scrips or any such instrument or unit, by whatever name called which provides a combined benefit risk on the life of the persons and investment by such persons and issued by an insurer referred to in clause (9) of section 2 of the Insurance Act, 1938 (4 of 1938);

f) units or any other instrument issued by any pooled investment vehicle

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

h) government securities;

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

j) rights or interest in securities.

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. Security ownership allows investors to convert their savings into financial assets with an expectation of return on their investments. The issuers of securities are able to reach out to a broader group of investors. For example, in the absence of a well-developed securities market, a household with surplus fund may have to hold all of their savings in a bank deposit even if they are willing to take on some risk for higher returns. But with the different types of equity and fixed income securities available with varying levels of risk and return, investors can choose to invest their surplus funds in the type of security that suits their specific preferences. 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 market in which securities are issued, purchased by investors and subsequently transferred among investors is called the securities market.

2.2 Primary and Secondary market

The securities market has two interdependent and inseparable segments, viz., the primary market and the secondary market. The primary function of the securities market is to enable the flow of capital from those who have it to those who need it. Securities market helps in transfer of resources from those with idle or surplus resources to others who have a productive need for them.

2.2.1 Primary Market

Primary market is used by companies (issuers) for raising fresh capital from the investors. Primary market offerings may be a public offering or an offer to a select group of investors in a private placement program. The shares offered may be new shares issued by the company, or it may be an offer for sale, where an existing large investor/investors or promoters offer a portion of their holding to the public. Let us understand various terms used in the primary market context.

Public issue: Securities are issued to the members of the public, and anyone eligible to invest can participate in the issue.

Initial Public Offer (IPO): An initial public offer of shares or IPO is the first sale of a corporate's common shares to investors at large. The main purpose of an IPO is to raise equity capital for further growth of the business. Eligibility criteria for raising capital from the public investors is defined by SEBI in its regulations and include minimum requirements for net tangible assets, profitability and net-worth.

Further Public Offer (FPO): When an already listed company makes either a fresh issue of securities to the public or an offer for sale to the public, it is called a further public offer (FPO). When a company wants additional capital for growth or repay its debt, it raises equity capital through a fresh issue of capital in a further public offer. An FPO may also be through an offer for sale, which usually happens when it is necessary to increase the public shareholding in the company to meet the regulatory requirements.

Rights Issue: Shares offered to existing shareholders in proportion to their existing holding in the share capital of the company are termed as "Rights shares" popularly known as rights issue. In the rights issue, the shareholders have a right to participate in the issue. It is pre-emptive rights given to existing shareholders. In this rights issue, the offer is required to be made to the existing shareholders in proportion to their existing holdings. The shareholders who are offered may or may not subscribe to the same. They may subscribe partly or fully the offer.

Private Placement: When an issuer makes an issue of securities to a select group of persons and which is neither a rights issue nor a public issue, it is called private placement.

According to Companies Act 2013, an offer to subscribe to securities, made to less than 200 persons, is called private placement of securities.

Preferential Issue: Preferential issue is when a listed issuer issues shares or convertible securities, to a select group of persons. The issuer is required to comply with various provisions defined by SEBI relating to pricing, disclosures in the notice, lock-in, in addition to the requirements specified in the Companies Act.

Qualified Institutions Placements (QIPs): Qualified Institutions 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). QIBs include financial institutions, mutual funds and banks among others. SEBI has defined the eligibility criterion for corporates to be able to raise capital through QIP and other terms of issuance under QIP such as quantum and pricing etc.

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

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

Offer for Sale (OFS): An Offer for Sale is a form of share sale where the shares offered in an IPO or FPO are not fresh shares issued by the company, but an offer by existing shareholders to sell shares that have already been allotted to them. An OFS does not result in increase in the share capital of the company since there is no fresh issuance of shares. The proceeds from the offer go to the offerors, who may be a promoter(s) or other large investor(s). The disinvestment program of the Government of India, where the government offers shares held by it in Public Sector Undertakings (PSUs), is an example of OFS. It may be stated that OFS is a secondary market transaction done through the primary market route.

2.2.2 Secondary Market

An active secondary market promotes the growth of the primary market and capital formation, since the investors in the primary market are assured of a continuous market where they have an option to liquidate or exit their investments. Thus, in the primary market, the issuers have direct contact with the investors,

while in the secondary market, the dealings are between investors only. Secondary market can be broadly divided into two segments:

Over-The-Counter (OTC) Market: OTC markets are the markets where trades are directly negotiated between two or more counterparties. In this type of market, the securities are traded and settled over the counter among the counterparties directly.

Exchange Traded Markets*:* The other option of trading in securities is through the stock exchange route, where trading and settlement is done through the stock exchange. The trades executed on the exchange are settled through a clearing corporation, which acts as a counterparty and guarantees the settlement of the trades to both buyers and sellers.

Other common terms that are used in the context for the secondary markets are:

Trading: A formal contract to buy/sell securities is termed as trading. Stock exchanges in India feature an electronic order matching system that facilitates automatic, speedy and efficient execution of trades.

Clearing and Settlement: Clearing and settlement are post trading activities that constitute the core part of equity trade life cycle. Clearing activity is all about ascertaining the net obligations of buyers and sellers for a specific time period. Settlement is the next step of settling obligations between buyers and sellers by paying money (if transaction is a buy transaction) or delivering securities (if it is a sell transaction).

Clearing corporation is the entity through which settlement of securities takes place for all the trades done on stock exchanges. The details of all transactions performed by the trading members (TMs or brokers) are made available to the Clearing Corporation by the stock exchange. The Clearing Corporation gives an obligation report to TMs and custodians who are required to settle their money or securities obligations within the specified deadlines, failing which they are required to pay penalties. Clearing corporations provide full novation of contracts between buyers and sellers, which means it acts as buyer to every seller and seller to every buyer. As a result, the operational risk of the transaction is substantially reduced for an investor.

Risk Management: Clearing Corporation, provides settlement guarantee of trades to the counterparties (all buyers and sellers). This exposes the Clearing Corporation to the risk of default by the buyers and sellers. To handle this risk, the Clearing Corporation charges various kinds of margins, most prominent among these margins are initial or upfront margin and mark to market (MTM) margins. Initial margin is a percentage of transaction value arrived at based on concept of “Value At Risk” philosophy and MTM margin is the notional loss which an outstanding trade has suffered during a specified period on account of price movements.

2.3 Market Participants and their Activities

Market Participants in securities markets include buyers, sellers and various intermediaries between the buyers and sellers. Some of these entities are defined in brief below:

2.3.1 Market Infrastructure Institutions and other intermediaries

Stock Exchanges: Stock Exchanges provide a trading platform where buyers and sellers can transact in already issued securities. Stock exchanges such as NSE, BSE and MSEI are nationwide exchanges. Trading happens on these exchanges through 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.

Clearing Corporations: Clearing Corporations play an important role in safeguarding the interest of investors in the Securities Market. Clearing agencies ensure that brokers of the Stock Exchanges meet their obligations to deliver funds or securities. These agencies act as a legal counterparty to all trades and guarantee settlement of all transactions on the Stock Exchanges. It can be a part of an exchange or a separate entity.

Depositories: Depositories are institutions that hold securities (shares, debentures, bonds, government securities, mutual fund units) of investors in electronic form. Investors open an account with the depository through a registered Depository Participant. They also provide services related to transactions in the securities held in dematerialized form. Currently there are two Depositories in India that are registered with SEBI—Central Depository Services Limited (CDSL), and National Securities Depository Limited (NSDL).

Depository Participant: A Depository Participant (DP) is an agent of the depository through which it interfaces with the investors and provides depository services. Depository participants enable investors to hold and transact in securities in the dematerialized form. 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.

DPs are appointed by the depository with the approval of SEBI. Public financial institutions, scheduled commercial banks, foreign banks operating in India with the approval of the Reserve Bank of India, state financial corporations, custodians, stock- brokers, NBFCs and Registrar to an Issue and Share Transfer Agents complying with the requirements prescribed by SEBI, can be registered as a DP.

Trading Members/Stock Brokers: Trading members or Stock Brokers are registered members of a Stock Exchange. They facilitate buy and sell transactions of investors on stock exchanges. All secondary market

transactions on stock exchanges have to be essentially conducted through registered brokers of the stock exchange. Trading members can be individuals (sole proprietor), Partnership Firms or Corporate bodies, who are permitted to become members of recognized stock exchanges subject to fulfilment of minimum prudential requirements.

Trades have to be routed only through the trading terminals of registered brokers of an exchange, to be accepted and executed on the exchange electronic system. Brokers can trade on their own account using their own funds. Such transactions are called proprietary trades.

SEBI registration to a broker is granted based on factors such as availability of adequate office space, equipment and manpower to effectively carry out his activities, past experience in securities trading etc. SEBI also ensures the capital adequacy of brokers by requiring them to deposit a base minimum capital with the stock exchange and limiting their gross exposures to a multiple of their base capital.

Brokers receive a commission for their services, which is known as brokerage.

Several brokers provide research, analysis and recommendations about securities to buy and sell, to their investors.

Authorized persons (AP): Authorised Persons are agents of the brokers (previously referred to as sub-brokers) and are registered with the respective stock exchanges.[3] APs help in reaching the services of brokers to a larger number of investors.

Custodians: A Custodian is an entity that is vested with the responsibility of holding funds and securities of its large clients, typically institutions such as banks, insurance companies, and foreign portfolio investors. Besides safeguarding securities, a custodian also settles transactions in these securities and keeps track of corporate actions on behalf of its clients. It helps in:

- Maintaining a client's securities and funds account.
- Collecting the benefits or rights accruing to the client in respect of securities held.
- Keeping the client informed of the actions taken or to be taken on their portfolios.

Clearing Banks: Clearing Bank acts as an important intermediary between clearing members and the clearing corporation. Every clearing member needs to maintain an account with the clearing bank. It is the clearing member's responsibility to make sure that the funds are available in its account with clearing bank on the

[3] Vide SEBI Circular: SEBI/HO/MIRSD/DoP/CIR/P/2018/117 dated August 3, 2018, all the registered Sub-Brokers needed to migrate to act as an AP and/ or Trading Member (TM).

day of pay-in to meet the obligations arising out of trades executed on the stock exchange. In case of a pay-out, the clearing member receives the amount in their account with clearing bank, on pay-out day.

Merchant Bankers: Merchant bankers are entities registered with SEBI and act as issue managers, investment bankers or lead managers. They help an issuer access the security market with an issuance of securities.

They are single point of contact for issuers during a new issue of securities. They evaluate the capital needs of issuers, structure an appropriate instrument, get involved in pricing the instrument and manage the entire issue process until the securities are issued and listed on a stock exchange. They engage and co-ordinate with other intermediaries such as registrars, brokers, bankers, underwriters and credit rating agencies in managing the issue process.

2.3.2 Institutional Participants

Investors in securities market can be broadly classified into Retail Investors and Institutional Investors.

Institutional Investors comprises banks, mutual funds, pension funds, insurance companies, hedge funds, alternative investment funds, foreign portfolio investors etc.. Some of them are defined here in brief:

Banks: In India, banks actively participate in the equity market under the regulatory framework established by the Reserve Bank of India (RBI). Banks are permitted to invest in equities and fixed income securities through their treasury operations and subsidiary companies, subject to limits and conditions. The RBI guidelines mandate that banks must adhere to prudent exposure limits to mitigate risks. These regulations ensure that banks' involvement in the capital market is conducted in a controlled and risk-managed manner, contributing to the stability and integrity of the financial system.

Mutual Funds: Mutual Fund is a professionally managed collective investment scheme that pools money from many investors to purchase securities on their behalf.

Pension Funds: A fund established to facilitate and organize the investment of the retirement funds contributed by the employees and employers. The pension fund is a common asset pool meant to generate stable growth over the long term, and provides a retirement income for the employees. Pension funds are commonly run by a financial intermediary for the company and its employees, although some larger corporations operate their pension funds in-house.

Insurance Companies: Insurance companies' core business is to insure assets. Depending on the type of assets that are insured, there are various insurance companies like life insurance and general insurance etc. These companies have huge corpus and they are one of the most important investors in the Indian economy

by investing in capital and money markets. Like mutual funds, each insurance company also has designated people who are responsible for investment decisions.

Alternative Investment Funds: 'Alternative Investment Fund' (AIF) is primarily a privately pooled investment vehicle. Various types of AIFs: Venture Capital Fund, Angel Fund, Private Equity Fund, Debt Fund, Infrastructure Fund, SME Fund, Hedge Fund and Social Venture Fund.

Foreign Portfolio Investors (FPIs): A Foreign Portfolio investor (FPI) is an entity established or incorporated outside India that proposes to make investments in India. These international investors must register with the SEBI to participate in the Indian securities markets.

Employees' Provident Fund Organization (EPFO): EPFO is a statutory body set up under the Employees' Provident Funds & Miscellaneous Provisions Act, 1952. EPFO comes under the purview of Ministry of Labour and Employment. EPFO does not invest directly in any of the individual stocks in equity market. EPFO invests in both debt securities and exchange traded funds as per prescribed pattern.

National Pension System: National Pension System (NPS) is a pension cum investment scheme launched by Government of India to provide old age security to Citizens of India. This defined contribution pension system is regulated by Pension Fund Regulatory and Development Authority (PFRDA). The Central Government had introduced the National Pension System (NPS) with effect from January 1, 2004. Subsequent to Central Government, various State Governments adopted this architecture and implemented NPS with effect from different dates. For the non-government category there are two categories available: corporate sector and All Citizens of India. NPS Corporate Sector Model is the customized version of NPS to suit various organizations. NPS schemes invest in equity shares, corporate bonds and government securities.

Family Offices: Family office can be defined as the ecosystem which the family builds around itself to manage its wealth. Family offices provide administrative support to investment management services with a view to coordinate the family financial needs, life style goals, charitable givings, estate planning etc.. Family offices generally serve multiple generations. These are investment management firms catering to ultra-high net worth households/individuals (UHNWI) providing them customized investment management solutions.

Corporate Treasuries: Corporate treasuries are increasingly seen as profit centres. Traditionally, the role of corporate treasury has been that of manager of financial risks and provider of liquidity. The focus area of corporate treasuries has been debt management to capital structure management with the key responsibility of raising long term funds and minimizing the cost of capital.

2.3.3 Retail Participants

Retail Investors include individual investors who buy and sell securities for their personal account, and not for another company or organization. As per the SEBI Issue of Capital and Disclosure Requirements (ICDR) Regulations, 2018: 'Retail individual investor' means an individual investor who applies or bids for specified securities for a value of not more than Rs.2 lakh during IPO/FPO.

Chapter 2: Sample Questions

1. **When a listed company issues shares to a select group of persons, which is neither a rights nor a public issue, then it is known as _____.**

a. Preferential issue
b. Private placement
c. Private equity

2. **Which of the following is essential for the public issue of a debt security?**

a. The debt issue size should be greater than Rs. 5000 Crs
b. The debt instruments must be credit rated
c. The debt issuer must stand as guarantor for the payment of principal and interest.
d. The debt instruments should have a minimum coupon specified.

3. **Which of the following is the function of the secondary markets?**

a. Provide liquidity for securities issued
b. Provide a platform for making public issues
c. Provide information about public companies
d. All the above

4. **A trade that is squared-off during the day _____.**

a. **Does not require delivery of shares**
b. Is not guaranteed by the exchange
c. Is cancelled by the exchange
d. Is not considered in calculating trading volumes

CHAPTER 3: INVESTING IN STOCKS

LEARNING OBJECTIVES:

After studying this chapter, you should understand about:

- Equity as an investment
- Types of risk in equity investments
- Management of risk through diversification
- Equity research and stock selection
- Estimation of intrinsic value
- Technical analysis

3.1 Equity as an investment

Investment options can broadly be classified into two categories: Equity and Debt. Equity investments represent ownership in a company, while debt investments involve lending money to an entity in exchange for fixed interest payments. The primary difference between the two is the risk-reward ratio. Equity investments typically offer higher returns but come with greater risk, whereas debt investments provide stable returns with lower risk.

High Risk and Reward in Equity Investments

Equity investments are inherently riskier than debt instruments. Stock prices fluctuate based on company performance, industry trends, economic conditions, and market sentiment. While this volatility increases risk, it also offers the potential for high rewards. If a company performs well, equity investors benefit from capital appreciation—the increase in stock price over time. On the other hand, if a company underperforms or faces financial distress, investors may suffer losses.

Capital Appreciation and Dividend Income

One of the primary reasons investors choose equity is capital appreciation—the potential for stock prices to rise, allowing investors to sell their shares at a profit. Over the long term, equity markets have historically provided substantial returns, outpacing inflation and other asset classes.

In addition to capital gains, many companies distribute a portion of their earnings as dividends. These periodic payments provide a steady income stream to shareholders. While dividends are not guaranteed and depend on a company's profitability, they enhance the overall return on equity investments. Companies with a history of consistent dividend payments are typically seen as financially stable and reliable investment options.

Key Features of Equity Investments

Equity as a Residual Claim: Equity holders have a residual claim on a company's assets and earnings. This means they are the last to be paid in the event of liquidation, after all debts and liabilities are settled. While this increases risk, it also offers significant upside potential when a company performs well, as shareholders enjoy a share of the remaining profits.

Voting Rights: Equity investors, particularly those holding common stock, have voting rights, allowing them to participate in corporate decision-making. Shareholders can vote on important matters such as electing the board of directors, approving mergers, or making significant business decisions. This gives investors some control over the company's strategic direction.

Ownership in the Company: Buying equity in a company means purchasing a share of ownership. Equity investors are partial owners of the business and benefit from its success. This ownership right extends to receiving profits, influencing decisions through voting, and participating in company growth. Unlike debt investors who only receive fixed interest payments, equity investors have unlimited profit potential, depending on company performance.

3.2 Risks of equity investments

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

3.2.1 Market risk

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

3.2.2 Sector specific risk

Risks, which are specific to a particular sector may not be relevant to other sectors. Sector specific risks are non-systematic in nature and hence can be diversified. Benefit of diversification will come by way of adding securities from other sectors in the portfolio, which have low or negative correlation with the companies from the given sector

3.2.3 Company specific risk

Company-specific risk, also known as unsystematic risk or idiosyncratic risk, refers to the risk that affects an individual company rather than the broader market or economy. This type of risk arises due to factors unique to a specific company and can impact its stock price, financial performance, and overall stability. It can be due to management quality, financial health, non-compliances, operations or competitive landscape. However, such risk can be mitigated by way of diversification and is considered avoidable compared to market-wide risks (systematic risks) like interest rates, inflation, or economic downturns, which affect all companies.

Please note that other investment risks, as defined in chapter 1, are also applicable while investing in Equities.

3.3 Diversification of risk in equity investments

Equity investments are inherently riskier than bonds and many other asset classes, but risks can be mitigated through diversification. The two primary forms are:

- **Cross-sectional diversification:** Holding equities across different industries, sectors, and geographies at a given time.
- **Time diversification:** Staying invested over long periods to balance out market ups and downs, supporting the adage "time in the market beats timing the market."

Empirical studies confirm diversification reduces risk due to the lower correlation of returns across sectors. This principle aligns with "Don’t put all your eggs in one basket."

Business cycles and counter-cyclical trends play a key role. Some businesses thrive during recessions (e.g., defensive or recession-proof sectors), while others lag or lead in recovery. Understanding these cycles helps enhance diversification strategies.

3.4 Equity research and stock selection

Equity research involves thorough analysis and research of the companies and its environment. Equity research primarily means analysing the company's financials and non-financial information, study the dynamics of the sector the company belongs to, competitors of the company, economic conditions etc..

The idea behind equity research is to come up with intrinsic value of the stock to compare with market price and then decide whether to buy or hold or sell the stock. There are many frameworks/methodologies available for stock selection. Analysts use fundamental analysis - top-down approach or bottom-up approach - quantitativeand qualitative indicators, technical indicators etc., to select stocks.

3.4.1. Fundamental Analysis

Fundamental analysis is the process of determining intrinsic value for the stock. These values depend on underlying economic factors such as future earnings or cash flows, interest rates, and risk variables. By examining these factors, intrinsic value of the stock is determined. Investor should buy the stock if its market price is below intrinsic value and sell, if the market price is above the intrinsic value. However, the difference between intrinsic value and market price should be enough to cover the transaction costs.

Investors who are engaged in fundamental analysis believe that, intrinsic value may differ from the market price but eventually market price will converge towards the intrinsic value. An investor or portfolio manager who can do a superior job of estimating intrinsic value will generate above-average returns by acquiring undervalued securities. Fundamental analysis involves economy analysis (E), industry analysis (I), company analysis (C), known as EIC framework.

Top Down approach versus Bottom up Approach

Analysts follow two broad approaches to fundamental analysis—top-down and bottom-up.

In a Top-Down approach, the factors to consider are economic (E), industry (I) and company (C) factors. It is done by scanning the macro-economic scenario and then identifying industries to choose from and finally zeroing in on companies to invest in.

On the other hand, in the Bottom-Up approach, a company's financial prospects are evaluated and added in the portfolio based on its suitability under the stated Investment Objective.

3.4.2 EIC Approach to Stock Selection

The Economy-Industry-Company (EIC) approach is a fundamental research framework used by analysts to identify the best stocks for investment. It follows a top-down approach, beginning with a broad analysis of the economy, narrowing down to specific industries, and finally selecting the best-performing companies within those industries. This structured approach helps investors make informed decisions by evaluating macroeconomic conditions, industry trends, and company fundamentals before selecting a stock.

This top-down analysis ensures that investments align with favourable macroeconomic conditions and industry trends while targeting fundamentally sound companies. By following this approach, investors can make well-informed, data-driven investment decisions.

A. Economic Analysis

The first step in the EIC approach is economic analysis, where analysts assess the overall macroeconomic environment. The performance of an economy directly impacts stock markets, influencing investor sentiment and corporate earnings. Analysts examine key indicators such as:

- **Gross Domestic Product (GDP) Growth**: A growing economy typically leads to higher corporate profits and stock market gains.
- **Inflation Rates:** Moderate inflation is good for businesses, but high inflation erodes purchasing power and raises costs.
- **Interest Rates:** Lower interest rates encourage borrowing and investment, boosting corporate growth, while higher rates can slow down economic expansion.
- **Employment and Wage Growth:** High employment and rising wages increase consumer spending, benefiting businesses.
- **Government Policies and Regulations**: Fiscal policies (tax cuts, government spending) and monetary policies (rate changes, liquidity measures) shape the business environment.
- **Global Economic Trends:** International trade policies, geopolitical risks, and currency exchange rates also impact stock markets.

By analyzing these factors, analysts determine whether the economy is in an expansion, peak, contraction, or recession phase, helping them decide if it is a good time to invest in equities. If the economic outlook is positive, they proceed to industry analysis to find sectors that are likely to benefit.

B. Industry Analysis

Once analysts have a favourable economic outlook, they identify industries that are positioned for growth. Different industries react differently to economic cycles, making industry selection crucial. Key factors in industry analysis include:

- **Industry Life Cycle**: Analysts determine whether an industry is in the introduction, growth, maturity, or decline phase. Growth-phase industries offer the best investment opportunities.
- **Demand and Supply Conditions:** High demand and limited supply create pricing power, increasing profitability for industry players.
- **Competitive Landscape:** The level of competition affects profitability. Analysts use Porter's Five Forces Model, evaluating:
    - Threat of new entrants
    - Bargaining power of suppliers
    - Bargaining power of buyers
    - Threat of substitutes
    - Industry rivalry
- **Regulatory Environment**: Some industries, like banking or healthcare, are heavily regulated, impacting their profitability and risk.
- **Technological Disruptions:** Emerging technologies can change industry dynamics, creating new leaders and disrupting traditional businesses.

After identifying promising industries, analysts move to the final step: selecting the best company within that industry.

C. Company Analysis

At the company level, analysts evaluate financial and qualitative factors to pick the best stock. Some key aspects include:

- **Financial Statements**: Analysts examine:
    - **Revenue and Profit Growth:** Consistent growth indicates strong business performance.
    - **Return on Equity (ROE) and Return on Assets (ROA)**: High ROE and ROA signal efficient use of capital.
    - **Debt Levels**: Low debt ensures financial stability and lower risk.
    - **Cash Flow Analysis**: Strong cash flows indicate a company's ability to fund operations and expansion.
- **Management Quality:** Analysts assess the leadership team's track record, vision, and decision-making ability.

- **Competitive Advantage:** Companies with strong brand value, unique products, or cost leadership tend to outperform.
- **Valuation Metrics:** Analysts use tools like Price-to-Earnings (P/E) Ratio, Price-to-Book (P/B) Ratio, and Enterprise Value to EBITDA (EV/EBITDA) to determine if a stock is fairly priced.

3.5 Estimation of intrinsic value

Once the analysis of economy, industry and company is completed, the analyst can go ahead with estimating intrinsic value of the firm's stock. Price and value are two different concepts in investing. While price is available from the stock market and known to all, value is based on the evaluation and analysis of the entity that is undertaking the valuation of the stock at a point in time. It may be noted that Price is a Fact but Value is an Opinion.

There are various approaches to valuation explained in subsequent paragraphs. There are uncertainties associated with the inputs that go into these valuation approaches. As a result, with due diligence, the final output can at best be considered an educated estimate. That is the reason, valuation is often considered an art as well as a science. It requires the combination of knowledge, experience, and professional judgment in arriving at a fair valuation of any asset. The purpose of valuation is to relate market price of the stock to its intrinsic value and judge whether it is fairly priced, over-priced, or under-priced.

3.5.1 Discounted Cash Flow (DCF) Analysis

Discounted Cash Flow (DCF) is a fundamental valuation method used to determine the intrinsic value of an asset by estimating its future cash flows and discounting them to the present value. The idea behind DCF is that the value of an investment today is equal to the sum of all expected future cash flows, adjusted for the time value of money. This method is widely used in equity valuation, corporate finance, and investment decision-making.

Types of DCF Models

There are three primary types of DCF models, each suited for different valuation scenarios:

A. Dividend Discount Model (DDM)

The Dividend Discount Model (DDM) is used for valuing companies that regularly pay dividends. It assumes that the intrinsic value of a stock is the present value of all future dividends the company is expected to pay.

Box: 3.1

The simplest form of DDM is the Gordon Growth Model (GGM):

$$P0 = D1 / (r - g)$$

Where:

- P0 = Intrinsic value of the stock
- D1 = Expected dividend next year
- r = Required rate of return (discount rate)
- g = Expected dividend growth rate

B. Free Cash Flow to Firm (FCFF) Model

The Free Cash Flow to Firm (FCFF) model values a company based on its operating cash flows before interest payments. It estimates the total enterprise value (EV), which includes both equity and debt holders.

Box: 3.2

The FCFF formula is:

$$FCFF = EBIT (1 - TaxRate) + Depreciation - Capital\ Expenditure - Change\ in\ Working\ Capital$$

To find the intrinsic value of equity, the enterprise value is adjusted by subtracting net debt:

$$Equity\ Value = EV - Debt + Cash$$

The FCFF is discounted using the Weighted Average Cost of Capital (WACC) since it reflects the required return for both equity and debt investors.

FCFF is best suited for:

- Companies with both debt and equity financing.
- Firms where dividends are irregular or not paid.
- Mergers and acquisitions discussions, where total firm value is needed.

C. Free Cash Flow to Equity (FCFE) Model

The Free Cash Flow to Equity (FCFE) model estimates the cash flows available to equity shareholders after all expenses, taxes, reinvestments, and debt repayments.

Box: 3.3

The FCFE formula is:

FCFE = Net Income + Depreciation – Capital Expenditure – Change in Working Capital + Net Borrowing

FCFE is discounted using the Cost of Equity (re), derived from the Capital Asset Pricing Model (CAPM).

$re = Rf + \beta (Rm - Rf)$

Where:

- Rf = Risk-free rate (e.g., government bond yield)
- β = Stock's beta (measure of risk compared to the market)
- Rm = Expected market return

A higher beta implies higher risk and, therefore, a higher discount rate, reducing the present value of future cash flows.

FCFE is best suited for:

- Valuing firms with significant leverage, as it directly accounts for debt financing.
- Firms that do not pay dividends but generate substantial cash flows.

A higher beta implies higher risk and, therefore, a higher discount rate, reducing the present value of future cash flows.

In short, DCF analysis provides a structured approach to valuation by considering expected future cash flows and discounting them appropriately. The choice between DDM, FCFF, and FCFE depends on the company's dividend policy, capital structure, and the nature of its cash flows.

3.5.2 Asset Based Valuation

Asset Based valuation methodology is used in some businesses where the business is asset heavy, and the assets are usually reflected in the financial statements at fair market value, like financial Institutions, firms in real estate and gold, gems and jewellery. Under this method, the value of the firm is equal to the "adjusted current market values of Net Tangible, Intangible, Financial, and Net Current Assets". Value of equity is "value of firm less value of all outsider liabilities". Significantly the issue with this approach is that it does not recognise the value of future profits and cashflows of the firm, and all future possible value creation the firm can do due to its research and innovation. This is also known as Replacement Value i.e. what price one would pay to create the business, brand, size etc.

3.5.3 Relative Valuation (Multiple Based)

Another popular valuation method is Relative valuation, where one company's multiples are compared with that of (a) other similar companies, (b) sector, (c) market and/or (d) same company in the past.

Some of the most commonly used relative valuation multiples are:

- Price-to-Earnings (P/E),
- Price Earnings-to-Growth (PEG)
- Price-to-Book Value (P/BV),
- Enterprise Value to EBIDTA (EV/EBIDTA),
- Price-to-Sales (P/S),
- Price – to- Operating Cash Flow (P/OFCF) etc.

At times, non-financial metrices are also used for relative valuation. For example, “Average Revenue per Mega Byte” “Average Revenue per User” in the case of Telecom companies, “Plant Load Factor” in the case of Power companies, “Occupancy Rates” in the case of Lodging Hotels, “Footfall” in the case of Retail sector, etc.

A. P/E Ratio

The most common stock valuation measure used by analysts is the price to earnings ratio, or P/E, which is stock price divided by EPS.

For example, if the stock is trading at Rs. 100 and the EPS is Rs. 5, the P/E is 20 times.

Historical or trailing P/Es are computed by dividing the current market price of the equity share by the sum of the last four quarters’ EPS. Forward or leading P/Es are computed by dividing the current mark price of the equity share by the sum of the expected next four quarters of EPS. Current P/E Ratio is current market price of the equity share divided by the current or the immediate recent annual EPS of a company.

For example, consider a company whose fiscal year ends in March every year. In order to compute the forward P/E for the financial year ending 2019 (technically called FY19), an investor would add together the quarterly EPS estimates for the future quarters ending June 2019, September 2019, December 2019 and March 2020. Then the current market price of equity is divided by this number aggregate number to get a forward P/E Ratio.

A stock's P/E tells us how much investor is willing to invest in an equity share, per rupee of earnings. Therefore a P/E ratio of 10 suggests that investors in the stock are willing to invest Rs. 10 for every Re. 1 of earnings that the company generates.

For judging whether the target firm is fairly valued, undervalued or overvalued, its PE ratio is compared with the market PE ratio (i.e. of Nifty 50, S&P Sensex, SX40, among others), or the average PE ratio of the industry to which it belongs, or with the PE ratios of peer group companies. For example the PE Ratio of the target company is 18, and that of the industry, market or the comparable firms is 22, then the firm is judged to be undervalued.

There are certain limitations to using the PE ratio as a valuation indicator. The projected P/E ratios are calculated based on analyst estimates of future earnings that may not be accurate. PE ratios of companies that are not profitable, and consequently have a negative EPS, are difficult to interpret. P/E ratios change constantly and the ratio needs to be recomputed every time there is a change in the price or earnings estimates. The average P/E ratio in the market and among industries fluctuates significantly depending on economic conditions.

As a general guidance one is advised to approach relation valuation in this manner. For example, all things being equal, a Rs.10 stock is enjoying a P/E of 75, then it is should be considered "expensive" than a Rs.100 stock with a P/E of 20.

B. Price to Book Value Ratio

Price to Book Value (P/BV) is another relative valuation ratio used by investors. It compares a stock's price per share (market value) to its book value of equity per share (i.e. Networth). The P/BV ratio is an indication of how the market is valuing the book value of equity or how much more or less are the shareholders valuing the equity to be. The market price being above or below the book value is much to do with market players and investor's expectations of the value currently not recognised in the books.

The book value per share is calculated by dividing the reported shareholders' equity (i.e. Networth) by the number of equity shares outstanding.

The use of book value as a valuation parameter also has limitations because a company's assets are recorded at historical cost less depreciation. Depending on the age of these assets and their physical location, the difference between current market value and book value can be substantial. Also, assets like intellectual property are difficult to assess in terms of value. Hence, book value may undervalue these kinds of assets. P/B ratio is widely used as a valuation metric in valuing financial services and banking stocks where the assets closely follow their market value.

C. Price to Sales (P/S) Ratio

The price-to-sales ratio (Price/Sales or P/S) is calculated by dividing a company's market capitalization (the number of outstanding shares multiplied by the share price) by the company's total sales or revenue over the past 12 months. Price to sales ratio is used as sales are less prone to financial manipulation. Also in case of companies not earning profits yet, or companies in high volume low margin businesses instead of earning based ratios investors can look at the P/S ratio to determine whether the stock is undervalued or overvalued.

D. Price Earnings to Growth (PEG) Ratio

A high growth company would typically command a higher P/E multiple. To compare such companies growing at different pace, Price-Earnings to Growth Ratio (PEG Ratio) is used. PEG Ratio takes into account not just the P/E multiple, but also adjusts it for the growth of earnings. Like other multiples, lower PEG ratio is favoured over higher PEG ratio.

This ratio may be interpreted as the price that an investor is willing to pay for a company, as justified by the growth in earnings. The assumption with high P/E stocks is that investors are willing to buy at a high price

because they believe that the stock has significant growth potential. The PEG ratio is an improvisation of the PE ratio using a companion variable called growth. Using either the industry or the comparable firms' PEG ratios one can decide whether the target firm's equity is overvalued or undervalued. The PEG ratio may show that one company, compared to another, may not have the growth rate to justify its higher P/E, and its stock price may appear overvalued.

The thumb rule is that if the PEG ratio is 1, it means that the market is valuing a stock in accordance with the stock's estimated EPS growth. If the PEG ratio is less than 1, it means that the stock's price is undervalued given its growth rate. On the other hand, stocks with PEG ratios greater than 1 can indicate just the opposite - that the stock is currently overvalued. This is based on an assumption that P/E ratios should approximate the long-term growth rate of a company's earnings.

The efficacy of the PEG ratio as a valuation measure will depend upon the accuracy with which the earnings growth numbers are estimated. Overestimation or underestimation of future earnings will lead to erroneous conclusions about the valuation of the share.

E. EV/EBITDA Multiple

The EV/EBITDA (Enterprise Value to Earnings Before Interest, Taxes, Depreciation, and Amortization) multiple is a widely used valuation metric in relative valuation. It compares a company's enterprise value (EV), which includes market capitalization, debt, and cash to its EBITDA, a measure of operating profitability.

This ratio helps investors assess a company's valuation relative to peers, considering its profitability before the impact of financing and accounting decisions. A lower EV/EBITDA suggests a company may be undervalued, while a higher EV/EBITDA may indicate overvaluation.

Best Suited For:

- Capital-intensive industries (e.g., manufacturing, telecom, infrastructure).
- Comparing companies with different debt structures, as EBITDA is unaffected by capital structure.

Unlike the P/E ratio, which depends on net earnings, EV/EBITDA focuses on operating performance, making it a preferred multiple in mergers, acquisitions, and leveraged buyout (LBO) analysis.

3.6 Technical Analysis

Technical Analysis is based on the assumption that all information that can affect the performance of a stock, the company fundamentals, the economic factors and market sentiments, are already reflected in its stock prices. Accordingly, technical analysts do not analyse the fundamentals of the business. Instead, the

approach is to forecast the direction of prices through the study of patterns in historical market data—price and volume. Technicians (sometimes called chartists) believe that market activity will generate indicators/signals through price trends that can be used to forecast the direction and magnitude of stock price movements in future.

There are three essential assumptions in technical analysis about the price and volume behaviour:

- The history of past prices provides indications of the underlying trend and its direction.
- The volume of trading that accompanies price movements provides important inputs on the underlying strength of the trend.
- The time span over which price and volume are observed influences the strength or weakness of the underlying trend.

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

Technical Analysis is a specialized stream in itself and involves study of various trends- upwards, downwards or sideways, so that traders can benefit by trading in accordance with the trend. Identifying support and resistance levels, which represent points at which there is a lot of buying and selling interest respectively, and the implications on the price if a support and resistance level is broken, are important conclusions that are drawn from past price movements. For example, if a stock price is moving closer to an established resistance level, a holder of the stock can benefit by booking profits at this stage since the prices are likely to retract once it is close to the resistance level. If a support or resistance is broken, accompanied by strong volumes, it may indicate that the trend has accelerated and supply and demand situation has changed. Trading volumes are important parameters to confirm a trend. An upward or downward trend should be accompanied by strong volumes. If a trend is not supported by volumes or the volumes decrease, it may indicate a weakness in the trend.

Technical analysis converts the price and volume data into charts that represent the stock price movements over a period of time. Some of the charts used include line charts, bar charts, candlestick chart. The patterns thrown up by the charts are used to identify trends, reversal of trends and triggers for buying or selling a stock. Typically, chartists use moving average of the price of the stock to reduce the impact of day to day fluctuations in prices that may make it difficult to identify the trend.

3.6.1. Assumption of Technical Analysis

From the above discussion on technical analysis, one can say that:

- The market price is determined by the interaction of supply and demand.
- Supply and demand are governed by many rational and irrational factors.
- Price adjustments are not instantaneous and prices move in trends
- Trends persist for appreciable lengths of time.
- Trends change in reaction to shifts in supply and demand relationships.
- These shifts can be detected in the action of the market itself.

3.6.2. Technical versus Fundamental Analysis

Fundamental analysis involves determining the intrinsic worth of the stock and comparing it with the prevailing market price to make investment decisions. Fundamental analysts believe that prices will move towards their intrinsic value sooner or later. Technical analysis is not concerned if the stock is trading at a fair price relative to its intrinsic value. It limits itself to the future movements in prices as indicated by the historical data. It is used for short-term trading activities and not necessarily long-term investing.

Chapter 3: Sample Questions

1. _____ industries rise and fall and very closely follow the general economic activity in comparison to other industries.

a. Cyclical
b. Consumer staples
c. Defensive
d. Financial

2. Under relative valuation techniques, value of a stock is estimated based upon its current price relative to variables considered to be significant in valuation, such as _____.

a. Earnings
b. cash flow
c. book value
d. All of these

3. …… ratio compares the price of the stock to the earning it generates.

a. P/E ratio
b. P/B Ratio
c. Price/Cash flow ratio
d. Price/sales ratio

4. . Market Risk refers to risk in equity investment arising due to _____.

a. The price volatility in the market created by market dynamics
b. The gap between book value and market value of an equity share
c. The price volatility created by the underlying business profitability
d. The price volatility due to the government's intervention in the stock markets

CHAPTER 4: INVESTING IN FIXED INCOME SECURITIES

LEARNING OBJECTIVES:

After reading this chapter, the reader should understand about:

- Overview of fixed income securities
- Bond characteristics
- Determinants of bond safety
- Valuation of Bonds
- Measuring price volatility for bonds

4.1 Overview of Fixed Income Securities

Investors find it less exciting to talk about bonds or fixed income securities (bonds). A typical investor has more focus on equities when it comes to investment discussions. It is an irony because the global total market value of bonds is larger than the total market value of equity. Generally, Government is the single largest issuer of bonds. Not only the size but also in terms of number of issues, bonds overtake equities as unlike equity, companies can issue many different bond issues outstanding at the same time. Governments issue bonds of many kinds and varied maturity profile.

In India, the fixed income market is classified on the basis of the entities issuing fixed income securities. Fixed income securities are issued by legal entities such as the Central and State Governments, Public Bodies, Banks and Institutions, statutory corporations and other corporate bodies[4]. The fixed income instruments traded can be classified into the following segments on the basis of the issuer of these securities (Table 4.1):

[4] In India, the long-term debt securities issued by the Government of India or any of the State Government's or undertakings owned by them or by development financial institutions are called as bonds. Instruments issued by other entities are called debentures.

Table 4.1: Types of Fixed Income Instruments

Market Segment	Issuer
Government Securities	Central Government
	State Governments
Public Sector Bonds	Government Agencies / Statutory Bodies
	Public Sector Undertakings
Private Sector Bonds	Corporates
	Banks
	Financial Institutions

Government securities or G-Secs, constitute the largest segment of the Indian fixed income market. The next largest section of the rupee-denominated debt market is the corporate bond market. This segment has grown substantially in recent years .

The Indian primary market in corporate debt is basically a private placement market with most of the corporate bond issues being privately placed among the wholesale investors i.e. the banks, financial institutions, mutual funds, large corporate & other large investors. This situation has restricted the retail participation in the bond market. The share of retail investors in corporate bond market is very small.

The issue and trading of fixed income securities by each of these entities are regulated by different bodies in India. Government securities and securities issued by banks, non-banking finance companies (NBFCs) are regulated by the RBI. The issue of non-government securities comprising basically issues of corporate debt is regulated by SEBI.

4.2 Bond Characteristics

Since bonds create fixed financial obligations on the issuers, they are referred as fixed income securities. The issuer of a bond agrees to:

a) pay a fixed amount (known as coupon) periodically and
b) repay the fixed amount of principal (known as face value) at the date of maturity.

The fixed obligations of the security are the most defining characteristic of bond. Mostly bonds make semi-annual coupon payments, though some may make annual, quarterly or monthly coupon payments. The coupon payment is always calculated as a fixed promised percentage applied on the face value of the bond.

There are however zero coupon bonds which do not make any coupon payments. Typically, a zero coupon bond is issued for less than its face value and the face value is paid on the maturity date. Bonds have fixed maturity date beyond which they cease to exist as a legal financial instrument. Perpetual bonds, which do not have any maturity date exist forever. On the basis of term to maturity, bonds with a year or less than a year maturity are termed as money market securities. Long-term obligations with maturities in excess of 1 year, are referred as capital market securities. Thus, long term bonds as they move towards maturity become money market securities.

The issue price, coupon, maturity period, face value, redemption value are important intrinsic features of a bond.

The issue price would define the amount guaranteed capital gain a bond holder would enjoy if the bond is held till maturity. The coupon of a bond indicates the regular income/coupon income that the bond holder will receive over the life (or holding period) of the bond.

The term to maturity is the time period before a bond matures. All G-Secs are normally coupon bearing and have semi-annual coupon or interest payments with a tenor of between 5 to 30 years. Maturity period is also known as tenor or tenure. Though not found in common, sometimes corporate bonds might promise some premium on redemption, hence making the redemption value different than the face value (or par value)

The face value or par value of the bond is the original value of the obligation. It is similar to the principal on a loan. Face value of the bond is different from bond's market price. This situation can arise when the interest rates prevailing in the market are different than the coupon rate promised on the bond. When coupons and the prevailing market rate of interest are not the same, market price of the bond can be lower or higher than principal value. If the market interest rate is above the coupon rate, the bond will sell at a discount to the par value. If the market interest rate is below the bond's coupon, the bond will sell at a premium to the par value.

Market interest rate and the bond price have an inverse relation. Whenever interest rate in the market increases, bond prices decline and vice-versa.

Another interesting thing about bonds is that unlike equity shares, government or companies can have many different bonds outstanding at the same time, but each of them could have a different maturity period and a coupon rates. These features of the bonds will be part of the indenture.[5] Logically every new issue of

[5] Indenture is the legal agreement between two parties, in case of bond indenture the two parties are the bond issuer (borrower) and the investors (lender).

a bond by a company would always provide coupon rates according to the then prevailing interest rates in the market rates.

4.2.1 Bonds with options

Bonds can also be issued with embedded options.[6] Some common types of bonds with embedded options are: bonds with call option, bonds with put option and convertible bonds.

A callable bond gives the issuer the right to redeem all or part of the outstanding bonds before the specified maturity date. Callable bonds are advantageous to the issuer of the security but they present investors with a higher level of reinvestment risk than non-callable bonds. The issuer will call the bond before its maturity only when the interest rates for similar bonds fall in market. The investor will receive the face value of the bond before its maturity, and will be forced to reinvest that money for the remaining period lower interest rates. This is called reinvestment risk.

A put provision gives the bondholders the right to sell the bond back to the issuer at a pre-determined price on specified dates. Puttable bonds are beneficial to the bondholder by guaranteeing a pre-specified selling price at the redemption dates.

A convertible bond is a combination of a plain vanilla bond plus an embedded equity call option. It gives the bondholder the right to exchange the bond for a specified number of common shares of the issuing company.

4.3 Determinants of bond safety

Bonds being fixed income securities, are expected to generate a pre-specified stream of cashflows in terms of coupon and principal payment. The previous discussion on return while investing in a bond and the price of a bond, are all dependent on a fundamental assumption, that the bonds are literally default risk free. Meaning the coupon and principal repayment would be as much as promised, and will occur at the same time which is promised. Therefore safety aspects of bonds are tied to their probability of defaulting on these payments or possibility of delaying in the payments. This probability and possibility is the underlying phenomenon of credit risk to which bond holders are exposed. Credit Risk is, the risk of loss resulting when the issuer fails to make full and timely payments of interest and/or repayments of principal.

The most important document to understand the safety aspects of the bond is its indenture. It is the legal agreement between the firm issuing the bond and the bondholders, providing the specific terms of the debt

[6] Options are financial derivatives that give buyers the right, but not the obligation, to buy or sell an underlying asset at an agreed-upon price at a future date, where the price is agreed upon today.

agreement. All the features of the bond i.e. its par value, coupon rate, maturity period, periodicity of coupon payments, collateral for the bond, seniority of the payments, options if any, will be set forth in the indenture. Indenture also provides information on covenants. Covenants are clauses specifying the rights of the bond holders and restrictions on the bond issuers. Covenants are broadly of two kinds: Positive covenants and Negative covenants. Positive covenants are actions which issuers are required to do, whereas negative covenants specify what issuers are prohibited from doing. These are necessary to protect an investor's investment in the debt security.

Companies issue different kinds of bonds. Some may be secured against some specified property of the issuer in the case of default. The value of the asset against which the bond is secured determines the quality of the bond. Some bonds are unsecured. These are backed by the promise of the issuer to pay coupon and principal on a timely basis. In such a situation, the credit worthiness of the issuer determines bond quality.

To understand the probability of default by the issuer, most bond investors rely on Rating Agencies. Rating agencies play an integral role in bond markets. These agencies are specialized firms that determine the ability and willingness of the issuers to meet their financial obligations on time and as promised.

The actual level of default risk faced on an investment depends on the financial situation of the borrower. Default risk can be assessed by tracking the credit rating of an investment. Credit rating agencies assign credit ratings after carrying out a detailed analysis of the issuer's financial ability to honour the payments on time. These ratings are in the form of alphanumeric symbols. Rating is given for an instrument and not to a firm; so two different instruments issued by the same firm can have different ratings. The higher the credit rating, the lower is the default risk. SEBI has standardized the rating symbols used by the credit rating agencies so that investors are able to easily gauge the level of credit risk assigned to an instrument. The rating symbols and their definitions are reproduced below in Box 4.1 and Box 4.2.

Rating agencies have their own methodology to gauge the creditworthiness of the issuer and also the probability that the particular instrument will not default. They use symbols to express their opinion. Typically, ratings are expressed as grades from 'AAA' to 'D' to communicate the relative level of credit risk. (See Box 4.1) Bonds with higher credit risk receive a lower credit rating from the bond rating firms and vice versa. Bond markets are also classified on the basis of creditworthiness reflected in the credit rating as investment grade and non-investment grade (speculative) bond market.

Box 4.1: Credit rating symbols and Definitions for Long Term Instruments
Long term debt instruments: The instruments with original maturity exceeding one year
Rating symbols should have CRA's first name as prefix
AAA - Instruments with this rating are considered to have the highest degree of safety regarding timely servicing of financial obligations. Such instruments carry lowest credit risk.
AA - Instruments with this rating are considered to have high degree of safety regarding timely servicing of financial obligations. Such instruments carry very low credit risk.
A - Instruments with this rating are considered to have adequate degree of safety regarding timely servicing of financial obligations. Such instruments carry low credit risk.
BBB - Instruments with this rating are considered to have moderate degree of safety regarding timely servicing of financial obligations. Such instruments carry moderate credit risk.
BB - Instruments with this rating are considered to have moderate risk of default regarding timely servicing of financial obligations.
B - Instruments with this rating are considered to have high risk of default regarding timely servicing of financial obligations.
C - Instruments with this rating are considered to have very high risk of default regarding timely servicing of financial obligations.
D - Instruments with this rating are in default or are expected to be in default soon.
***Modifiers {"+" (plus) / "-"(minus)} can be used with the rating symbols for the categories AA to C*. The modifiers reflect the comparative standing within the category.**

Box 4.2: Credit Rating Symbols and Definitions for Short Term Debt instruments
Short term debt instruments: The instruments with original maturity of upto one year
Rating symbols should have CRA's first name as prefix
A1 – Instruments with this rating are considered to have very strong degree of safety regarding timely payment of financial obligations. Such instruments carry lowest credit risk.
A2 - Instruments with this rating are considered to have strong degree of safety regarding timely payment of financial obligations. Such instruments carry low credit risk.
A3 - Instruments with this rating are considered to have moderate degree of safety regarding timely payment of financial obligations. Such instruments carry higher credit risk as compared to instruments rated in the two higher categories.
A4- Instruments with this rating are considered to have minimal degree of safety regarding timely payment of financial obligations. Such instruments carry very high credit risk and are susceptible to default.
D - Instruments with this rating are in default or expected to be in default on maturity.
Modifier {"+" (plus)} can be used with the rating symbols for the categories A1 to A4. **The modifier reflects the comparative standing within the category.**

4.4 Valuation of Bonds

Since bonds are fixed income securities, generating a series of pre-specified cashflows, their value can be estimated adopting the discounting cashflow approach. The discounting cashflows approach uses the required rate of return of the investor and discounts all the future cashflows received from a bond, to arrive at the intrinsic value of the bond, at a particular point in time. The motivation to arrive at the value of a bond is to compare its intrinsic value with the ongoing market price, just like how an equity share is compared, and then judge whether it is overvalued or undervalued. Therefore, investment decisions in the bonds can also be taken by estimating their intrinsic values. When the intrinsic value of a bond is greater than the ongoing current market price, one could invest in it. Or else, if the investor is already holding the bond, then the bond could be sold.

Alternatively, the investment and disinvestment decisions can also be taken by comparing the implied yield by investing in the bond at the ongoing current market price. If the calculated yield is greater than the required yield or required rate of return of the investor, then the investor can buy the bond. Similarly, if the yield is lesser than what the investor requires, then the bond could be sold. The following sections would discuss these further.

4.4.1. Intrinsic Value of a Bond

The intrinsic value of a bond is the sum of present value of all future cash flows of the bond discounted at a required rate of return.

The intrinsic value of a bond can be also calculated using the excel "PRICE" function in the MS Excel as illustrated in Illustration 4.1. The intrinsic value of the same bond that is used the example above is also used for the illustration.

There might be a point of confusion when the words "YIELD" and "PRICE" are used in the function. However the clarity is "YIELD" should be considered as the required rate of return of the investor and not "YIELD TO MATURITY" of the bond. Similarly "PRICE" is the final output one would get, which is the intrinsic value of the bond at the required rate of return and not the "ONGOING CURRENT MARKET PRICE"

Illustration 4.1: Calculating Intrinsic Value of a Bond in excel

A	B
Settlement (the date on which the valuation is being done)	01-01-2022
Maturity (the date of maturity reckoned from date of valuation)	01-01-2027
Rate (Coupon rate depicted on per annum basis)	12%
Yield (Discount rate applied or required rate of return of the investor)	15%
Redemption (The value proportionately expressed per Rs.100)	100
Frequency (It takes a number 1 for yearly, 2 for half-yearly, 4 for quarterly, 12 for monthly)	2
Basis (indicates the day count convention that is used [**Day count basis:** 0 or omitted = US (NASD) 30/360; 1 = Actual/actual; 2 = Actual/360; 3 = Actual/365; 4 = European 30/360)	0
PRICE (The intrinsic value of a bond, which would be the answer) the result in column should be multiplied by 10, because the answer is for a bond with	=PRICE(Settlement, Maturity, Rate,

face value of Rs.100, and the face value of the bond in our illustration is Rs.1000. The values in column B would result into an answer 929.76 (Please input the values in MS Excel and verify by doing it yourself)	Yield, Redemption, Frequency, Basis)

4.4.2. Bond Yield Measures

Bond holders receive return from one or more of the following sources, when they buy bond:

1. The coupon payments made by the issuer;
2. The capital gain (or capital loss) when the bond is sold/matured; and
3. Income from reinvestment of the interest payments that is interest-on-interest.

There are yield measures commonly used to measure the return from investing in a bond are briefly described below:

Yield to Maturity:

Yield to Maturity (YTM) is that rate which discounts the future cash flows from a bond, and makes the sum of the present values of such cashflows equal to the current market price of the bond. It is the rate of return that can be expected in a bond investment, when purchased at the ongoing market price, and when it is held until its maturity. YTM can also be considered as the Implied Rate of Return, or Internal Rate of Return of the bond

MS Excel has a function 'YIELD' which calculates the YTM of a bond, given all its details and the current market price, for a face value of Rs.100. Continuing the above example used to calculate the intrinsic value, and by considering the current market price of the bond to be Rs.975, the YTM would be calculated in MS Excel as shown in illustration 4.2.

Illustration 4.2: Calculating Yield to Maturity of a Bond in excel

A	B
Settlement (the date on which the bond is going to be purchased)	01-01-2022
Maturity (the date of maturity reckoned from date of purchase)	01-01-2027
Rate (Coupon rate depicted on per annum basis)	12%
Price (Current Market Price of the Bond, expressed per Rs.100)	97.5
Redemption (The value proportionately expressed per Rs.100)	100

Frequency (It takes number 1 for yearly, 2 for half-yearly, 4 for quarterly, 12 for monthly)	2
Basis (indicates the day count convention that is used [**Day count basis:** 0 or omitted = US (NASD) & INDIA 30/360; 1 = Actual/actual; 2 = Actual/360; 3 = Actual/365; 4 = European 30/360) [see box 4.3 for Day count convention]	0
YIELD (The Yield to Maturity would be 12.69%, when the cell is formatted to percentage with two decimals. (Please input the values in MS Excel and verify by doing it yourself)	=YIELD(Settlement, Maturity, Rate, Price, Redemption, Frequency, Basis)

Box 4.3: Day Count convention

Day count convention refers to the method used for arriving at the holding period (number of days) of a bond to calculate the accrued interest. As the use of different day count conventions can result in different accrued interest amounts, it is appropriate that all the participants in the market follow a uniform day count convention.

For example, the conventions followed in Indian market for bonds is 30/360, which means that irrespective of the actual number of days in a month, the number of days in a month is taken as 30 and the number of days in a year is taken as 360.

Whereas in the money market the day count convention followed is actual/365, which means that the actual number of days in a month is taken for number of days (numerator) whereas the number of days in a year is taken as 365 days. Hence, in the case of T-Bills, which are essentially money market instruments, money market convention is followed.

In some countries, participants use actual/actual, some countries use actual/360 while some use 30/actual. Hence the convention changes in different countries and in different markets within the same country (e.g. Money market convention is different than the bond market convention in India).

As previously discussed when market interest rates rise, the prices of a bonds fall. Conversely, if the market interest rates decline, the prices of bonds rise. In other words, the yield of a bond is inversely related to its price. The relationship between yield to maturity and coupon rate of bond may be stated as follows:

- When the market price of a bond is less than its face value, i.e., the bond is selling at a discount, then YTM would be > Coupon Rate.
- When the market price of a bond is more than its face value, i.e., the bond is selling at a premium, then YTM would be < Coupon Rate .
- When the market price of a bond is equal to its face value, i.e., the bond is selling at par, then YTM would be = Coupon Rate.

4.5 Measuring Price Volatility of bonds

Market price of a bond is a function of four factors: (1) Par value of the bond; (2) Coupon rate of the bond; (3) Maturity period i.e. no. of years to maturity and (4) Prevailing market interest rate.

There are mathematical proofs that demonstrate the following relationships between yield (interest rate) changes and bond price behaviour:

a) Bond prices and the interest rates have inverse relationship.
b) Bond price volatility is inversely related to coupon. Bonds with higher coupons show smaller percentage price fluctuation for a given change in interest rates . For example, if many bonds with same maturity period of 10 years are taken, experiencing the same change in YTM say from 5% to 6%, the smaller coupon bond will experience the larger percentage price change. If a zero coupon bond is also included in the example, it will experience the largest percentage price change.
c) Bond price volatility is directly related to term to maturity, longer maturity bonds experience larger price changes for a given change in yields. Bond price volatility increases at a diminishing rate as term to maturity increases.
d) Bond price movements resulting from equal absolute increases or decreases in yield are not symmetrical. A decrease in yield raises bond prices by more than an increase in yield of the same amount lowers prices.

4.5.1. Interest rate risk

Interest Rate Risk is defined as the risk emanating from changes in the market interest rates. As discussed above, market price of the bond reflects the present value of all future cash flows of the bond. The

discount rate used to calculate the present value is the function of prevailing interest rates over various maturities. If the interest rate in the economy increases, the discounting factor to find out the present value of the future cash flows also increases, resulting in the fall in the value of the bond.

A related concept to interest rate risk is reinvestment rate risk. Reinvestment risk is when the investor may not be able to reinvest the intermittent cash flows (coupons) at yields prevalent at the time of making the investment due to either decrease or increase in interest rates prevailing at the time of receipt of cash flows by investors. Yield to maturity computation implicitly assumes that all coupon cash flows will be reinvested at yield to maturity. If, after the purchase of the bond, interest rates decline, the coupon cash flows will be reinvested at rates below the yield to maturity. Conversely, if interest rates increase, the coupon cash flows will be reinvested at rates above yield to maturity.

4.5.2. Determining Macaulay's Duration

Duration (also known as Macaulay Duration) of a bond is popularly known as a measure of time taken to recover the initial investment in present value terms. Duration is expressed in number of years. Based on the calculation involved, it is interpreted as Weighted Average Time to recover the initial investment in the bond (the current market price). It is always less than or equal to the overall life (to maturity) of the bond in years. Only a zero coupon bond (a bond with no coupons) will have duration equal to its remaining maturity. Theoreticians also believe that the price sensitivity of a bond to changes in interest rates can be approximated by the bond's duration. The significance of duration is that greater the duration, more volatile is bond's price or return on bond investment, for given changes in the level of interest rates. Duration of a bond can be calculated in two ways one is Manually and the other using MS Excel

Calculating Duration in MS Excel:

Duration can be calculated in MS Excel using the "DURATION" function in the finance functions. The syntax is = DURATION (Settlement date, Maturity date, Coupon Rate, Yield to Maturity, Frequency of Coupon payments, Basis)

Illustration 4.4: A bond is currently selling at Rs.1168.51 generating a yield to maturity of 9%, when the bond is paying a coupon of 12%, its face value is Rs.1000, and the balance term to maturity is 8 years. The YTM of the bond can be calculated as 9% p.a., using the bond data.

A	B
Settlement (the date on which the bond is going to be purchased)	01-01-2022
Maturity (the date of maturity reckoned from date of purchase)	01-01-2030
Rate (Coupon rate depicted on per annum basis)	12%

Yield (Yield to Maturity at Current Market Price of the bond)	9%
Frequency (It takes number 1 for yearly, 2 for half-yearly, 4 for quarterly, 12 for monthly)	2
Basis (indicates the day count convention that is used [**Day count basis:** 0 or omitted = US (NASD) & INDIA 30/360; 1 = Actual/actual; 2 = Actual/360; 3 = Actual/365; 4 = European 30/360)	0
DURATION (The answer is in years, and it will be 5.569 years)	=YIELD(Settlement, Maturity, Rate, Yield, Frequency, and Basis)

4.5.3 Concept of Modified Duration

One of the popular measures of measuring interest rate risk in a bond is Modified Duration. It is a good measure of price sensitivity of a Bond for a given change in the market interest rates, yields, or required rates of return of the bond investor.

The approximate change in price of a bond for a given change in market interest rates can be estimated using the modified duration as follows

% change in the price = (-) Modified Duration * Change in market interest rates in decimals.

The negative sign indicates that there is an inverse relation between movement of interest rate and price, when one goes up, the other goes down.

Chapter 4: Sample Questions

1) Government securities issued by Central Government carry practically no risk of_____ and, hence are called risk-free or gilt-edged instruments.

a) Tradability
b) liquidity
c) default
d) negotiability

2) _____ risk arises from the fact that income flows received from an investment at the coupon rate may not be able to earn the same interest.

a) Re-investment
b) Default risk
c) Credit risk
d) None of the above

3) The feature that allows the issuing firms to retire the bonds before the maturity by paying a prescribed price is called _____.

a) Callability (call option)
b) Putability (put option)
c) Convertibility
d) Redemption

4) Typical putability (put option) feature of a bond _____.

a) Gives the bond holders the option to convert the bond into another security, typically the common stock of the firm issuing the convertible bonds
b) Gives the holder the right, under certain circumstances to sell the bond back to the issuer
c) Allows the issuing firms to retire the bonds before the maturity by paying a prescribed price
d) Allows the investor to redeem the bond

CHAPTER 5: DERIVATIVES

LEARNING OBJECTIVES:

After reading this chapter, the reader should understand about:

- Definition of derivatives
- Types of derivative products
- Structure of derivative markets
- Purpose of Derivatives
- Concept of Commodity and Currency Derivatives
- Underlying concepts in derivatives
- Derivatives in PMS

5.1 Definition of Derivatives

Derivative is a contract or a product whose value is derived from value of some other asset known as underlying. Derivatives are based on wide range of underlying assets. These include:

- Metals such as gold, silver, aluminum, copper, zinc, nickel, tin, lead etc.
- Energy resources such as oil (crude oil, products, cracks), coal, electricity, natural gas, etc.
- Agri commodities such as wheat, sugar, coffee, cotton, pulses etc.
- Financial assets such as shares, bonds and foreign exchange.

In the Indian context the Securities Contracts (Regulation) Act, 1956 [SC(R)A] defines "derivative" to include-

1. A security derived from a debt instrument, share, loan whether secured or unsecured, risk instrument or contract for differences or any other form of security.
2. A contract which derives its value from the prices, or index of prices, of underlying securities.

Derivatives are securities under the SC(R)A and hence the trading of derivatives is governed by the regulatory framework under the SC(R)A.

The term derivative has also been defined in section 45U(a) of the RBI act 1934 as follows:

An instrument, to be settled at a future date, whose value is derived from change in interest rate, foreign exchange rate, credit rating or credit index, price of securities (also called “underlying”), or a combination

of more than one of them and includes interest rate swaps, forward rate agreements, foreign currency swaps, foreign currency-rupee swaps, foreign currency options, foreign currency-rupee options or such other instruments as may be specified by RBI from time to time.

5.2 Types of derivative products

The commonly used derivative products are:

- Forwards
- Futures
- Options
- Swaps

5.2.1 Forwards

Forward contract is an agreement made directly between two parties to buy or sell an asset on a specific date in the future, at the terms decided today. Forwards are widely used in commodities, foreign exchange, bonds and interest rate markets.

Let us understand with the help of an example. What is the basic difference between cash market and forwards? Assume on March 9, 2018 you wanted to purchase gold from a goldsmith. The market price for gold on March 9, 2018 was Rest. 30,425 for 10 gram and goldsmith agrees to sell you gold at market price. You paid him Rest. 30,425 for 10 gram of gold and took gold. This is a cash market transaction at a price (in this case Rest. 30,425) referred to as spot price.

Now suppose you do not want to buy gold on March 9, 2018, but only after 1 month. Goldsmith quotes you Rest. 30,450 for 10 grams of gold. You agree to the forward price for 10 grams of gold, enter into a forward contract and go away. Here, in this example, you have bought forward or you are long forward, whereas the goldsmith has sold forwards or short forwards. There is no exchange of money or gold at this point of time. After 1 month, you come back to the goldsmith pay him Rest. 30,450 and collect your gold. This is a forward contract, where both the parties are obliged to go through with the contract irrespective of the value of the underlying asset (in this case gold) at the point of delivery.

Essential features of a Forward contract are:

- It is a contract between two parties (Bilateral contract).

- All terms of the contract like price, quantity and quality of underlying, delivery terms like place, settlement procedure etc. are fixed on the day of entering into the contract.

In other words, Forward contracts are bilateral over-the-counter (OTC) transactions where the terms of the contract, such as price, quantity, quality, time and place are negotiated between two parties before entering into the contract. Any alteration in the terms of the contract is possible only if both the parties agree to it. Corporations, traders and investing institutions extensively use OTC transactions to meet their specific requirements. The essential idea of entering into a forward contract is to fix the price and thereby avoid the price risk. Thus, by entering into forwards, one is assured of the price at which one can buy/sell an underlying asset.

Major limitations of forward contracts

Liquidity Risk

As forward contracts are tailor made contracts i.e. the terms of the contract are according to the specific requirements of the parties, other market participants may not be interested in these contracts. Forwards are not listed or traded on exchanges, which makes it difficult for other market participants to easily access the terms of these contracts or contracting parties.

Counterparty risk

Counterparty risk is the risk of an economic loss from the failure of counterparty to fulfil its contractual obligation. For example, A and B enter into a bilateral agreement, where A will purchase 100 kg of rice at Rs.20 per kg from B after 6 months. Here, A is counterparty to B and vice versa. After 6 months, if price of rice is Rest 30 in the market then B may forego his obligation to deliver 100 kg of rice at Rs.20 to A. Similarly, if price of rice falls to Rs.15 then A may purchase from the market at a lower price, instead of honouring the contract. Thus, a party to the contract may default on his obligation if there is incentive to default. This risk is also called default risk or credit risk.

In addition to the illiquidity and counterparty risks, there are several issues like lack of transparency, settlement complications as it is to be done directly between the contracting parties. Simple solution to all these issues lies in bringing these contracts to the centralized trading platform. This is what futures contracts do.

5.2.2 Futures

Futures markets were innovated to overcome the limitations of forwards. A futures contract is an agreement made through an organized exchange to buy or sell a fixed amount of a commodity or a financial asset on a future date at an agreed price.

Simply, futures are standardised forward contracts that are traded on an exchange. Exchange becomes counterparty to both buyer and seller of a futures contract through a clearing house. Futures create an obligation on both buyer and seller's part. The terms of the contract are specified by the exchange and are subjected to change as and when necessary. The clearing corporation associated with the exchange guarantees settlement of these trades. A trader, who buys futures contract, takes a long position and the one, who sells futures, takes a short position. The words buy and sell are figurative only because no money or underlying asset changes hand, between buyer and seller, when the deal is signed.

Features of futures contract

In futures market, exchange decides all the contract terms of the contract other than price. Accordingly, futures contracts have following features:

- Standardised Contracts
- Contract between two parties through Exchange
- Centralised trading platform i.e. exchange
- Price discovery through free interaction of buyers and sellers
- Margins are payable by both the parties to discourage defaults
- Quality decided today (standardized)
- Quantity decided today (standardized)

5.2.3 Options

An Option is a contract that gives its buyers the right, but not an obligation, to buy or sell the underlying asset on or before a stated date/day, at a stated price, for a premium (price). The party taking a long position i.e. buying the option is called buyer/ holder of the option and the party taking a short position i.e. selling the option is called the seller/ writer of the option. The option buyer has the right but no obligation with regards to buying or selling the underlying asset, while the option writer has the obligation to its commitment in the contract.

Therefore, option buyer/ holder will exercise his option only when the situation is favourable to her, but, when she decides to exercise, option writer is legally bound to honour the contract.

Options are of mainly two types—call and put option.

An option, which gives buyer a right to buy the underlying asset, is called Call option and the option which gives buyer a right to sell the underlying asset, is called Put option.

5.2.4 Swaps

A swap is a contract in which two parties agree to a specified exchange of cash flows on a future date(s). Swaps are common in interest rate and currency markets.

Example: A borrower has to pay a quarterly interest rate defined as the Treasury bill rate on that date, plus a spread. This floating rate interest payment means that the actual obligation of the borrower will depend on what the Treasury bill rate would be on the date of settlement. The borrower however prefers to pay a fixed rate of interest. In this case, she can use the interest rate swap markets to get into the following swap arrangement:

- Pay a fixed rate to the swap dealer every quarter
- Receive T-bill plus spread from the swap dealer every quarter

The swap in this contract is that one party pays a fixed rate to the other, and receives a floating rate in return. The principal amount on which the interest will be computed is agreed upon between counterparties and is never exchanged. Only the interest rate on this amount is exchanged on each settlement date (every quarter) between counterparties. The principal amount is also known as notional amount.

5.3 Structure of derivative markets

A derivative market is formed when different players with different needs to manage their risks come together and try to secure themselves from the respective risky events that they fear in the future.

In India, the following derivative products are available on various stock exchanges:

- Equity index options
- Equity index futures
- Individual stock options
- Individual stock futures
- Currency options and futures on select currency pairs
- Interest rate futures
- Commodity futures for a select set of commodities

Apart from the above, forward markets for agricultural commodities and swap markets for interest rates are available in the OTC markets.

OTC Markets

Some derivative contracts are settled between counterparties on terms mutually agreed upon between them. These are called over the counter (OTC) derivatives. They are non-standard and they depend on the trust between counterparties to meet their commitment as promised. These are prevalent only between institutions, which are comfortable dealing with each other.

Exchange Traded Markets

Exchange-traded derivatives are standard derivative contracts defined by an exchange, and are usually settled through a clearing house. The buyers and sellers maintain margins with the clearing-corporations, which enables players that do not know one another (anonymous) to enter into contracts on the strength of the settlement process of the clearing house. Forwards and swaps are OTC derivatives; futures and options are exchange-traded derivatives.

5.4 Purpose of Derivatives

A derivative is a risk management tool used commonly in transactions where there is risk due to an unknown future value. Derivatives are typically used for three purposes—Hedging, Speculation and Arbitrage.

Hedging

When an investor has an investment in any asset or portfolio of assets, and wants to protect the portfolio value against adverse price movements, then she can use the derivatives to hedge i.e. protect the against the risk of adverse future price movements.

Speculation

A speculative trade in a derivative is not supported by an underlying existing investment in asset or portfolio. It simply involves implementation of an investment or trading strategy based on a view about the future prices of the relevant asset underlying the specific derivative product.

For instance, Let us assume that an asset's price in spot market is Rs.100 and Rs.102 in the futures market for a one-month time period. If you believe that the asset price can become 105, then you would like to buy and lock future price at 102 for a small margin. If your assumption comes true, you will gain Rs.3 (105-102), however if the price remains at 100, then you will lose Rs.2 (102-100). This is speculation.

Arbitrage

The law of one price states that two goods (assets) that are identical, cannot trade at different prices in two different markets. If not, one would buy from the cheaper market and sell at the costlier market, and make riskless profits. This riskless profits is known as Arbitrage.

However, such buying and selling itself will reduce the gap in prices. The demand in the cheaper market will increase prices there and the supply into the costlier market will reduce prices, bringing the prices in both markets to the same level.

Arbitrageurs are specialists who identify such price differential in two markets or between spot and future markets to make riskless profits. Theoretically, prices in two markets for the same tradable asset will be different only to the extent of transaction costs. These costs can include transportation, storage, insurance, interest costs and any other cost that impacts the activities of buying and selling. However at times, a small window of arbitrage opportunity appears in various securities primarily due to information asymmetry.

5.5 Commodity and Currency Derivatives

Commodities Derivatives Market

The Commodities Derivatives Market enables participants to trade contracts based on physical commodities like gold, crude oil, agricultural products, and metals. Instruments such as futures and options help producers hedge against price fluctuations, while traders speculate on price movements. Prices in this market are driven by supply-demand dynamics, geopolitical risks, weather conditions, and economic trends. Commodity derivatives are traded on major exchanges such as MCX and NCDEX in India, regulated by SEBI. This market plays a crucial role in price discovery, risk management, and liquidity for commodity-based businesses and investors.

Currency Derivatives Market

The Currency Derivatives Market allows traders and investors to hedge or speculate on currency exchange rate movements using financial contracts such as futures, options, forwards, and swaps. These derivatives derive their value from underlying currency pairs like USD/INR, EUR/USD, GBP/INR, etc.. Businesses use currency derivatives to mitigate foreign exchange risk, while traders use them for arbitrage and speculation. The market is influenced by factors such as interest rate differentials, inflation, geopolitical events, and central bank policies. In India, currency derivatives are actively traded on exchanges like NSE, BSE, and MCX-SX, regulated by SEBI and RBI.

5.6 Underlying concepts in derivatives

Zero-Sum Game

In a futures contract, the counterparties who enter into the contract have opposing views and needs. The seller of gold futures thinks prices will fall, and benefits if the price falls below the price at which she entered into the futures contract. On the other hand, the buyer of gold futures thinks prices will rise, and benefits if the price rises beyond the price at which she has agreed to buy gold in the future. On maturity the market price of the underlying would be same for both the parties, leading to profits to only one of them. But when the net positions of the both the buyer and seller are considered, it always amounts to zero. Hence the word Zero-Sum Game suits appropriately to describe the net positions of derivative instruments. However there are the two usual assumptions to this conclusion, that there are no taxes and no transaction costs.

Settlement Mechanism

Most derivative contracts are settled in cash. Cash settlement is a settlement method where upon expiration or exercise of the derivatives contract, the counterparties settle their position through exchange of the price differentials without the need to actually delivering the actual (physical) underlying asset.

However, SEBI has mandated physical settlement (settlement by delivery of underlying stock) for all stock derivatives unless squared off before expiry except derivatives on Indexes (Nifty, BankNifty etc.).

Maintaining Margins

In order to avoid counterparty risks, required margin money is deposited by both the parties to the clearing house before executing a trade. The quantum of margin money depends on the price volatility of the underlying and value-at-risk for the contract. (Value-at-risk is a statistical measure of loss for the contract value within a defined confidence interval).

5.7 Investment in Derivatives in PMS

Portfolio managers are permitted to invest in derivatives, including transactions for the purpose of hedging and portfolio rebalancing, through recognised stock exchanges. Portfolio managers can invest in derivatives on the terms specified in the Portfolio Management Agreement. The Agreement should contain complete details pertaining to the manner and terms of usage in derivatives product including quantum of exposure to derivatives (in absolute terms and as a percentage of investment in other securities in the portfolio), type of derivative instruments, purpose of using derivatives, type of derivative position and the exposure thereof, terming of valuing and liquidating derivative contracts in the event of liquidation of portfolio management

scheme, prior permission from the investors in the event of any changes in the manner or terms of usage of derivative contracts etc.

The total exposure of a client in derivatives should not exceed client's portfolio value. Investment in derivatives can only be done on the terms mutually agreed between the Portfolio Manager and the client through the Portfolio Management agreement. In the event of any violation of the terms of the agreement, the portfolio manager shall be held responsible. Portfolio Managers are required to provide necessary disclosures with respect to the use of derivatives, in the Disclosure Document in accordance with the Portfolio Managers Regulations.

Portfolio Managers are permitted to participate in Exchange Traded Commodity Derivatives on behalf of their clients subject to the regulatory stipulations and client's consent.

Chapter 5: Sample Questions

Chapter 5: Sample Questions

1. In a Nifty 50 futures contract ,the underlying is _____.

a. the top traded stocks of the Nifty 50 index
b. the average price of the stocks of the Nifty 50 index
c. the value of the Nifty 50 index
d. all of the above

2. The counterparty risk in a futures contract is mitigated primarily through _____.

a. collateralisation by one of the parties to the contract
b. settlement on gross basis between two parties
c. the functions of the clearing corporation
d. the limits on positions and trading volumes

3. In case of Swaps, _____ is exchanged at the end of each period, say quarter.

a. Each party pays both the principal and the interest
b. Each party pays only principal amount
c. Each party pays only the interest amount
d. Only the difference of interest is paid by one party to the other

4. Arbitrage opportunities can exist between _____.

a. Spot and futures prices
b. Two futures prices
c. Futures and options prices
d. All of the above

CHAPTER 6: COLLECTIVE INVESTMENT VEHICLES

LEARNING OBJECTIVES:

After reading this chapter, the reader should understand about various collective investment vehicles:

- Mutual Funds
- Real Estate Investment Trusts (ReITs)
- Infrastructure Investment Trusts (InvITs
- Alternate Investment Funds (AIFs)

6.1 Types of Collective Investment Vehicles

6.1.1 Mutual Funds

A mutual fund is a professionally managed investment vehicle that pools money from multiple investors to invest in a diversified portfolio of securities, such as stocks, bonds, money market instruments, and other assets. The pooled funds are managed by experienced fund managers who make investment decisions based on the fund's objectives, risk profile, and prevailing market conditions.

Mutual funds allow investors to participate in capital markets without the need for direct stock-picking expertise and offering an efficient way to invest in diversified assets. Investors purchase units of a mutual fund, which represent their share in the pooled assets. The value of these units is determined by the Net Asset Value (NAV), which is calculated daily based on the fund's market performance.

Mutual funds cater to different investment goals, including wealth creation, income generation, and capital preservation, making them suitable for a broad range of investors.

Role of Mutual Funds for Investors

Mutual funds play a crucial role in helping investors build wealth, manage risks, and achieve financial goals. Their accessibility, professional management, tax benefits, diversification and economies of scale make them an attractive option for both new and seasoned investors. By choosing the right fund based on individual risk tolerance and financial objectives, investors can effectively grow their wealth over time.

A. **Diversification and Risk Reduction**

One of the key roles of mutual funds is to provide diversification. By investing in multiple securities across sectors and asset classes, mutual funds help reduce portfolio risk. Even if some assets perform poorly, others may perform well, balancing overall returns. This diversification is difficult to achieve for individual investors with limited capital.

B. Professional Fund Management

Mutual funds are managed by qualified and experienced fund managers who analyze market trends, economic conditions, and company performances to make informed investment decisions. Retail investors benefit from the expertise of these professionals without having to track markets actively.

C. Accessibility and Affordability

Mutual funds allow investors to start with small amounts. Systematic Investment Plans (SIPs) enable investors to contribute as little as Rs.500 per month, making it an affordable investment option. This enables retail investors to invest in high-value securities that may otherwise be out of reach.

D. Liquidity and Flexibility

Most mutual funds offer high liquidity, allowing investors to redeem their units at any time (except in the case of close-ended funds). Unlike fixed deposits or real estate investments, mutual funds provide investors with easy access to their money, subject to exit load conditions.

E. Tax Efficiency

Mutual funds offer tax benefits under Section 80C (in the case of Equity-Linked Savings Schemes – ELSS). Additionally, long-term capital gains (LTCG) from equity funds are taxed favorably, making them attractive for wealth creation.

F. Variety of Investment Options

Mutual funds offer different types of schemes, including:

- Equity Funds (for high-risk, high-return investments)
- Debt Funds (for stable income and low-risk investing)
- Hybrid/Balanced Funds (for a mix of growth and stability)
- Index Funds and ETFs (for passive investing)

G. Transparency and Regulation

Mutual funds in India are regulated by the Securities and Exchange Board of India (SEBI), ensuring transparency and investor protection. Investors receive regular reports, disclosures, and NAV updates, helping them make informed decisions.

H. Economies of Scale

Mutual funds benefit from economies of scale, as pooling money from numerous investors leads to lower transaction costs and efficient portfolio management. Large-scale investments allow fund managers to negotiate better deals on securities, reducing costs per investor. This advantage enables retail investors to access professionally managed funds at lower expense ratios compared to direct investments in individual securities.

6.1.2 Real Estate Investment Trust

Real Estate Investment Trusts (ReITs) are investment vehicles that allow investors to gain exposure to income-generating real estate assets without directly owning physical properties. ReITs pool funds from multiple investors to invest in commercial real estate, such as office spaces, malls, warehouses, and hotels, which generate rental income. These trusts are required to distribute a significant portion of their earnings as dividends to unit holders.

In India, ReITs are regulated by the Securities and Exchange Board of India (SEBI) under the SEBI (Real Estate Investment Trusts) Regulations, 2014. They are structured as trusts and must be listed on stock exchanges, providing liquidity to investors. Features of ReITs are:

- **Diversification & Accessibility:** Retail investors can participate in the real estate market without needing large capital investments.
- **Stable Income:** ReITs generate regular income through rental yields and dividend distributions.
- **Liquidity:** Unlike direct real estate investments, ReITs can be traded on stock exchanges, allowing easy entry and exit.
- **Regulated & Transparent:** SEBI regulations ensure strong governance, reducing risks.
- **Inflation Hedge:** Real estate typically appreciates over time, protecting against inflation.

6.1.3 Infrastructure Investment Trust

Infrastructure Investment Trusts (InvITs) are investment vehicles that pool money from investors to invest in infrastructure assets such as roads, highways, power transmission lines, and renewable energy projects. InvITs provide a structured way for developers to monetize infrastructure assets while offering investors a stable income stream.

Regulated by the Securities and Exchange Board of India (SEBI) under the SEBI (Infrastructure Investment Trusts) Regulations, 2014, InvITs are structured as trusts and must be listed on stock exchanges, ensuring transparency and liquidity for investors. Features of InVITS are mentioned below:

- **Stable Income:** InvITs generate cash flows from toll collections, electricity tariffs, and other infrastructure revenues, ensuring consistent payouts.
- **Diversification & Accessibility:** Retail investors gain access to large infrastructure projects without direct ownership.
- **Liquidity:** Unlike direct infrastructure investments, InvITs can be bought and sold on stock exchanges.
- **Lower Risk & Regulation:** SEBI mandates regular disclosures and governance, reducing investment risks.
- **Inflation Hedge & Capital Growth:** As infrastructure demand grows, InvIT unit values appreciate, offering long-term gains.

6.1.4 Alternate Investment Funds

Alternative Investment Funds (AIFs) are privately pooled investment vehicles that collect capital from investors and invest it in non-traditional asset classes, such as private equity, venture capital, hedge funds, real estate, distressed assets, and structured debt.

AIFs are targeted at high-net-worth individuals (HNIs), institutional investors, and sophisticated investors who seek diversified investment opportunities beyond traditional equity and debt markets.

- **Diversification Beyond Traditional Assets:** AIFs provide exposure to private markets, startups, distressed assets, and alternative strategies.
- **Higher Return Potential:** Unlike mutual funds, AIFs offer customized strategies for higher returns.
- **Professional Fund Management:** Managed by seasoned investment professionals with deep expertise.
- **Structured Risk Management:** AIFs use sophisticated risk assessment models to mitigate downside risks.

- **Customized Investment Strategies:** Investors can choose funds based on risk appetite, time horizon, and return expectations.

6.2 Legal Structure of Mutual Funds, ReITS, InvITs and AIFs

The legal structure of Mutual Funds, Real Estate Investment Trusts (ReITs), Infrastructure Investment Trusts (InvITs) and Alternate Investment Funds (AIFs) in India follows a trust-based model governed by the Securities and Exchange Board of India (SEBI). Each of these investment vehicles involves multiple participants ensuring smooth operation, compliance, and investor protection.

6.2.1. Mutual Funds

Mutual Funds operate under a trust structure registered with SEBI. The key participants include:

- **Sponsor**: The entity that establishes the mutual fund and contributes initial capital.
- **Trust & Trustee Company**: Holds the fund's assets in fiduciary capacity and ensures compliance with SEBI regulations.
- **Asset Management Company (AMC):** The investment manager responsible for portfolio management and fund operations.
- **Custodian**: Holds and safeguards securities on behalf of the fund.
- **Registrar & Transfer Agent (RTA)**: Handles investor records, transactions, and fund unit administration.

6.2.2. ReITs

ReITs are structured as trusts registered with SEBI and listed on stock exchanges. The main participants are:

- **Sponsor:** Establishes the ReIT and holds a minimum stake as per SEBI norms.
- **ReIT Trustee:** Ensures regulatory compliance and oversees the investment manager’s actions.
- **Investment Manager:** Manages the ReIT’s portfolio, including asset acquisitions and operations.
- **Custodian:** Holds assets and manages transactions for transparency and compliance.
- **Valuer:** Independently values real estate assets for fair pricing.

6.2.3. InvITs

InvITs function similarly to ReITs but focus on infrastructure assets. The structure includes:

- **Sponsor:** Sets up the InvIT and contributes initial capital.
- **InvIT Trustee:** Acts in the interest of investors and monitors the investment manager.
- **Investment Manager:** Handles asset acquisition, management, and compliance.

- **Project Manager:** Responsible for operating and maintaining infrastructure projects.
- **Custodian & Valuer:** Safeguards assets and ensures fair valuation.

These structures ensure transparency, governance, and investor protection while enabling efficient capital deployment into financial markets and infrastructure development.

6.2.4. AIFs

AIFs also follows a trust structure with defined responsibilities of different participants.

- **Sponsor:** An entity or individual responsible for setting up the AIF and providing the initial capital and contribute to the fund.
- **Fund Manager:** Responsible for investment decisions, risk assessment, and portfolio management.
- **Trustee:** AIF is structured as a trust, a trustee is appointed to oversee the fund's activities in the best interest of the investors.
- **Custodian:** The custodian is responsible for holding and safeguarding the assets of the AIF

6.3 Types of Mutual Funds, ReITS, InvITs and AIFs[1]

Mutual Funds

Mutual funds are categorized based on their investment strategy[7]:

Equity Mutual Funds (High-risk, high-return)	• **Large-cap funds:** Invest in established companies. • **Mid-cap & Small-cap funds:** Focus on high-growth companies. • **Sectoral/Thematic funds:** Invest in specific industries (e.g., IT, Pharma). • **ELSS (Tax-saving funds):** Offer tax benefits under Section 80C.

This section is intended only for a general understanding. In actual practice, SEBI has categorized mutual fund schemes to ensure uniformity and standardization across the industry. For more detailed information, candidates are advised to refer to https://www.sebi.gov.in/legal/circulars/oct-2017/categorization-and-rationalization-of-mutual-fund-schemes_36199.html and subsequent circulars. Similarly for ReITs and InVITs, candidates are advised to read the relevant circulars.

Debt Mutual Funds (Low-risk, stable income)	• **Liquid Funds:** Invest in short-term instruments for quick liquidity. • **Corporate Bond Funds:** Invest in company bonds for moderate returns. • **Gilt Funds:** Invest in government securities, ensuring safety.
Hybrid/Balanced Funds (Blend of equity & debt)	• **Aggressive Hybrid Funds:** Higher equity allocation. • **Conservative Hybrid Funds:** Higher debt allocation.
Passive Funds (Index Funds & ETFs)	• **Index Funds:** Track benchmark indices like NIFTY 50, Sensex. • **Exchange-Traded Funds (ETFs):** Trade on stock exchanges.

Factor Funds	**Factor Funds: Definition** Factor funds, also known as smart beta funds, follow specific quantitative factors or characteristics such as value, momentum, volatility etc. to construct portfolios. Stock selection and their weights in the portfolio are based on mathematical rules optimizing the desired output. Factor funds provide a rules-based and systematic approach to investing. It enables investors to gain exposure to specific risk-return drivers. Factor funds falls between Active and Passive funds. Rule-based approach mimics the passive nature while the frequent systematic selection of stocks mimics the active nature of a factor fund. **Types of Factor Funds** **1. Momentum Factor Funds** Momentum factor funds track stocks with strong upward price trends, aiming to capitalize on continued momentum. While offering high return potential, they carry risks like volatility and market corrections. Momentum indices mitigate these risks by selecting top performers and rebalancing periodically to adapt to sector shifts. This strategy is particularly effective in bull markets and has historically outperformed benchmarks due to its adaptability and sector-neutral approach. **2. Low Volatility Factor Funds** Low-volatility factor funds focus on stocks with lower price fluctuations, offering potentially better risk-adjusted returns over the long term. Unlike momentum investing, this strategy targets lower risk, making it robust during market downturns and reducing drawdown risks.

	3.Value Factor Funds Value factor funds invest in stocks with attractive valuation metrics (e.g., low P/E, P/B, high dividend yield). Rooted in the principles of Benjamin Graham and Warren Buffett, this strategy seeks "less expensive" stocks and offers diversification with low correlation to broader markets. It tends to perform well in recovery phases and bull markets. **4. Quality Factor Funds** Quality factor funds emphasize stocks with strong fundamentals, such as low debt and stable earnings growth. These funds perform well in bear markets, providing resilience during downturns. Some funds combine multiple factors (e.g., alpha, low volatility, dividend yield, momentum) to optimize returns using two-factor or multifactor strategies.

Real Estate Investment Trusts (ReITS)

Types of ReITs

Equity ReITs	• Own and manage commercial real estate properties. • Generate income primarily through rent.
Mortgage ReITs	• Invest in real estate loans and mortgage-backed securities. • Earn income from interest on loans.
Hybrid ReITs	• A mix of equity and mortgage ReITs. • Earn both rental and interest income.

Infrastructure Investment Trusts (InvITS)

Types of InvITs

InvITs can be classified based on their operational model and risk profile:

Public InvITs	• Listed on stock exchanges (like NSE & BSE). • Open to retail investors and institutions. • Provide liquidity through trading on the stock exchange.
Private InvITs	• Unlisted and privately placed. • Only available to institutional investors. • Typically used for long-term infrastructure financing.
Full-fledged InvITs	• Invest in operational, revenue-generating assets. • Lower risk due to stable cash flows from tolls, rentals, or service charges.
Developmental InvITs	• Invest in under-construction infrastructure projects. • Higher risk but potential for capital appreciation once projects become operational.

Alternate Investment Funds (AIFs)

AIFs are classified into three categories based on their investment strategy and risk-return profile:

A. Category I AIFs (Promotes Socially and Economically Beneficial Investments):

These funds invest in early-stage businesses, social ventures, and infrastructure projects. SEBI encourages these funds by offering tax incentives.

Examples:

- **Venture Capital Funds (VCFs):** Invest in high-growth startups and early-stage companies.

- **Angel Funds:** Pool investments from angel investors to fund new startups.
- **Social Venture Funds:** Invest in companies with social impact (education, healthcare, renewable energy).
- **Infrastructure Funds:** Focus on transportation, power, and urban development.

B. Category II AIFs (Private Equity & Debt-Oriented Funds):

These funds invest in private equity, structured debt, and distressed assets. Unlike Category I, they receive no government incentives but have flexible investment mandates.

Examples:

- **Private Equity (PE) Funds**: Invest in unlisted companies for long-term capital appreciation.
- **Debt Funds**: Invest in corporate bonds, mezzanine debt, and distressed loans.
- **Fund of Funds (FoFs)**: Invest in multiple AIFs instead of directly holding assets.

C. Category III AIFs (Hedge Funds & High-Risk Strategies):

These funds employ complex trading strategies, such as short-selling, derivatives, and leverage, to generate high returns.

Examples:

- **Hedge Funds**: Use long-short strategies, options, and arbitrage to maximize returns.
- **Quantitative Funds:** Invest based on algorithmic and data-driven models.

Chapter 6: Sample Questions

1. A _____ is a trust that pools the savings of a number of investors who share a common financial goal.

    a. Custodian
    b. Depository
    c. Bank
    d. Mutual Fund

2. The following is/are the benefits of investing through mutual funds:

    a. Professional investment Management
    b. Risk reduction through diversification
    c. Convenience of making transactions and record keeping
    d. All the above

3. The types of securities purchased by the fund, depends on _____.

    a. the investment objectives of the fund
    b. decisions of SEBI about the fund
    c. decisions of RBI about the fund
    d. Decisions of the fund advisors

4. The following schemes have the features of:

    - Continuous sale and purchase of units at NAV or NAV related prices,
    - Investor can enter and exit the scheme any time during the life of a fund
    - The scheme does not have specific time frame

    a. Open ended scheme
    b. Close ended scheme
    c. Interval scheme
    d. All the above

CHAPTER 7: ROLE OF PORTFOLIO MANAGERS

LEARNING OBJECTIVES:

After reading this chapter, the reader should understand about:

- Overview of portfolio managers in India
- Types of portfolio management services
- Organisational Structure of PMS in India
- General Responsibilities of a Portfolio Manager
- Administration of investor's portfolio

7.1 Overview of Portfolio Management Services in India

Risk and return are the two important aspects of financial investment. Portfolio management involves selecting and managing a basket of assets that minimizes risk, while maximizing return on investments. A portfolio manager plays a pivotal role in designing customized investment solutions for the clients.

A portfolio manager is a body corporate which, pursuant to a contract or arrangement with a client, advises or directs or undertakes on behalf of the client (whether as a discretionary portfolio manager or otherwise), the management or administration of a portfolio of securities or the client's funds. Portfolio managers are registered and regulated under SEBI (Portfolio Managers) Regulations, 2020. According to SEBI guidelines, portfolio management services (PMS) can be offered only by SEBI registered entities.

January 1993, marked the beginning of Portfolio Management Service when SEBI issued Securities and Exchange Board of India (Portfolio Managers) Regulations, 1993. These were one of the first few regulations issued by the regulators. These regulations came even before the mutual fund regulations. This shows the importance of the sector to the regulator.

In India, the major providers of portfolio management services are big brokerage firms, asset management companies and independent asset managers.

7.2 Types of portfolio management services

On the basis of provider of the services PMS can be classified as:

1. PMS by asset management companies
2. PMS by brokerage houses
3. Boutique (independent) PMS houses

They can further be classified on the basis of product class as:

1. Equity based PMS
2. Fixed Income based PMS
3. Commodity PMS
4. Mutual Fund PMS
5. Multi Asset based PMS

Portfolio managers may classify their clients on the basis of their net-worth.

Another way which also finds mention in the regulation also is on the basis of the services provided by the portfolio managers. The following are the types of portfolio management services:

7.2.1 Discretionary Services

As per SEBI's Portfolio Managers Regulations, 2020 "discretionary portfolio manager" means a portfolio manager who under a contract relating to portfolio management, exercises or may exercise, any degree of discretion as to the investment of funds or management of the portfolio of securities of the client, as the case may be.

In other words, discretionary portfolio manager individually and independently manages the funds of each investor as per the contract. This could be based on an existing investment approach or strategy which the portfolio manager is offering or can be customized based on client's requirement.

7.2.2 Non-Discretionary Services

Non-discretionary portfolio manager manages the funds in accordance with the directions of the client. The portfolio manager does not exercise his/her discretion for the buy or sell decisions. The portfolio manager

has to consult the client for every transaction. Decisions such as 'What to buy/sell?' and 'When to buy/sell?' rests with the investor. The execution of trade is done by the portfolio manager. So in this case, the Portfolio Manager provides investment execution services but not investment management services.

7.2.3 Advisory Services

In advisory role, the portfolio manager suggests the investment ideas or provides non-binding investment advice. The investor takes the investment decisions. The investors also executes the transactions. These kind of services are typically used for institutional clients, who manages portfolio's on their own, but typically hires country experts in each country.

7.3 Organizational structure of PMS in India

A portfolio manager is a body corporate who, pursuant to a contract or arrangement with a client, advises or directs or undertakes on behalf of the client (whether as a discretionary portfolio manager or otherwise), the management or administration of a portfolio of securities or the funds of the client.

7.4 General Responsibilities of a Portfolio Manager

The Portfolio Managers Regulations by SEBI has enumerated the following general responsibilities on the portfolio managers:

1. The discretionary portfolio manager shall individually and independently manage the funds of each client in accordance with the needs of the client, in a manner which does not partake character of a Mutual Fund, whereas the non-discretionary portfolio manager shall manage the funds in accordance with the directions of the client.
2. The portfolio manager shall not accept from the client, funds or securities worth less than fifty lakh rupees. Provided that the minimum investment amount per client shall be applicable for new clients and fresh investments by existing clients. Provided further that subject to appropriate disclosures in the disclosure document and the terms agreed between the client and the portfolio manager, the requirement of minimum investment amount per client shall not apply to an accredited investor. Provided further that the requirement of minimum investment amount per client shall not apply to the co-investment portfolio manager.
3. The portfolio manager shall act in a fiduciary capacity with regard to the client's funds.
4. The portfolio manager shall segregate each client's holding in securities in separate accounts.

5. The portfolio manager shall keep the funds of all clients in a separate account to be maintained by it in a Scheduled Commercial Bank.
6. The portfolio manager shall transact in securities within the limitation placed by the client himself with regard to dealing in securities under the provisions of the Reserve Bank of India Act, 1934 (2 of 1934).
7. The portfolio manager shall not derive any direct or indirect benefit out of client's funds or securities.
8. The portfolio manager shall not borrow funds or securities on behalf of the client.
9. The portfolio manager shall not lend securities held on behalf of the clients to a third person except as provided under these regulations.
10. The portfolio manager shall ensure proper and timely handling of complaints from his clients and take appropriate action immediately.
11. The portfolio manager shall ensure that any person or entity involved in the distribution of its services is carrying out the distribution activities in compliance with these regulations and circulars issued thereunder from time to time.

7.5 Administration of investor's portfolio

The portfolio manager has to manage and administer the funds of the investors within the regulatory framework. There are two popular models of execution. First one is pool execution i.e. trading for all clients together and then allocating individual securities to each client's demat account and the other one is trading in individual client name. In this case, allocation happens automatically since trade is in individual name.

The portfolio manager enters into an agreement in writing before taking up an assignment of management of funds and portfolio on behalf of a client. The agreement clearly defines the relationship and sets out their mutual rights, liabilities and obligations relating to management of portfolio. The following are some aspects regarding the administration of the funds.

7.5.1 Defining the universe of securities for the purpose of investments

The agreement between the portfolio manager and the client includes the investment approach. An investment approach is a broad outlay of the type of securities and permissible instruments to be invested in by the portfolio manager for the customer, taking into account factors specific to clients and securities. The agreement also includes the areas of investment and restrictions, if any, imposed by the client with regard to the investment in a particular company or industry. Thus, the universe of securities for the purpose of investments is well defined in the agreement. As mentioned, it is a regulatory requirement.

7.5.2 Circumstances leading to pre-mature withdrawal of funds

The funds or securities can be withdrawn or taken back by the client before the maturity of the contract. However, the terms of premature withdrawal would be as per the agreement between the client and the portfolio manager.

The agreement between the portfolio manager and the client should include the terms for early withdrawal of funds or securities by the clients. It should also include the withdrawal fees in terms of percentage as well as the amount. Portfolio managers cannot impose a lock-in on the investment of their clients.

As the PMS Circular dated February 13, 2020[8] in case client portfolio is redeemed in part or full, the exit load charged shall be as under:

a) In the first year of investment, maximum of 3% of the amount redeemed.
b) In the second year of investment, maximum of 2% of the amount redeemed.
c) In the third year of investment, maximum of 1% of the amount redeemed.
d) After a period of three years from the date of investment, no exit load.

7.5.3. Dos and Don'ts for the portfolio managers

The portfolio manager shall abide by the provisions of the SEBI Act, 1992 and the regulations. Following are the Do's and Don'ts for portfolio managers.

Do's:

1. The portfolio manager shall take adequate steps for redressal of grievances of the investors within 21 calendar days as per the time stipulated by SEBI of the date of the receipt of the complaint and keep SEBI informed about the number, nature and other particulars of the complaints received.
2. Portfolio manager shall abide by the Code of Conduct.
3. The portfolio manager shall segregate each client's holding in securities in separate accounts.
4. The portfolio manager shall keep the funds of all clients in a separate account to be maintained by it in a Scheduled Commercial Bank.

[8]https://www.sebi.gov.in/legal/circulars/feb-2020/guidelines-for-portfolio-managers_45981.html

5. The portfolio manager shall transact in securities within the limitation placed by the client himself with regard to dealing in securities under the provisions of the Reserve Bank of India Act, 1934 (2 of 1934).
6. The portfolio manager shall segregate each clients' funds and portfolio of securities and keep them separately from his own funds and securities and be responsible for safekeeping of clients' funds and securities.

Don'ts:

1. The portfolio manager shall not derive any direct or indirect benefit out of the client's funds or securities.
2. The portfolio manager shall not borrow funds or securities on behalf of the client.
3. The portfolio manager shall not lend securities held on behalf of the clients to a third person except as provided under SEBI Portfolio Managers regulations.
4. The money or securities accepted by the portfolio manager shall not be invested or managed by the portfolio manager except in terms of the agreement between the portfolio manager and the client.
5. The portfolio manager while investing in units of mutual funds through direct plan shall not charge any kind of distribution related fees to the client.
6. The portfolio manager shall not leverage the portfolio of its clients for investment in derivatives.
7. The portfolio manager shall not deploy the clients' funds in bill discounting, badla financing or for the purpose of lending or placement with corporate or non-corporate bodies.
8. The portfolio manager shall not invest the clients' funds in the portfolio managed or administered by another portfolio manager.
9. The portfolio manager shall not invest client's fund based on the advice of any other entity.
10. The portfolio manager shall not while dealing with clients' funds indulge in speculative transactions i.e., it shall not enter into any transaction for purchase or sale of any security which is periodically or ultimately settled otherwise than by actual delivery or transfer of security except the transactions in derivatives.
11. The portfolio manager shall, ordinarily purchase or sell securities separately for each client. However, in the event of aggregation of purchases or sales for economy of scale, inter se allocation shall be done on a pro rata basis and at weighted average price of the day's transactions. The portfolio manager shall not keep any open position in respect of allocation of sales or purchases effected in a day.

12. The portfolio manager shall not hold the securities belonging to the portfolio account, in its own name on behalf of its clients either by virtue of contract with clients or otherwise.
13. The portfolio manager shall not execute off market transfers in client's account except:
    a. for settlement of the clients' own trades;
    b. for providing margin/ collateral for clients' own positions;
    c. for dealing in unlisted securities in accordance with the regulations;
    d. with specific consent of the client for each transaction;
    e. for any other reason specified by SEBI from time to time.

7.5.4. Appointment of custodian

Except for the portfolio manager who provides only the advisory services, every portfolio manager shall appoint a custodian in respect of securities managed or administered by it. Details of custodian like its Name, Address, SEBI Registration No., Date of Appointment need to be furnished in the application for obtaining registration to the regulator.

7.5.5. Maintenance of records

Every portfolio manager shall keep and maintain the following books of accounts, records and documents namely: -

(a) a copy of balance sheet at the end of each accounting period;
(b) a copy of the profit and loss account for each accounting period;
(c) a copy of the auditor's report on the accounts for each accounting period;
(d) a statement of financial position and;
(e) records in support of every investment transaction or recommendation which will indicate the data, facts and opinion leading to the investment decision.

Such records are maintained under the hands of the Principle Officer of the portfolio manager.

The portfolio manager should intimate to SEBI the place where the books of accounts, records and documents are maintained. The portfolio manager should after the end of each accounting period, furnish to SEBI copies of the balance sheet, profit and loss account and such other documents. It should furnish to SEBI a net worth certificate issued by a chartered accountant as and when required. The portfolio manager

is required to preserve the books of account and other records and documents for preceding five accounting years and furnish to SEBI as and when required.

7.5.6. Accounts and audit

The portfolio manager shall maintain separate client-wise accounts. The funds received from the clients, investments or disinvestments, all the credits to the account of the client like interest, dividend, bonus, or any other beneficial interest received on the investment and debits for expenses, if any, shall be properly accounted for and details thereof shall be properly reflected in the client's account.

The tax deducted at source as required under the provisions of the Income-Tax Act, 1961, (43 of 1961) shall be recorded in the portfolio account.

The books of account will be audited yearly by qualified auditor to ensure that the portfolio manager has followed proper accounting methods and procedures and that the portfolio manager has performed his duties in accordance with the law. A certificate to this effect shall, if so specified, be submitted to SEBI within six months of close of portfolio manager's accounting period.

The portfolio accounts of the portfolio manager shall be audited annually by an independent chartered accountant and a copy of the certificate issued by the chartered accountant shall be given to the client.

The client may appoint a chartered accountant to audit the books and accounts of the portfolio manager relating to his transactions and the portfolio manager shall co-operate with such chartered accountant in course of the audit.

7.5.7. Appointment of compliance officer

Every portfolio manager shall appoint a compliance officer who shall be responsible for monitoring the compliance of the Act, rules and regulations, notifications, guidelines, instructions etc., issued by SEBI or the Central Government and for redressal of investors' grievances. The compliance officer shall immediately and independently report to SEBI any non- compliance observed.

Chapter 7: Sample Questions

1) The net worth requirement to be registered as a PMS provider, as per SEBI (Portfolio Managers) Regulations, 2020, is?

a. Rs. 5 crore
b. Rs. 2 crore
c. Rs. 50 lakhs
d. Rs. 10 crore

2) An _____ is a broad outlay of the type of securities and permissible instruments to be invested in by the portfolio manager for the customer, considering factors specific to clients and securities.

a. investment approach
b. investment statement
c. investment strategy
d. investment risk profile

3) Except for the one that provides only the _____, every portfolio manager shall appoint a custodian in respect of securities managed or administered by it.

a. advisory services
b. discretionary services
c. Non-discretionary services
d. None of the above

4) A _____ portfolio manager manages funds based on the client's instructions and obtains their approval before executing any transaction.

a. Non-discretionary
b. Discretionary
c. Advisory
d. All the above

CHAPTER 8: OPERATIONAL ASPECTS OF PORTFOLIO MANAGERS

LEARNING OBJECTIVES:

After reading this chapter, the reader should know about:

- Entities which can invest in a PMS
- Disclosures to the prospective investors
- Process of onboarding of clients
- PMS's liability in case of default
- Redressal of investor grievances
- Disclosures to various regulators
- Costs, expenses and fees of investing in PMS
- Performance reporting to the Investor

8.1 Entities which can invest in PMS

The following entities can invest in PMS with a minimum investment of Rest. 50 lacs:

- Individuals
- Non-resident Indians (as per the RBI guidelines)
- Hindu Undivided Family
- Proprietorship firms
- Association of person
- Partnership Firms
- Limited liability Partnership
- Trust
- Body Corporate

8.2 Disclosures to the prospective clients

Accurate and standardized disclosure by PMS providers is needed to help existing & prospective investors take well informed investment decisions.

Regulation requires that the disclosure document is to be given to the prospective client along with the account opening form prior to signing of the agreement and keep and audit trail. The same has to be made available on the website of the Portfolio Manager. Due care shall be taken to present the information in simple language and in a clear, concise and easily understandable manner in the disclosure document.

SEBI, in consultation with APMI, has introduced a simplified Disclosure Document format via SEBI Circular dt. Sep 09, 2025. The contents of the disclosure document are given below.

Part -I: Static Section

No.	Heading	Content
1	Disclaimer clause	A statement to the effect that the particulars have been prepared in accordance with the SEBI (Portfolio Managers) Regulations, 2020 and filed with SEBI. This Document has neither been approved or disapproved by SEBI nor has SEBI certified the accuracy or adequacy of the contents of the Document.
2	Definitions	All terms used in the Disclosure Document be defined. The language and terminology used in the Disclosure Document shall be as provided in the Regulations. Any new term if used shall be clearly defined. All terms shall be used uniformly throughout the text of the Disclosure Document.
3	Description	History, Present Business and Background of the portfolio manager. Promoters of the portfolio manager, directors and their background. Top 10 Group companies/firms of the portfolio manager on turnover basis (latest audited financial statements may be used for this purpose). Details of the services being offered: Discretionary/ Non-discretionary / Advisory.

4	Penalties, pending litigation or proceedings, findings of inspection or investigation for which action may have been taken or initiated by any regulatory authority.	All cases of penalties imposed by SEBI or the directions issued by SEBI under the SEBI Act or rules or regulations made thereunder. The nature of the penalty/direction. Penalties/fines imposed for any economic offence and/ or for violation of any securities laws. Any pending material litigation/legal proceedings against the portfolio manager/key personnel with separate disclosure regarding pending criminal cases, if any. Any deficiency in the systems and operations of the portfolio manager observed by SEBI or any regulatory agency. Any enquiry/ adjudication proceedings initiated by SEBI against the portfolio manager or its directors, principal officer or employee or any person directly or indirectly connected with the portfolio manager or its directors, principal officer or employee, under the Act or rules or regulations made thereunder.
5	Services Offered	The present investment objectives and policies including the types of securities in which it generally invests shall be clearly and concisely stated in the document for easy understanding of the potential investor. Investment Approaches of the Portfolio Manager The policies for investments in associates/group companies of the portfolio manager and the maximum percentage of such investments therein subject to the applicable laws/regulations/ guidelines.
6	Risk factors	Statement to the effect that securities investments are subject to market risks and there is no assurance or

		guarantee that the objective of the investments will be achieved. Statement to the effect that past performance of the portfolio manager does not indicate its future performance. Risk arising from the investment approach, investment objective, investment strategy and asset allocation. Risk arising out of non-diversification, if any. If the portfolio manager has no previous experience/ track record a disclosure to that effect shall be made. All transactions of purchase and sale of securities by portfolio manager and its employees who are directly involved in investment operations shall be disclosed if found having conflict of interest with the transactions in any of the client's portfolio. If the portfolio manager has group companies, a disclosure of conflict of interest related to services offered by group companies of the portfolio manager if any.
7.	Nature of expenses	Investment management and advisory fees. Custodian fee Registrar and transfer agent fee Brokerage and transaction cost.
8.	Taxation	Disclose the tax implications of investments in securities and the tax provisions on Income/ Loss or Tax Deduction at Source on various investors.
9.	Accounting policies	Disclose the accounting policy followed by the portfolio manager while accounting for the portfolio investments of the clients.
10.	Investors services	Name, address and telephone number of the investor relation officer who shall attend to the investor queries and complaints. Grievance redressal and dispute settlement mechanism.

11.	Details of the diversification policy of the portfolio manager	The details of the diversification policy of the portfolio manager for the portfolio of the clients.

Part-II: Dynamic Section

No.	Heading	Content
12.	Client Representation	Category of clients No. of clients Funds managed Discretionary / Non- Discretionary (if available) Associate/group companies (last 3 years) Others (last 3 years) Total Complete disclosure in respect of transactions with related parties as per the standards specified by the Institute of Chartered Accountants of India.
13.	Financial Performance	The Financial Performance of the portfolio manager based on audited financial statements and in terms of procedure specified by SEBI for assessing the performance.
14.	Performance of Portfolio Manager	Portfolio Management performance of the portfolio manager for the last three years, and in case of discretionary portfolio manager disclosure of performance indicators calculated using 'Time Weighted Rate of Return' method.
15.	Audit Observations	Audit observations of the preceding 3 years
16.	Details of investments in the securities of related	The details of investment of client's funds by the portfolio manager in the securities of its related parties or associates.

	parties of the portfolio manager	

8.2.1 Written down policies by Portfolio Manager

Portfolio Managers shall put in place a written down policy, which detail the specific activities, role and responsibilities of various teams engaged in fund management, dealing, compliance, risk management, back-office, etc., with regard to management of client funds and securities including the order placement, execution of order, trade allocation amongst clients and other related matters.

Portfolio Managers shall also put in place a specific policy, which provide for the following:

- Specific situations (not generic) wherein the orders shall be placed for each client individually or pooled from trading account of Portfolio Manager.
- Scenarios/situations in which deviation from the allotment of securitiesas intended at the time of placement of order would be permissible, if at all.
- Scenarios, wherein, the Portfolio Manager is required to place certain margins/collaterals in order to execute certain transactions, details on how such margins/collaterals shall be segregated/placed from amongst various clients, without affecting the interest of any client.
- Deviations, if any, shall be on account of exigency only and require prior written approval of the Principal Officer and Compliance officer of the Portfolio Manager with a detailed rationale for such deviation.

These policies as need to be approved by the Board/equivalent body of the Portfolio Manager.

8.2.2 Fair and equitable treatment of all clients

Portfolio Managers shall ensure that all clients are treated in a fair and equitable manner and ensure compliance with the following:

8.2.3 Requirements with respect to investments in all instruments

Portfolio Managers shall constitute a dealing team (DT) which shall be responsible for order placement and execution of all orders in accordance with the aforesaid policies of the Portfolio Manager. DT may include the Principal Officer or the person appointed in terms of Regulation 7(2) (e) of the PM Regulations.

- Portfolio Managers shall ensure that DT is suitably staffed and complywith the following:
    - All conversations of DT shall be only through the dedicated recorded telephone lines or

through emails from authorized email ids.

- Mobile phones or any other communication devices other than the recorded telephone lines shall not be allowed inside the dealing room.
- Access to internet facilities on computers and other devices inside the dealing room shall be restricted and shall only be used for activities related to trade execution.
- Entry/access to the dealing room shall be restricted to authorized employees as defined in the aforementioned policies of the PortfolioManager.
- There shall be no sharing of information through any mode, except for trade execution under the approved policies of the Portfolio Manager.

- For equity, equity-related instruments and Mutual Funds units [27]
  - Portfolio Managers with assets under management of INR 1000 crores or more under discretionary and non-discretionary services, shall have in place an automated system with minimal manual intervention for ensuring effective funds and securities management including order management and allocation of securities to each client.

Portfolio Managers shall maintain audit trail of all activities related to management of funds and securities of clients including order placement,trade execution and allocation. Further, there shall be time stamping with respect to order placement, order execution and trade allocation.

8.3 Process of On-boarding of clients

The two important elements of the customer life cycle are: client onboarding and reporting. The following are the important aspects of the client onboarding process in case of a PMS service:

8.3.1 Reading of disclosure document

The Regulation requires that the disclosure document is to be given to the prospective client along with the account opening form prior to signing of the agreement besides being made available at all times on Portfolio Manager's website.

8.3.2 Fulfilling KYC requirements

Investors need to fulfil certain mandatory requirements to be eligible to invest in PMS. The KYC process involves verification of proof of identity and proof of residence of the customer. The KYC process also

requires verification of the PAN card. PAN Card is mandatory for all investors who wish to invest in PMS to complete KYC formalities, at least by one of the Regulated Entities regulated by any of the financial regulator e.g. SEBI, RBI, IRDAI or PFRDA. Portfolio Managers can always ask for additional information in addition to the Proof of Identity and Proof of Address.

Documents required for KYC for different types of investors vary including Non-Resident Indians or Non-Individuals or Minors.

SEBI Directive on Inclusive Digital KYC for Person with Disability

SEBI vide circular Ref. No. SEBI/HO/MIRSD/SECFATF/P/CIR/2025/74 Dated May 23, 2025 has reiterated its commitment to enabling equal access to financial services through its registered intermediaries by ensuring that digital KYC processes are inclusive and accessible to person with disabilities, including those with visual impairments. Intermediaries are now mandated to offer assistive digital services.

8.3.3. Submitting duly filled application form[9]:

The following format is given for the account opening form in Portfolio Managers Regulation 2020.

- General Information about the client such Name, primary mailing address, secondary (back up) mailing address, identity information such as photograph, Permanent Account Number (PAN), driving license, Occupation, Introducer Details, Income Details etc.
- Investment profile of the client such as Experience, Risk Tolerance, Investment Horizon, Investment Objective, Withdrawal Choice etc.
- Investment approach and Portfolio Construction choice opted by the client

8.3.4. Content of agreement between the portfolio manager and investor[10]

The portfolio manager before taking up an assignment of management of funds and portfolio on behalf of a client, enters into an agreement in writing with such client that clearly defines the *inter se* relationship and sets out their mutual rights, liabilities, and obligations relating to management of portfolio.

The agreement between the portfolio manager and the client include the following:

[9] Candidates are advised to check the latest account opening form from SEBI Website/Portfolio managers regulation.

[10] For details, candidates are advised to refer to Schedule IV of Portfolio Managers Regulations, 2020.

1. the investment objectives and the services to be provided;
2. period of the contract and provision of early termination, if any;
3. investment approach, areas of investment and restrictions, if any, imposed by the client with regard to the investment in a particular company or industry;[11]
4. type of instruments and proportion of exposure;
5. tenure of portfolio investments;
6. terms for early withdrawal of funds or securities by the clients;
7. attendant risks involved in the management of the portfolio**;**
8. amount to be invested subject to the restrictions provided under these regulations;
9. procedure of settling client's account including form of repayment on maturity or early termination of contract;
10. fees payable to the portfolio manager;
11. the quantum and manner of fees payable by the client for each activity for which service is rendered by the portfolio manager directly or indirectly (where such service is out sourced);
12. custody of securities;
13. in case of a discretionary portfolio manager; a condition that the liability of a client shall not exceed his investment with the portfolio manager;
14. accounting terms, audit and furnishing of the reports to the clients as per the provisions of the regulations; and
15. other terms of portfolio investment subject to the prescribed regulations.

Fee calculation tool shall be provided to all clients by the Portfolio Manager. Fee illustrations to be provided whenever performance fess is charged to clients. No additional fees and charges to be levied other than those specified in the agreement. The Portfolio Manager shall provide to clients a "most important Terms and Conditions (MITC)" document as per the standard format.[12]

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[11] An investment approach is a broad outlay of the type of securities and permissible instruments to be invested in by the portfolio manager for the customer, taking into account factors specific to clients and securities.

[12] https://www.sebi.gov.in/legal/circulars/may-2024/portfolio-managers-facilitating-ease-in-digital-on-boarding-process-for-clients-and-enhancing-transparency-through-disclosures_83147.html and https://www.apmiindia.org/storagebox/images/Circulars/APMI%20Circular%2011%20-%20Submissions%20by%20APMI%20vide%20SEBI%20Circular%20dated%202nd%20May'24.pdf

8.3.5. Most Important Terms and Conditions (MITC)

In order to facilitate ease of understanding of the critical aspects of the Portfolio Manager-client relationship, Portfolio Manager shall additionally provide to its client a “Most Important Terms and Conditions (MITC)” document, which shall be duly acknowledged by the client.

The Portfolio Manager shall ensure compliance of MITC for new clients, on-boarded on or after October 01, 2024 and for the existing clients, the MITC shall be informed to the clients via email or any other suitable mode of communication (which can be preserved) by January 01, 2025.

APMI has come out with a standard format, which is presented below here.

Most Important Terms and Conditions (MITC) for the clients of the Portfolio Managers	
Name of the Portfolio Manager & SEBI Registration Number	
Contact details of Portfolio Manager	
Distributor Name	
Service Opted by the Client	Discretionary/NonDiscretionary/Advisory/ CoInvestment Services
Amount Invested	
Date of PMS Agreement	
Risk Tolerance of the Client	Low/ Medium/ High
Strategy	Equity/ Debt/ Hybrid/ Multi Asset
Investment Approach	
Benchmark for the Investment Approach	
Investment Tenure/ Horizon	
Related Party Investments	Allowed/ Not Allowed
Fees & Charges including exit load, if any levied by the Portfolio Manager	
Details of bank and demat accounts where client's funds and securities are kept	
Tenure of the PMS Agreement	
Disclosure of interest in various corporate bodies by Client	Yes/ No
Nominee along with share of each nominee in PMS, Demat and Bank accounts	
Name of Guardian, in case the Nominee is a minor	
Name and contact details of Investor Relations Officer	
Other important T&Cs	

The MITC and all information provided here above are applicable to you. The MITC is in addition to and are to be read in conjunction with the PMS-Client Agreement executed between you and the Portfolio Manager.

Date:
Place:

Signature 1st/ Sole Holder/ Authorised Signatory	**Signature** 2nd Holder/ Authorised Signatory	**Signature** 3rd Holder/ Authorised Signatory

8.3.6 Direct On-boarding in PMS

As per the SEBI circular, Portfolio Managers shall provide an option to clients to be on-boarded directly, without intermediation of persons engaged in distribution services. Portfolio Managers shall prominently disclose in its disclosure documents, marketing material and on its website, about the option for direct on-boarding. At the time of on-boarding of clients directly, no charges except statutory charges shall be levied. Alternatively, investors can invest in PMS through distributors.[13]

8.3.7 Process Flow

Investors can invest in PMS products in cash or in securities or a combination of the two worth minimum Rs. 50 lacs. The portfolio manager shall not accept from the client, funds or securities worth less than rupees fifty lacs. The valuation of the securities on the on-boarding date should meet the regulatory criteria. The portfolio manager may execute the sale of all or part of such securities to meet the investment objectives of the client within the investment approach.

8.3.8 Joint Holder in PMS

An investment in PMS may be held jointly. The investment records are created in the name of the first holder and all the benefits of the investment such as dividends, interest and redemption proceeds are made to the first holder's account. All the joint holders must sign the application and comply with the requirements of PAN and KYC norms. The mode of operating the account may be single, joint or anyone or survivor. Any change to the mode of operation, or addition or deletion of joint holders can be done only with the signatures of all holders.

In case of a demat account, addition or deletion of holders is not allowed once the account is opened.

8.4 Liability in case of Default

The portfolio manager who contravenes any of the provisions of the SEBI Act, rules or regulations shall be liable including the action under Chapter V of the SEBI (Intermediaries) Regulations, 2008:

1) suspension of certificate of registration for a specified period;

2) cancellation of certificate of registration;

[13] https://www.sebi.gov.in/legal/circulars/feb-2020/guidelines-for-portfolio-managers_45981.html (SEBI Circular on Guidelines for Portfolio Managers dated February 13, 2020)

3) prohibiting the portfolio manager to take up any new assignment or contract or launch a new scheme for the period specified in the order;

4) debarring a principal officer of the portfolio manager from being employed or associated with any registered intermediary or other registered person for the period specified in the order;

5) debarring a branch or an office of the portfolio from carrying out activities for the specified period;

6) warning the portfolio manager.

8.5 Redressal of investors grievances

The portfolio manager shall take adequate steps for redressal of grievances of the investors within the time stipulated by SEBI and keep SEBI informed about the number, nature and other particulars of the complaints received.[14] This is one of the conditions of obtaining certification of registration under regulations . Contents of agreement between the portfolio manager and his clients also includes provisions for redressal of grievances.

The portfolio manager is required to appoint a **compliance officer** who will be responsible for monitoring the redressal of investors' grievances. SEBI recently mandated an Online dispute redressal mechanism for all intermediaries to provide an Alternative Dispute Resolution Mechanism for investors.

With the said change, now the new process of dealing with investor grievance and disputes in the securities markets will be undertaken through the following measures:

(i) Time-bound mechanism for resolution of investor complaints by the concerned intermediary, Market Infrastructure Institution (MII), and through SCORES which is already existing framework

(ii) In the event of the complainant not being satisfied with the resolution, the MII administered dispute resolution process may be initiated by the aggrieved party

(iii) In case either party is not satisfied with the arbitration award, such party may approach the courts.

The following amendment was made to SEBI PMS Regulations by inserting Regulation 22A through SEBI (Alternative Dispute Resolution Mechanism) (Amendment) Regulations, 2023 w.e.f July 3, 2023.

All claims, differences or disputes between investors and the portfolio manager arising out of or in relation to the activities of the portfolio manager in the securities market shall be submitted to a dispute resolution

[14] https://www.sebi.gov.in/legal/regulations/aug-2023/securities-and-exchange-board-of-india-portfolio-managers-regulations-2020-last-amended-on-august-18-2023-_76366.html

mechanism that includes mediation and/or conciliation and/or arbitration, in accordance with the procedure specified by SEBI.

Further to the above ODR mechanism being made mandatory for PMS providers, let us discuss the same in details: -

Online Dispute Resolution (ODR) Mechanism:-

The various stages involved in the ODR process is given below:

a. **Pre-Conciliation:** This is an initial stage where the Market Infrastructure Institution (MII) facilitates an amicable discussion between the investor and the intermediary / listed company / regulated entity (Market Participant). Resolving an issue in pre-conciliation ensures that formal proceedings are not initiated.

b. **Conciliation:** This is a more formal process where a conciliator (a neutral third party) works with the disputing parties to reach a mutually acceptable agreement. It's like a facilitated negotiation with the goal of finding a compromise that all parties can agree on.

c. **Arbitration:** This is a legal process where a dispute is resolved by one or more arbitrators (neutral third parties) whose decision (the arbitral award) is binding and enforceable. It's like having a private judge who makes a final decision on the dispute.

   The first two stages are free of cost for the investors.

To help investors access the ODR mechanism, an online platform (SMART ODR) has been developed through which investors may approach any Market Infrastructure Institution (MII) to lodge their request for dispute resolution. The request will be auto-assigned to a MII ODR platform based on round-robin logic. The intermediaries have to display the link of the said portal on their website and amend their

8.6 Disclosures to the regulator

Portfolio managers are required to make mandatory disclosure to regulatory bodies under various acts and regulation. The following sections gives the details of the same.

8.6.1 Disclosures to SEBI

SEBI may also ask portfolio manager to disclose any information as and when required including the following**:** -

(a) particulars regarding the management of a portfolio;

(b) any change in the information or particulars previously furnished, which have a bearing on the certificate granted to him;

(c) the names of the clients whose portfolio it has managed;

(d) particulars relating to the net worth requirement as specified in regulation 9 of Portfolio Managers Regulation 2020.

8.6.2 Disclosures to Financial Intelligence Unit – India

The Government of India has put a policy framework to combat money laundering through the Prevention of Money Laundering Act, 2002 (PMLA 2002). SEBI has mandated that all registered intermediaries to formulate and implement a comprehensive policy framework on anti-money laundering and adopt 'Know Your Customer' (KYC) norms. The Portfolio Manager is required to comply with all applicable anti money laundering laws and regulations in all of its operations.

Financial Intelligence Unit - India (FIU-IND) is the central, national agency responsible for receiving, processing, analysing and disseminating information relating to suspect financial transactions to enforcement agencies and foreign FIUs.

The portfolio manager is required to report any suspicious transaction within 7 working days to FIU.

8.7 Costs, expenses and fees of investing in PMS

The portfolio manager can charge an agreed fee from the clients for rendering portfolio management services. The exact nature of these fees and expenses would form part of the client agreement and the Portfolio Manager shall take client's prior consent on these fees and expenses. The following are the indicative lists of fees and expenses. The fees and expenses could vary depending on the asset class / type of portfolio. Also all these fees may apply to all kinds of portfolios.

- **Investment management and advisory fee :** The fee so charged may be a fixed fee or a return based fee or a combination of both. These are typically on actuals and reimbursed to Portfolio Manager.
- **Custodian fee / Depository fee:** The charges relating to opening and operation of dematerialized accounts, custody and transfer charges for shares, bonds and units, dematerialization and other charges in connection with the operation and management of the depository accounts.
- **Registrar and Transfer agent fee:** Charges payable to registrars and transfer agents in connection with effecting transfer of securities and bonds.
- **Brokerage and transaction costs:** Brokerage and related transaction costs, are part of the acquisition cost / sale realization including STT, stamp duty etc.. Brokerage at actuals shall be charged to clients as expense.
- **Certification charges, Fund Accounting charges and Professional fee:** Any charges payable for outsourced professional services like fund accounting, taxation, auditing, and any legal services, franking charges, affidavits, notarizations, courier etc. incurred on behalf of the client by the portfolio manager.
- **Out of Pocket and Other Incidental Expenses:** Charges in connection with day to day operations like service tax, other statutory levies, telephone expenses, opening of bank, trading and demat accounts and any other out of pocket expenses incurred by the portfolio manager, on behalf of the client.

While charging fees or expenses, the regulation mandates that:

1. No upfront fees shall be charged by the Portfolio Managers, either directly or indirectly, to the clients.
2. Brokerage at actuals shall be charged to clients as expense.
3. Operating expenses excluding brokerage, over and above the fees charged for Portfolio Management Service, shall not exceed 0.50% per annum of the client's average daily Assets under Management (AUM).
4. In case client portfolio is redeemed in part or full, the exit load charged shall be as under: [15]
    1. In the first year of investment, maximum of 3% of the amount redeemed.
    2. In the second year of investment, maximum of 2% of the amount redeemed.
    3. In the third year of investment, maximum of 1% of the amount redeemed.
    4. After a period of three years from the date of investment, no exit load.

[15] https://www.sebi.gov.in/legal/circulars/feb-2020/guidelines-for-portfolio-managers_45981.html

8.7.1. High Water Mark

It is a performance-based fee structure that ensures the fund manager is compensated only for net positive returns above the investor's previous highest portfolio value. It prevents fund managers from charging performance fees on the same gains repeatedly and aligns their incentives with investor interests.

How High Water Mark Works:

- At the start, the investor's initial investment is considered the High Water Mark.
- If the portfolio grows beyond this level, a performance fee (usually a percentage of profits) is charged.
- If the portfolio declines in value, no performance fee is charged until the portfolio surpasses the previous High Water Mark.

Let's understand it with an example:

- Year 1: Investment starts at Rs. 1 crore → Grows to Rs. 1.2 crore → Performance fee is charged.
- Year 2: Portfolio falls to Rs. 1 crore → No performance fee is charged.
- Year 3: Portfolio rises to Rs. 1.3 crore → Performance fee is charged only on gains above Rs. 1.2 crore.

This method ensures fairness and motivates fund managers to achieve consistent long-term growth.

8.7.2. Hurdle Rate

The Hurdle Rate in investment management, especially in Portfolio Management Services (PMS) and Alternative Investment Funds (AIFs), is the minimum return a fund must generate before the fund manager can charge a performance fee.

How Hurdle Rate Works?

- If the fund's return is below the hurdle rate, no performance fee is charged.
- If the return exceeds the hurdle rate, the performance fee is applied only to the gains above this rate.
- It ensures that fund managers are rewarded only when they generate returns above a pre-agreed threshold.

Example

- Hurdle Rate: 10% per year
- Year 1 Return: 8% → No performance fee charged
- Year 2 Return: 15% → Performance fee applies only on the 5% excess return (15% - 10%)

Like High Water Mark, this structure also ensures fair compensation and aligns fund managers' incentives with investor interests.

8.8 Performance reporting to the Investor

SEBI Portfolio Managers regulation state the following regarding performance reporting to the investors:

The portfolio manager shall furnish periodically a report to the client, as agreed in the contract, but not exceeding a period of three months and as and when required by the client and such report shall contain the following details, namely: -

(a) the composition and the value of the portfolio, description of securities and goods, number of securities, value of each security held in the portfolio, units of goods, value of goods, cash balance and aggregate value of the portfolio as on the date of report.

(b) transactions undertaken during the period of report including date of transaction and details of purchases and sales.

(c) beneficial interest received during that period in the form of interest, dividend, bonus shares, rights shares, etc.

(d) expenses incurred in managing the portfolio of the client.

(e) details of risk foreseen by the portfolio manager and the risk relating to the securities recommended by the portfolio manager for investment or disinvestment.

(f) default in payment of coupons or any other default in payments in the underlying debt security and downgrading to default rating by the rating agencies, if any.

(g) details of commission paid to distributor(s) for the particular client.

Portfolio Manager shall present the Time weighted rate of return (TWRR) of the Investment Approach along with the trailing return of the selected benchmark when communicating/advertising/publishing/mentioning performance of an investment approach. Portfolio Manager shall present the Extended Internal Rate of Return (XIRR) for each investment approach the investor invests in when reporting performance to an investor. This shall be accompanied by the minimum, maximum and median XIRR return generated across all investors in each of the IA, the investor has invested in. The TWRR of the respective IA(s) and the trailing return of the benchmark(s) selected shall also be presented separately. The disclosure should also be accompanied by the following disclaimer:

"Please note that performance of your portfolio may vary from that of other investors and that generated by the investment approach across all investors because of (a) the timing of inflows and outflows of funds and (b) difference in the portfolio composition because of restrictions and other constraints."[16]

[16] Candidates are advised to read SEBI Circular (SEBI/HO/IMD/IMD-PoD/P/CIR/2022/172) dated December 16, 2022.

Chapter 8: Sample Questions

1. The following entity is eligible to invest into PMS:
    a. Proprietorship firms
    b. Association of person
    c. Partnership Firms
    d. All of the above

2. The following entities can invest in PMS:
    a. Individuals
    b. Non-resident Indians (as per the RBI guidelines)
    c. Hindu Undivided Family
    d. All the above

3. The minimum investment required for PMS investment is:
    a. Rs. 50 lacs
    b. Rs. 25 Lacs
    c. Rs. 5 Lacs
    d. Rs. 100 Lacs

4. _____ is the central, national agency responsible for receiving, processing, analysing and disseminating information relating to suspect financial transactions to enforcement agencies.

    a. FIU-IND
    b. SEBI
    c. RBI
    d. CBI

CHAPTER 9: PORTFOLIO MANAGEMENT PROCESS

LEARNING OBJECTIVES:

After reading this chapter, the reader should be familiar with:

- Importance of Asset allocation decision
- Correlation across asset classes and securities
- Steps in Portfolio Management Process
- Asset Allocation Decision
- Rebalancing of portfolio

9.1. Importance of Asset Allocation Decision

Asset allocation is the process of deciding how to distribute an investor's wealth into different asset classes for investment purposes. An asset class is defined as a collection of securities that have similar characteristics, attributes, and risk/return relationships for example, bonds, equities, cash and cash like securities etc. A broad asset class, such as "bonds," can be divided into sub-asset classes, like treasury bonds, corporate bonds, and junk bonds. Equity can further be divided into large cap, mid cap & small cap.

Asset allocation decision is a very important investment decision. Professional investment experience has been suggesting that in the long run performance of investment portfolios depends majorly on asset allocation. The asset allocation decision is not an isolated decision, it is a component of portfolio management process.

9.2 Understanding correlation across asset classes

Diversification aims to reduce portfolio risk by investing in uncorrelated or negatively correlated assets. When one asset underperforms, another may outperform, stabilizing overall returns.

For example:

- Equities and Bonds often have low or negative correlation, making bonds a hedge during stock market downturns.
- Gold and Equities typically show negative correlation during economic crises.
- Real Estate and Stocks may have low correlation, adding stability.

By combining different asset classes or securities with low correlation, investors can achieve better risk-adjusted returns, reducing overall portfolio volatility.

Correlation measures the relationship between the price movements of two different asset classes. It is expressed as a value between -1 and +1:

- +1 (Perfect Positive Correlation): Assets move in the same direction.
- 0 (No Correlation): No relationship between asset movements.
- -1 (Perfect Negative Correlation): Assets move in opposite directions.

9.3 Steps in Portfolio Management Process

Portfolio management process involves a set of integrated activities undertaken in a logical, orderly and consistent manner to create and maintain optimum portfolio. The elements in the portfolio management process are planning, execution and feedback as discussed below:

The first step in the process of portfolio management is development of policy statement for the portfolio i.e. Investment Policy Statement (IPS). It is a road map that identifies investors risk appetite and defines investment objectives, goals and investment constraints, if any.
The second step involves study of current financial conditions and forecast future trends.
The third step is construction of portfolio after taking into consideration policy statement and financial markets forecast. Since both the investor needs and the financial market forecasts being dynamic, portfolio requires continuous monitoring and rebalancing.
The fourth step in portfolio management process is performance measurement & evaluation.
Thus, the portfolio management process moves from planning through execution and then to feedback.

9.3.1 Preparation of Investment Policy Statement (IPS)

The Investment Policy Statement (IPS) is a crucial document in portfolio management, serving as a roadmap for investment decisions. It is drafted in consultation with the investors and outlines investment objectives, goals, constraints, preferences, and risk tolerance.

All investment decisions are based on the IPS, ensuring alignment with the investor's risk appetite and financial goals. Since investor requirements evolve over time, the IPS must be regularly updated and revised.

The IPS also forms the foundation for strategic asset allocation, balancing the investor's risk-return expectations with projected investment returns. A well-structured IPS ensures that investments align with the investor's objectives, promoting optimal portfolio construction and risk management.

Key Purpose:

- Helps investors understand their needs and assists portfolio managers in building optimal portfolios.
- Establishes a structured approach to investment management, minimizing poor decision-making.
- Sets realistic return expectations for investors.
- Helps portfolio managers make effective investment decisions.
- Provides a performance evaluation framework for portfolio managers.
- Protects investors from inappropriate or unethical decisions.

In addition to the above mentioned section, the IPS may also include reporting requirements, portfolio rebalancing schedules, frequency of performance communication, investment strategy and styles etc.

9.3.2. Understanding Risk Profile of the Investor

Risk profiling is a crucial step in Portfolio Management Services (PMS), as it helps determine an investor's risk tolerance, investment objectives, and financial situation. It enables the portfolio manager to create a customized investment strategy that aligns with the investor's risk appetite and return expectations.

Risk profiling considers factors such as age, financial goals, investment experience, liquidity needs, income stability, and psychological risk tolerance.

Components of Risk Profiling

- **Risk Tolerance:** The investor's willingness to take risks.
- **Risk Capacity:** The investor's financial ability to take risks.
- **Investment Horizon:** The timeframe for investment goals.
- **Liquidity Needs:** The requirement for easy access to funds.
- **Investment Knowledge & Experience:** Understanding of financial markets.

Sample Risk Profiling Questionnaire

Question	Options	Weights
1. What is your age?	a) Below 30	5
	b) 30-45	4
	c) 45-60	3
	d) Above 60	2
2. What is your primary financial goal?	a) High growth	5
	b) Moderate growth	4
	c) Capital preservation	3
	d) Regular income	2
3. How comfortable are you with short-term losses?	a) Very comfortable	5
	b) Somewhat comfortable	4
	c) Neutral	3
	d) Not comfortable	2
4. What percentage of your investments are in equities?	a) Above 75%	5
	b) 50-75%	4
	c) 25-50%	3
	d) Below 25%	2
5. How stable is your income?	a) Highly stable	5
	b) Moderately stable	4
	c) Somewhat unstable	3
	d) Unstable	2
6. What is your investment horizon?	a) More than 10 years	5
	b) 5-10 years	4
	c) 3-5 years	3
	d) Below 3 years	2

Risk Scoring & Investor Categories

Total Score	Risk Category	Investment Strategy
25-30	Aggressive	High equity exposure
19-24	Moderate	Balanced asset allocation
13-18	Conservative	More debt & fixed-income instruments
Below 13	Risk-Averse	Capital preservation-focused investments

Risk profiling ensures that PMS investments align with an investor's risk appetite and financial goals. A structured approach using a questionnaire and weighted scoring system helps in determining the appropriate investment strategy. Regular reviews and updates are essential as financial circumstances change over time.

Some of the other questions which may be incorporated in the said profiling for capturing Investor's preferences are:

- Indicative percentage of total investment portfolio proposed to be invested with the portfolio manager (optional).
- Overall investment goals such as capital appreciation or capital appreciation and regular income or regular income.
- Time period for which investments are proposed to be made with the portfolio manager. (This has to be same as the term of the agreement)
- Provisions for systematic withdrawal on a monthly, quarterly, annual basis etc.

9.3.3. Investment Objectives

Investment objectives define an investor's financial goals, risk tolerance, and expected returns from their investments. Different investors have different investment objectives depending on their risk profile, goals, earnings, networth, experience, age, investment horizon etc. These objectives serve as a guiding framework for selecting suitable investment products and strategies.

The key investment objectives include:

- **Capital Appreciation:** Growing wealth over time by investing in assets like equities or mutual funds.
- **Income Generation:** Earning regular income through dividends, interest, or rental income from assets.
- **Capital Preservation:** Protecting the principal amount by investing in low-risk instruments like bonds or fixed deposits.
- **Liquidity:** Ensuring easy access to funds for short-term financial needs.
- **Tax Efficiency:** Investing in tax-saving instruments to optimize post-tax returns.

A well-defined investment objective helps in building an effective and personalized investment strategy.

9.3.4. Investment Constraints

Just as different investors have different investment objectives, likewise different investors have different investment constraints too. Constraints are limitations on investors to take exposure to certain investment opportunities due to liquidity needs, time horizon, taxation etc.

Let us look at some of these constraints:

A. Liquidity constraint

Different investors have different liquidity requirements. Younger people usually have lesser liquidity requirements than older people. Some may have some health or medical concerns which require them to maintain certain liquid funds. Others may have requirements of college fees or wedding in the family or some other needs. Generally investors prefer to have liquid funds to meet their day to day expenses. Additionally they may like to keep some amount of liquidity to meet contingency requirements like sudden medical expenses etc..

The needs for liquidity fall into following categories:

Emergency Cash: The emergency cash reserve is usually measured as two to three months' spending, but it could be more if the individual's source of income is at risk or volatile.

Near term goal. These needs vary with the individual. For known goals due within a year, the amount needed to achieve these goals should be in assets with relatively good liquidity.

Investment Flexibility. The ability to take advantage of market opportunities as asset classes become overvalued and undervalued would require greater degree of liquidity.

To meet such requirements, some portion of the portfolio should be in cash or cash like securities. The advisor or the manager needs to make detailed assessment of the liquidity needs of the investors. Keeping too much money for liquidity may hit the overall portfolio return. On the other hand, not maintaining sufficient liquidity will lead to inconvenience and selling of other investments untimely. The liquidity constraints of the investor need to be clearly specified in the IPS.

B. Regulatory constraints

Generally individual investors do not have many regulatory constraints. But if there are any, they need to be followed. Regulations can also constraint the investment choices available to the investors. For example, as per the Reserve Bank of India's notification, Liberalised Remittance Scheme (LRS), an Indian resident individual can only invest up to $250,000 overseas per year.[17] Indian resident individual investors cannot make investments greater than the amount specified by the regulator. Another example is the sale or purchase of securities on the basis of information that is not publicly known. Usually people who have access to such information are insiders of the company and they are prohibited from trading on the basis of insider information.

C. Tax Constraint

Investment process is complicated by tax concerns. Tax plays a very important role in portfolio management and drives investment decisions. Different investments and different kinds of income are taxed differently. Return in form of income like interest, dividend and rents versus return in form of capital appreciation are taxed differently. The same form of return may attract different tax liability depending on the tax bracket, the recipient belongs to. Hence a thorough understanding of the tax code applicable to the investor needs to be part of the IPS.

[17] Under the Liberalised Remittance Scheme, all resident individuals, including minors, are allowed to freely remit up to USD 2,50,000 per financial year (April – March) for any permissible current or capital account transaction or a combination of both. Further, resident individuals can avail of foreign exchange facility for the purposes mentioned in Para 1 of Schedule III of FEM (CAT) Amendment Rules 2015, dated May 26, 2015, within the limit of USD 2,50,000 only. The Scheme was introduced on February 4, 2004, with a limit of USD 25,000. The LRS limit has been revised in stages consistent with prevailing macro and micro economic conditions

D. Exposures limits to different sectors, Entities and Asset Classes

As per the SEBI PMS Regulations 2020 the agreement between the portfolio manager and the investor should include the investment approach. An investment approach is a broad outlay of the type of securities and permissible instruments to be invested in by the portfolio manager for the investor, taking into account factors specific to investor and securities. It should also include the type of instruments and proportion of exposure.

After taking into consideration the investor's objective, risk appetite, liquidity needs, tax and other regulatory constraints, time horizon for investment, exposure limits to specific sectors, entities and asset classes can be set to avoid the concentration risk. The portfolio manager needs to adhere to these exposure limits while managing investments.

E. Unique needs and preferences

Sometimes investors have unique personal, social ethical, cultural and preferences beliefs, which act as investment constraints. For example an investor, may not want her money to be invested in the stocks of companies selling environmentally harmful products. Another example could be of an investor owning stocks of company in which he/she is working and is reluctant to sell the same even when it is financially prudent, due to emotional attachment. The point is that each investor is unique and if he/she has any specific preference, the same should be clearly specified in the IPS.

9.3.5. Assessments of needs and requirements of investor

Investors invest to meet their various goals and objectives. Assessment of the needs and requirements of the investors is critical in making investment decisions. People have many financial goals, some are to be achieved in near term, some are medium or long term goals. The goals also have different priority – some are high priority goals where as others may not be very important to achieve. Investors can put their needs and goals down along with the priority and the time frame for each of those goals, with the funds needed for the same. A proforma for creating a goal sheet is shown in Exhibit 9.1.

Exhibit 9.1: Proforma Goal Sheet

No.	Goal	Priority	Time period	Amount needed

Near-Term High Priority Goals have a high emotional priority which the investor wishes to achieve within just a few years at most. As a result, investment vehicles for these goals tend to be either cash equivalents or fixed-income instruments with maturity dates that match the goal date. For people of limited to modest means, the cost of not achieving those goals is just too great to take a risk with more-volatile approaches.

For many investors building a retirement corpus is a **long-term high priority goal**. When investors start planning for this goal well in advance, they have enough time to accumulate the corpus. Because of the long-term nature of such goals, a diversified approach utilizing several different classes of assets is usually preferred.

People also have many **low priority goals**. There are goals that are not particularly painful if they are not achieved. These could range from buying a farm house to a luxury car. For these goals, more-aggressive investment approaches are usually taken.

9.3.6 Analysing the financial position of the investor

A convenient way to analyse the financial position is by constructing personal financial statements. This helps in organizing financial data in a systematic way. Personal financial statements include a statement of net worth-balance sheet and income-expense statements.

For calculating net worth, all the assets the investor owns, i.e. the house, the car, the investments in stocks, bonds & mutual fund, balance in the saving accounts, value of the jewels owned and the value of all other financial assets and real assets are to be recorded at the estimated market value. Then all the liabilities need to be subtracted from the assets . Liabilities may include the outstanding car loan amount, credit card loans, home loan and any other amount he owes like the personal loan, education loan etc.. The difference between the value of assets and the liability is net worth.

It is suggested that net worth is to be calculated periodically, at least once in a year. The next step is calculating whether the person's present income exceeds spending and by how much amount. This is the amount which would be available periodically for investment purposes. The income expenditure statement can be prepared on monthly basis.

9.3.7. Forecasting risk and return of various asset classes

Portfolio Management is the process of integrating two sets of information. The first set of required inputs have already been listed above viz., investment objectives, goals and requirements, personality type, phase

in the life cycle, liquidity needs, tax and other constraints etc.. The second set of required inputs is the capital market forecasts that establishes the expected risk-return opportunities available to the investors as discussed in Chapter 3.

The various investment opportunities available to the investors need to be listed and their returns need to be forecasted along with the possibilities of deviations in those returns. Historical risk-return on various asset classes provide a good starting point to understand the relationship between risk and return and proceed to make the forecast about their future return possibilities.

9.3.8. Benchmarking the client's portfolio

The investment policy statement needs to provide a framework for evaluating the performance of the portfolio. It will typically include a benchmark portfolio which matches in composition of the investor's portfolio. The idea is to compare "apple with apple". If the investment is made in large cap equities, then the BSE 30 or NIFTY 50 index can be an appropriate benchmark. If the investment is made in long term bonds, a bond index with similar maturity and credit profile will be an appropriate benchmark.

Performance Benchmarking[18]

An investment approach (IA) is the documented investment philosophy to be adopted by the Portfolio Managers while managing the client funds in order to achieve client's investment objectives. Now, in addition to investment approach, an additional layer of broadly defined investment themes called 'strategies' shall be adopted by Portfolio Managers. These broad strategies shall be 'equity', 'debt', 'hybrid' and 'multi-asset'. Each investment approach (IA) shall be tagged to one and only one strategy from the strategies as above. This tagging shall be at the discretion of the concerned Portfolio Manager. A Portfolio Manager may tag more than one Investment strategy to an investment approach to a strategy but each investment approach must be tagged to only one strategy.

Association of Portfolio Managers of India (APMI) shall prescribe a maximum of three benchmarks for each strategy. These benchmarks shall reflect the core philosophy of the Strategy. While tagging an investment approach to a particular strategy, the portfolio manager shall select one benchmark from those prescribed for that strategy to enable the investor to evaluate relative performance of the Portfolio Managers.

[18]https://www.sebi.gov.in/legal/circulars/dec-2022/performance-benchmarking-and-reporting-of-performance-by-portfolio-managers_66256.html

The Board of the Portfolio Managers shall be responsible for ensuring appropriate selection of Strategy and benchmark for each Investment Approach. Once an IA is tagged to a Strategy and/or to a benchmark, the tagging shall be changed only after offering an option to subscribers to the IA to exit without any exit load.

The performance track record (of the specific IA whose tagging with Strategy/ benchmark was changed) prior to the change shall not be used by the Portfolio Manager for performance reporting. Further, the same shall be verified as part of annual audit under Regulation 30 of the SEBI (Portfolio Managers) Regulations, 2020 . The changes in Strategy and/or benchmark shall be recorded with proper justification and shall be verified as part of the annual audit under the PM Regulations.

9.4 Asset allocation decision

The interaction between the two sets of information – about the investor and about the risk-return on investment opportunity culminates into asset allocation decision. The asset allocation decision follows logically from the investor's needs and goals, risk preferences and liquidity needs. After developing a forecast on risk and return on various asset classes, the portfolio manager has to decide the mix of assets that maximizes the after-tax returns for the investor.

Different Ways to Decide on Asset Allocation for a Portfolio Manager

Asset allocation is a crucial decision for a Portfolio Manager (PM), as it determines the mix of asset classes (equities, bonds, real estate, commodities, etc.) in a portfolio based on the investor's risk-return profile. The key methods for deciding asset allocation include:

9.4.1 Strategic Asset Allocation (SAA)

Strategic Asset Allocation (SAA) is a long-term investment strategy that defines a portfolio's asset mix based on an investor's risk tolerance, return expectations, and financial goals. It involves setting fixed proportions for different asset classes such as equities, bonds, real estate, and cash, and periodically rebalancing the portfolio to maintain these target allocations.

Key Features of SAA:

1. **Long-Term Focus:** SAA is designed for long-term wealth creation and is not frequently adjusted based on market fluctuations.
2. **Risk-Return Optimization:** It ensures an optimal balance between risk and return based on historical as well as forecasted asset class performance.
3. **Periodic Rebalancing:** If asset prices shift significantly, the portfolio is rebalanced to restore the original allocation.

4. **Disciplined Investing:** SAA prevents emotional decision-making by adhering to a predefined investment plan.

Benefits of SAA:

- Provides stability and consistency in investment strategy.
- Reduces market timing risk by focusing on diversification.
- Helps investors stay aligned with their financial goals despite market fluctuations.

SAA is best suited for passive investors looking for a structured, long-term approach to wealth management.

9.4.2 Tactical Asset Allocation (TAA)

Tactical Asset Allocation (TAA) is a dynamic investment strategy where portfolio managers actively adjust asset class weights based on short-term market conditions, economic trends, or valuation opportunities. Unlike Strategic Asset Allocation (SAA), which maintains a fixed allocation over the long term, TAA allows for temporary deviations to capitalize on market inefficiencies.

Key Features of TAA:

1. **Short-Term Adjustments:** Investors shift allocations within a predefined range to take advantage of market movements.
2. **Active Management:** Requires continuous monitoring of market trends, economic indicators, and asset valuations.
3. **Enhancing Returns:** Seeks to generate higher returns by adjusting exposure to outperforming asset classes.
4. **Risk Management:** Helps reduce downside risk by tilting toward defensive assets in volatile markets.

Benefits of TAA:

- Capitalizes on market opportunities by adjusting allocations dynamically.
- Enhances portfolio returns by leveraging short-term price movements.
- Provides flexibility to adapt to changing economic and market conditions.

While TAA offers potential for higher returns, it requires market expertise, frequent monitoring, and active decision-making, making it suitable for investors with a higher risk appetite and access to professional investment management.

9.4.3 Comparison Between SAA and TAA

Feature	Strategic Asset Allocation (SAA)	Tactical Asset Allocation (TAA)
Approach	Long-term, passive strategy	Short-term, active strategy
Objective	Maintain a fixed asset mix for stability and risk control	Adjust asset allocation to capitalize on short-term market opportunities
Rebalancing	Less frequent (e.g., annually) to restore target allocations	More frequent adjustments based on market trends
Risk Level	Lower, as it focuses on diversification and stability	Higher, due to active shifts and market timing
Return Potential	Moderate, aligned with long-term market trends	Higher, if executed correctly, but depends on market timing skills
Market Sensitivity	Less sensitive to short-term fluctuations	Highly responsive to market changes
Decision-Making	Based on long-term investment goals	Requires continuous monitoring and active decision-making
Investor Suitability	Ideal for passive, long-term investors seeking steady growth	Suitable for experienced investors or professional managers with market expertise
Examples	A 60/40 equity-bond portfolio maintained over decades	Increasing equity exposure in bullish markets and shifting to bonds in downturns

9.4.4 Factor Based Investing

Factor-based investing is an investment strategy that selects securities based on specific characteristics or attributes that are expected to drive returns. These attributes, known as factors, help investors achieve better risk-adjusted returns compared to traditional market-cap-weighted investing. Factor-based strategies are widely used in smart beta funds, quantitative investing, and active portfolio management.

Factors are broad, systematic drivers of risk and return. They can be categorized into two main types:
Macroeconomic Factors: Affect all asset classes and include inflation, economic growth, interest rates, and liquidity conditions.

Style Factors: Influence individual securities and include well-known factors like Value, Momentum, Size, Quality, and Low Volatility.

Some of the key factors used are:
Value Factor: Stocks that are undervalued relative to their fundamentals (e.g., low price-to-earnings or price-to-book ratio) tend to outperform over time.
Momentum Factor: Securities with strong past performance tend to continue their upward trend in the short term.
Size Factor: Smaller companies tend to deliver higher returns than large-cap stocks over the long run.
Quality Factor: Firms with strong profitability, low debt, and stable earnings growth tend to be more resilient during downturns.
Low Volatility Factor: Stocks with lower price fluctuations historically tend to provide better risk-adjusted returns.
Factor investing involves selecting and weighting securities based on one or multiple factors rather than following a traditional market-cap-based approach. This can be done through:

Single-Factor Investing: A portfolio is built based on a single dominant factor, such as only investing in low-volatility stocks.
Multi-Factor Investing: Combines multiple factors (e.g., quality + momentum + value) to optimize returns and reduce risk.
Smart Beta Strategies: Index-based investing that deviates from traditional market-cap weighting to emphasize factor exposure.

Benefits of Factor-Based Investing:

Enhanced Risk-Adjusted Returns: Factor strategies aim to outperform market benchmarks with better risk control.
Diversification: Different factors perform well in different market cycles, reducing overall portfolio volatility.
Systematic and Rule-Based Approach: Removes emotional biases and promotes disciplined investing.
Cost-Effective: Smart beta ETFs and factor-based funds offer active-like returns at lower fees.
Challenges and Risks:
Factor Cyclicality: Not all factors work at all times; some may underperform for extended periods.
Data and Implementation Complexity: Requires robust data analysis, making execution difficult for retail investors.
Overcrowding Risks: Excessive investment in popular factors can reduce effectiveness.

Factor-based investing provides a structured, data-driven approach to portfolio construction, offering a balance between passive and active investing. By understanding and applying factor strategies, investors can enhance diversification, manage risk, and potentially improve long-term returns. However, factor investing should be used carefully, considering its cyclical nature and market conditions.

9.5 Rebalancing of Portfolio

Portfolio rebalancing is the process of adjusting the asset allocation in a portfolio to maintain the desired risk-return profile. Over time, market fluctuations can cause the actual asset allocation to drift away from the desired allocation, necessitating rebalancing to restore the intended mix.

9.5.1. Needs of Rebalancing

Need to rebalance the portfolio arises due to many factors. Some of them are:

- **Market Movements:** Changes in asset prices can shift portfolio weights, altering the risk exposure.
- **Risk Management:** Ensures that the portfolio remains aligned with the investor's risk tolerance.
- **Investment Discipline:** Prevents emotional decision-making by enforcing a systematic approach.
- **Financial Goals:** Keeps the portfolio in sync with long-term objectives and liquidity needs.

9.5.2. Benefits of Rebalancing

Some of the benefits of rebalancing are:

- **Maintains Asset Allocation:** Ensures consistency with the investment strategy.
- **Enhances Returns:** Helps lock in gains from outperforming assets and reinvest in underperforming but promising assets.
- **Reduces Risk:** Prevents excessive exposure to a single asset class, maintaining diversification.
- **Encourages Buy Low, Sell High:** Systematically sells overvalued assets and buys undervalued ones.

9.6.3. Challenges in Rebalancing

- **Tax Implications:** Selling assets to rebalance may trigger capital gains taxes.
- **Transaction Costs:** Frequent adjustments can lead to higher brokerage and trading costs.
- **Market Timing Challenges:** Determining the right time to rebalance without missing opportunities is complex.

- **Emotional Bias:** Investors may hesitate to sell winning assets or buy underperforming ones.

Rebalancing is essential for maintaining an optimal portfolio, but investors must weigh the benefits against the costs and challenges. A disciplined approach, periodic reviews, and tax-efficient strategies can help ensure effective rebalancing.

Chapter 9: Sample Questions

1) The first step in the investment process is the development of _____.
   a. Objective statement.
   b. Investment Policy statement
   c. Financial statement.
   d. Statement of cash needs.

2) Which of the following is considered to be an investment objective?
   a. Capital preservation
   b. Capital appreciation
   c. Current income
   d. all of the above

3) Asset allocation is _____.
   a. The process of dividing funds into different asset classes.
   b. Allotting shares to each investor for the purchases made during the day.
   c. Identifying returns generated by each asset class.
   d. Calculating fees and expenses for each asset class in the portfolio.

4) _____ phase is the stage when investors in their early-to-middle earning years attempt to accumulate assets to satisfy near-term needs, e.g., children's education or down payment on a home.
   a. Accumulation
   b. Spending
   c. Gifting
   d. Consolidation

CHAPTER 10: PERFORMANCE MEASUREMENT AND EVALUATION OF PORTFOLIO MANAGERS

After reading the chapter, reader should:

- Rate of return measures
- Risk measures
- Risk adjusted returns
- Performance evaluation: benchmarking and peer group analysis
- Performance Attribution Analysis
- Performance reporting to the investors
- Valuation of securities by portfolio managers
- Due diligence and portfolio manager selection

The main issue in performance measurement and evaluation is the human tendency to focus on the return, the investment has earned over a period of time with little regard to the risk involved in achieving that return. Proper performance measurement should involve recognition of both return and risk of investments.

10.1 Rate of return measures

The most vital statistic in measuring the performance of a portfolio is the rate of return. Rate of return has many possible definitions. However, there is one possible definition for each purpose. So, one should make effort to obtain clarity about the purpose for which the performance is to be measured and then look at an appropriate return measure.

10.1.1 Holding period return

The most straightforward rate of return is the holding-period-return (HPR), popularly known as total return or point-to-point return. It equals the income generated by an investment plus the change in value of the investment during the period the investment is held, over the beginning value of the investment, expressed as a percentage per annum.

For example, If the market value of an investor's portfolio on 1 April, 2018, is Rs.1,00,000, and on 31 March, 2019 the market value of the same portfolio stands at Rs.1,20,000, the investor would have achieved a holding-period return equal to 20%. In general, we can use Equation (1) to compute holding-period returns.

HPR = (E-B)/B *Equation 1*
HPR = ((120,000-100,000))/100,000 = 20%

Further, assume that during the same period the investor has received Rest. 5000 by way of dividend and interest income, then:

HPR = (I + (E -B)) / B ……. Equation 2
HPR = (5000 + (120000-100000))/100000 = 25%
Where:

HPR = holding-period return
I = Income
E = Ending Value
B = Beginning Value.

This measure assumes that all income distributions are made at the end of the year. In spite of this limitation, total return measure is widely used and generally accepted indicator of performance. This is considered as the starting point of performance measurement exercise.

10.1.2 Extended Internal Rate of Return (XIRR)

XIRR (Extended Internal Rate of Return) is a method used to calculate the annualized return of an investment with irregular cash flows occurring at different time intervals. It refines the traditional IRR (Internal Rate of Return) by assigning specific dates to each cash flow, making it more accurate for real-world investments

Suppose that an investor has invested Rest. 75,000 in this portfolio by making contributions at the beginning of the year as follows (Table 10.1):

Table 10.1: Investment Contributions

Year	Investment Amount in Rest.
2015	5000
2016	10000
2017	15000
2018	20000
2019	25000

Assume that the portfolio has generated the following annual return from 2015 through 2019 (Table 10.2):

Table 10.2: Five year return

Year	Return for the year
2015	-5.00%
2016	-15.20%
2017	8.10%
2018	30.75%
2019	17.65%

Table 10.3: Computation of Returns and portfolio value at the beginning and end of the period

A	B	C	D	E	F
	Investment made at the beginning of the year in Rest.	Return generated during the period	Return made during the period in Rest.	Portfolio Value at the beginning of the period in Rest.	Portfolio Value at the end of the period in Rest.
2015	5,000	-5.00%	-250	5,000	4,750
2016	10,000	-15.20%	-2,242	14,750	12,508
2017	15,000	8.10%	2,228	27,508	29,736
2018	20,000	30.75%	15,293	49,736	65,030
2019	25,000	17.65%	15,890	90,030	105,920

At the end of 2019, the investments would have grown to the value of Rest. 105,920 as shown below:

So, what is the rate of return generated during the period of five years?

By discounting the terminal value of the investment i.e. 105,920 to cashflow contributions made, internal rate of the return for the same can be calculated.

$$5000 = -\frac{10{,}000}{(1+r)^1} - \frac{15{,}000}{(1+r)^2} - \frac{20{,}000}{(1+r)^3} - \frac{25{,}000}{(1+r)^4} + \frac{105{,}920}{(1+r)^5}$$

(Extended Internal Rate of Return) XIRR = 15.15%

XIRR is the annual rate of return at which the cumulative contributions grow over the measurement period

10.1.3 Time weighted Rate of Return (TWRR)

The Time-Weighted Rate of Return (TWRR) is one of the most widely used performance metrics in portfolio management. It measures the compounded rate of return over multiple periods, neutralizing the effects of external cash flows (i.e., deposits and withdrawals). By segmenting returns into distinct periods and linking them geometrically, TWRR provides an accurate measure of investment performance.

TWRR is particularly useful in evaluating fund managers because it correctly captures the effect of market performance and investment decisions without being influenced by investor cash flows.

Calculation of TWRR

TWRR is calculated by breaking the investment period into multiple sub-periods, determined by the occurrence of external cash flows. The return for each sub-period is computed separately and then compounded using the following formula:

$$TWRR=[(1+R1)\times(1+R2)\times\ldots\times(1+Rn)]-1$$

Where:

Rn = Return for each sub-period

Returns are calculated between each cash flow event

The final return is linked multiplicatively across all sub-periods

Each sub-period return is calculated as:

Rn=(EV−BV-Contribution + Withdrawal)/(BV-Contribution + Withdrawal)

Where:

EV = Ending Value before any external cash flow

BV = Beginning Value after the last external cash flow

This ensures that each segment of performance is measured independently of investor cash movements.

Step-by-step TWRR calculation with an example

Let's assume an investor starts with Rs.1,00,000 in an investment portfolio and experiences multiple cash inflows and outflows over a one-year period. The portfolio's value changes as follows:

Amount, Rest	Beginning Value	Contribution	Withdrawal	Ending Value	Return During the Period	(1 + Ri)
01/01/20	-	1,00,000	-	1,00,000		
20/02/20	1,00,000	-	-	1,10,000	10.00%	1.1000
04/04/20	1,10,000	20,000	-	1,45,000	11.54%	1.1154
30/09/20	1,45,000	-	(15,000)	1,25,000	-3.85%	0.9615
30/09/20	1,25,000	30,000	-	1,80,000	16.13%	1.1613
31/12/21	1,80,000	-	(10,000)	1,85,000	8.82%	1.0882

TWRR for the entire period	49.09%
TWRR per annum	22.10%

Step 1: Sub period returns are calculated as per the formula below:

(Ending Market Value - Beginning Market Value - Contribution +Withdrawal) / (Beginning Market Value + Contribution - Withdrawal)

Step 2: Compute the overall TWRR:

- TWRR = (1+0.10) * (1 + 0.1154) * (1 – 0.0385) * (1+ 0.1613) * (1+ 0.0882)

  = 1.4909 – 1 = 49.09%

Step 3: Compute the Annual TWRR:

- Annual TWRR = (1+TWRR)^(1/n) – 1
- = (1 + 0.4909) ^ (1/2) – 1 = 22.10%

Thus, the TWRR for this investment period is 49.09% for the entire period between 01/01/2020 to 31/12/2021 i.e. 2 years resulting into 22.10% per annum.

Advantages of TWRR

1. **Eliminates Bias Due to Cash Flows:** Investor deposits and withdrawals do not affect TWRR calculations, making it an objective measure of portfolio performance.
2. **Ideal for Comparing Investment Managers:** TWRR allows investors to assess fund managers purely based on investment decisions.
3. **Compounded Growth Measurement:** It captures how investments grow over multiple periods, making it superior for long-term analysis.

Challenges and Limitations of TWRR

1. **Complexity in Calculation:** Requires splitting returns into multiple sub-periods and linking them geometrically, which may be difficult to compute manually.

The Time-Weighted Rate of Return (TWRR) is a crucial metric in investment management, particularly for evaluating fund managers. It eliminates the influence of external cash flows, providing an accurate picture of investment performance over time. TWRR offers a more standardized and unbiased measure of portfolio performance. Although it is slightly more complex to calculate, its ability to provide true performance evaluation makes it the preferred choice among professional investors and financial analysts.

10.1.4 Gross versus net return

The gross return is the total return generated on investment before the deduction of any fees, expenses or commissions. Gross return is stated for a specified period of time. Net return is calculated after adjusting gross return for fees, expenses or commissions. Net return is the return investor actually makes, hence focusing on gross return can be misleading though it can be used to evaluate the performance of investments at a broader level.

Let us look at the following example of a portfolio to understand the difference between gross return and net return. Given below is the information about the size of the portfolio, investment period, fees, expenses etc..

1. Size of sample portfolio: Rest. 100 lacs
2. Investment Period: 1 year
3. Profit made during the year: 20% on the capital contribution
4. Hurdle Rate: 10% of amount invested
5. Other Expenses such as Brokerages, DP charges etc., charged on gross value of portfolio (0.50%)
6. Upfront fee – Nil
7. Setup fee-Nil
8. Fixed Management fee charged on average of capital contribution and gross value of portfolio (e.g. 1.5%)
9. Performance fee (e.g. 20% of profits over hurdle rate without catch-up)
10. The frequency of calculating all fees is annual.

What is the gross return and net return on investment?

Capital Contribution made at the beginning of investment period (i)	1,00,00,000
Less: Upfront fees	-
Assets under management (AUM)	1,00,00,000
Add/ Less: Profits/ Loss on investment during the year on AUM at 20%	20,00,000
Gross Value of the Portfolio at the end of the investment period	1,20,00,000
Less: Other Expenses (0.50% of the gross value of the portfolio at the end of the investment period) (a)	60,000
Gross Value of the Portfolio less Other Expenses	1,19,40,000
Less: Fixed Management Fees (1.50%) of ((100,00,000+120,00,000)/2) (b)	1,65,000
Portfolio Value after charging Fixed Management Fees	1,17,75,000
Required Portfolio Value @ Hurdle Rate (i) * (1.10)^1 ie.100,00,000 * (1+10%)^1	1,10,00,000

Less: Performance Fee @ 20% of the Profits over Hurdle Level (c) 20%*(117,75,000-110,00,000)	1,55,000
Portfolio Value after charging Performance Management Fees i.e.(117,75,000-155,000)	1,16,20,000
Less: Exit Load (2%) (d)	2,32,400
Portfolio Value after charging Exit Load	1,13,87,600
Total Charges (a+b+c+d)	6,12,400
Net Value of the Portfolio	1,13,87,600

Gross return is the total rate of return earned. For the above example it is calculated as follows:

Gross Return = (Gross value of the portfolio – Capital Contribution)/Capital Contribution

Gross Return = (Rest. 1,20,00,000 Lacs. - Rest. 1,00,00,000 Lacs.) / Rest. 1,00,00,000 Lacs.
Gross Return = 20 %

Net Return is the return earned after adjusted for the fees and expenses. It is calculated as follows:

Net Return = (Net value of the portfolio – Capital Contribution)/Capital Contribution
Net Return = (Rest. 1,13,87,600 – Rest. 1,00,00,000) / Rs.1,00,00,000
Net Return = 13.88%

10.1.5 Pre-tax versus post tax return

The pre-tax rate returns are returns before taxes, and post-tax returns are returns after taxes are paid on investment income and realized capital gains. Investors belong to different tax brackets. Hence the performance of the investments is communicated as pre-tax rate of return. Investors or their financial advisors are expected to calculate the post-tax return by adjusting the pre-tax return to the tax rates applicable to the investors.

Post-tax return = Pre-Tax Return x (1-tax rate)

Pre-Tax return enables comparisons across different investments and strategies, since different investors may be subject to different levels of taxation. However, what really matters to the investor is post-tax return. Hence, they make investment decision on the basis of post-tax performance.

For the same example from 10.2.4, post-tax return calculation is given below:

Pre-tax return = 13.88%
Tax Rate = 20% (since the investment exited in 1 year, hence STCG is applicable)
Post-tax return = Pre-tax return x (1-tax rate)

Post-tax return = 13.88% x (1-20%) = 11.10%
Note: Please note that no deduction for PMS fees and expenses are allowed while computing capital gain tax for Income Tax purpose.

10.1.6 Portfolio Return

The return of the portfolio is the weighted average return of individual securities in it. The following example, gives the weight (proportion) of four securities in the portfolio and their return.

Security	Return	Weight in the portfolio
A	15%	30%
B	10%	20%
C	12%	20%
D	18%	30%

The weighted average return of the securities is the return of the portfolio, calculated as follows:
Portfolio Return = (15%*30%)+(10%*20%)+(12%*20%)+(18%*30%) = 14.30%

10.2. Risk measures

Risk is the key dimension of performance measurement, and a decisive factor in selecting a portfolio manager.

10.2.1. Total risk and downside risk

Risk in a generic sense is the possibility of loss, damage, or harm. For investments more specific definitions of risk can be given.

It can be defined as variability in the expected return - total risk. Or, it can be limited to losses or worse than expected outcomes only – downside risk.

Two possible measures of risk have received support in theory to capture total risk: the variance and the standard deviation of the estimated distribution of expected returns. Whereas downside risk includes concepts such as semi-variance/standard deviation and target semi variance/standard deviations.

Standard deviation as a measure of total risk

Standard deviation and variance are measures of dispersion in return. Standard deviation is the square root of variance. It quantifies the degree to which returns fluctuate around their average. A higher value of standard deviation means higher risk. Standard Deviation is measured in percentage terms.

Standard deviation is used probably more than any other measure to describe the risk of a security (or portfolio of securities). In any academic study on investment performance; chances are that standard deviation will be used to gauge risk. It's not just a financial tool, though. Standard deviation is one of the most commonly used statistical tools in the sciences and social sciences. It provides a precise measure of the amount of variation in any group of numbers - the returns of a mutual fund, rainfall in Mumbai, or the weight of professional cricket players.

One of the strengths of standard deviation is that is can be used across board for any type of portfolio with any type of security. The calculation is the same for a portfolio of bonds as it is for a portfolio of growth stocks or any other type of investments.

10.2.2. Portfolio risk versus individual risk

Standard deviation or variance of the returns is used as measure of risk both for individual securities and the portfolio as a whole. Portfolio risk, however, depends on the weights of the investments, their individual standard deviations and more importantly the correlation across these securities.

10.2.3. Systematic Risk and Unsystematic Risk

Systematic risk is basically the market risk, which cannot be diversified. It arises due to common risk factors, like interest rates, exchange rates, commodities prices. It is linked to supply and demand in various marketplaces. All investments get affected by these common risk factors directly or indirectly. Systematic risk is measured by Beta.

Risks due to sector specific/company specific factors is referred as unsystematic risks. These risks can be diversified away. Alpha return is a reward for bearing unsystematic risk.

Beta

Systematic risk is measured by Beta. Beta relates the return of a stock or a portfolio to the return on market index. It reflects the sensitivity of the fund's return to fluctuations in the market index

The relationship between the Beta of an individual security with portfolio of securities is linear. Beta of the portfolio can also be calculated by taking the weighted average beta of the individual securities in the portfolio. Thus, if stock A has a beta of 1.2 and stock B has a beta of 1.1 and they make up the portfolio in the ratio of 60:40, the Beta of the portfolio (β_p) would be:

β_p= 0.60x1.2+0.40x1.1 = 1.16

Beta is fairly easy to interpret. A beta that is greater than one means that the portfolio or stock is more volatile than the benchmark index, while a beta of less than one means that the security is less volatile than the index. From the same logic, beta of cash is zero as it doesn't have any impact from the market movements. Also, beta of a security can be negative, which means that the stock moves in opposite direction than that of the market movement.

10.3 Risk-adjusted return

The differential return earned by the portfolio manager may be due to difference in the exposure to risk. Hence it is imperative to adjust the return for the risk. The following are popularly used risk-adjusted return measures. These risk-adjusted performance measures assess the performance of a fund in terms of return per unit of risk.

10.3.1 Sharpe Ratio

One approach is to calculate portfolio's return in excess of the risk-free return and divide the excess return by the portfolio's standard deviation. This risk adjusted return is called Sharpe ratio. It measures Reward to Variability.

$$S = \frac{\left(R_p - R_F\right)}{\sigma_p}$$

Here,

S = Sharpe Ratio

R_p =Return of the portfolio

R_f = Risk-free return

σ_p=Standard deviation of return on the portfolio

It is to be noted that these three variables should be for the same period. Generally, annualized return and annualized standard deviation is taken for computing Sharpe ratios of the portfolio, for easy comparison across portfolios.

Suppose annualized return for a portfolio is 10.50% and its standard deviation is 6.50%. Also, the risk-free rate of return is 5.50%.

Then the Sharpe ratio for the portfolio is:

(10.50% - 5.50%)/ 6.50% = 0.7692

This suggests that the fund has generated 0.7692 percentage point of return above the risk-free return for each percentage point of standard deviation.

The Sharpe ratio is a measure of relative performance. It enables investors to compare across investment opportunities. Higher the Sharpe ratio, better is the portfolio's risk adjusted performance. A fund with a higher Sharpe ratio in relation to another is preferable as it indicates that the fund has generated higer return for every unit of risk.

As can be noted Sharpe ratio adjusts return to the total portfolio risk. Hence it is a useful measure of performance for several mutually exclusive portfolios.

The Sharpe ratio is the simplest measure to compute and that is why it is the most widely used risk-adjusted return measure.

10.3.2 The Treynor Ratio

The Treynor measure adjusts excess return for systematic risk. It is computed by dividing a portfolio's excess return, by its beta as shown in equation:

$$T = \frac{\left(R_p - R_F\right)}{\beta_p}$$

where
T = the Treynor measure,
R_p = portfolio return,
R_f = riskfree return and
β_p = portfolio beta.

As can be seen the numerator of the equation remains the same as in case of Sharpe ratio. The denominator standard deviation is replaced by Beta.

Suppose in the above case, beta of the fund is precisely 1. The Treynor ratio of the funds would be:

$$\textbf{Treynor Ratio} = \frac{(\mathbf{10.50\%-5.50\%})}{\mathbf{1}} = \mathbf{0.05}$$

This indicates that the fund has generated 0.05 percentage point excess returns for every unit of systematic or market risk.

Like Sharpe ratio, it is a measure of relative performance. It enables investors to compare across investment opportunities. A fund with a higher Treynor ratio in relation to another is preferable as it indicates that the fund has higher risk premium for every unit of market risk.

10.3.3 Sharpe versus Treynor Measure

The Sharpe ratio uses standard deviation of return as the measure of risk, whereas Treynor performance measure uses Beta (systematic risk).

For a completely well-diversified portfolio, the two measures give identical ranking, because total risk and systematic risk would be the same. However, for a poorly diversified portfolio, the raking based on Treynor Ratio could be higher than that on Sharpe ratio as Treynor ratio, ignores unsystematic risk.

Thus, any difference in rankings based on Sharpe Ratio and Treynor ratio is due difference in portfolio diversification levels.

10.4 Performance Evaluation: Benchmarking and peer group analysis

Performance evaluation is a relative concept. After measuring the performance, next important step is to evaluate it against some suitable benchmark or similar portfolios to address more important issues like how the returns measure up to the comparable investment opportunities.

Performance evaluation also enable the investors to determine if the portfolio manager has enhanced the portfolio's value beyond what could be obtained from a passive indexed strategy, and whether the portfolio management fees are justified.

Performance evaluation involves benchmarking and peer group analysis.

10.4.1 Characteristics of indices for Benchmarking

Benchmark is used for an objective of the effective implementation of investment strategy vis-à-vis a given standard or point of reference. A benchmark generally the investment characteristics and investment approach of the portfolio being evaluated against it. For example, performance of the equity strategy can be measured against NIFTY 50 benchmark or NIFTY Mid Cap Index etc.

Indices make popular choices for benchmarking portfolio. The number and variety of available indices make selection of suitable benchmarks a daunting task. A good benchmark increases the proficiency of performance evaluation hence while choosing an index as benchmark, care should be taken to ensure that it is representative of the portfolio.

A good benchmark should be able to satisfy the following criteria:

- The identity of constituents and their weights in the benchmark are clearly defined.
- The benchmark is investable, in other words it is possible to have a passive exposure to the same.
- The benchmark is consistent with the portfolio’s investment approach. For example, if the portfolio’s investment approach is to invest in blue-chip stocks, the benchmark should also consist of blue-chip stocks. If the investment style of the portfolio is value investing, the benchmark should be of the same orientation.
- The benchmark is having the same risk-return profile as the portfolio.

- The performance of the benchmark is measurable.

10.4.2 Customized Benchmark

Sometimes market based indices may not meet the above criteria of a good benchmark, given the portfolio manager's investment strategies and style e.g. factor-based investing. Such situation demands for appropriate customized benchmark. When the portfolio managers follow a certain type of investment strategy and style, they create an investment universe reflecting the same to focus their research activities. The portfolio managers then select the most attractive securities from the investment universe. Such investment universes can act as benchmarks for portfolio evaluation when market-based indices are not found to be valid. The advantage of such benchmarks is that they meet the requirement of valid benchmarks. The disadvantage is that the costs of construction and maintenance of these benchmarks would be much higher than the fee paid for using market-based indices.

10.5. Performance attribution analysis

Attribution Analysis is a key tool in portfolio performance evaluation, used to break down a portfolio's total return into various contributing factors. It helps investors, fund managers, and analysts understand the sources of excess return compared to a benchmark. By dissecting returns, Attribution Analysis provides insights into how decisions related to asset allocation, security selection, and market timing have influenced portfolio performance.

Key Components of Attribution Analysis

Attribution Analysis breaks down portfolio performance into three key components:

1. **Asset Allocation Effect:** How the decision to allocate funds across asset classes impacted performance. This measures the impact of the investor's decision to allocate funds among asset classes (e.g., equities, bonds, cash). If a portfolio manager overweights or underweights certain sectors relative to the benchmark, this decision contributes to the portfolio's performance
2. **Security Selection Effect:** The impact of choosing specific securities within each asset class. This captures the effect of choosing individual securities within a given asset class. Even if the asset allocation is identical to the benchmark, better stock selection can drive excess returns
3. **Interaction Effect:** The combined impact of allocation and selection. The interaction effect measures the combined impact of asset allocation and security selection. It captures the performance impact when a manager both overweights a sector and selects superior stocks within that sector

These effects help explain why a portfolio outperformed or underperformed its benchmark.

The total return difference between the portfolio and its benchmark is the sum of the three effects:

Hence,
Total Excess Return = Asset Allocation Effect + Security Selection Effect + Interaction Effect

Example of Attribution Analysis

Let's assume a portfolio manager is managing a fund with three sectors: Technology, Healthcare, and Financials. The benchmark also has the same sectors but with different weights and returns.

Sector	Portfolio Weight (%)	Portfolio Return (%)	Benchmark Weight (%)	Benchmark Return (%)
Technology	40	12	35	10
Healthcare	30	8	40	7
Financials	30	5	25	6
Total Portfolio Return		**8.70%**	**Benchmark Return**	**7.80%**

The Portfolio Return (8.7%) is higher than the Benchmark Return (7.8%), meaning the portfolio manager has outperformed the market by 0.9%. Now, let’s break this down into asset allocation, security selection, and interaction effects.

Step 1: Calculate Asset Allocation Effect
The Asset Allocation Effect shows how much of the portfolio's excess return comes from assigning different weights to asset classes than the benchmark.

$$\sum(Wp - Wb) \times Rb$$

For each sector:

- Technology: $(40\% - 35\%) \times 10\% = 0.5\%$
- Healthcare: $(30\% - 40\%) \times 7\% = -0.7\%$
- Financials: $(30\% - 25\%) \times 6\% = 0.3\%$
- Total Asset Allocation Effect = 0.5% - 0.7% + 0.3% = 0.1%

Step 2: Calculate Security Selection Effect
The Security Selection Effect measures how well the portfolio's chosen stocks performed relative to the benchmark within the same sector.

$$\sum Wb \times (Rp - Rb)$$

For each sector:

- Technology: $35\% \times (12\% - 10\%) = 0.7\%$
- Healthcare: $40\% \times (8\% - 7\%) = 0.4\%$
- Financials: $25\% \times (5\% - 6\%) = -0.25\%$
- Total Security Selection Effect = 0.7% + 0.4% - 0.25% = 0.85%

Step 3: Calculate Interaction Effect
The Interaction Effect captures the combined influence of both allocation and selection decisions.

$$\sum (Wp - Wb) \times (Rp - Rb)$$

For each sector:

- Technology: $(40\% - 35\%) \times (12\% - 10\%) = 0.1\%$
- Healthcare: $(30\% - 40\%) \times (8\% - 7\%) = -0.1\%$
- Financials: $(30\% - 25\%) \times (5\% - 6\%) = -0.05\%$
- Total Interaction Effect = 0.1% - 0.1% - 0.05% = -0.05%

Step 4: Calculate Total Attribution Effect
Total Excess Return = Asset Allocation Effect + Security Selection Effect + Interaction Effect

$$= 0.1\% + 0.85\% - 0.05\% = 0.9\%$$

Since the portfolio return (8.7%) was 0.9% higher than the benchmark return (7.8%), the attribution model explains the outperformance.

Insights from the Attribution Analysis

- **Security Selection had the biggest impact (+0.85%):** The fund manager's stock-picking decisions were the primary driver of excess returns.
- **Asset Allocation added a small positive effect (+0.1%):** The decision to allocate more to Technology and Financials helped.
- **Interaction Effect was slightly negative (-0.05%):** This suggests that while allocation and selection were both positive, they did not reinforce each other optimally.

Why Attribution Analysis Matters

- **Evaluates Manager Skill:** Helps investors assess whether the portfolio manager's choices genuinely added value.
- **Performance Diagnosis:** Identifies whether excess returns come from smart stock picking or strategic allocation.
- **Informs Future Strategy:** Helps managers refine allocation and selection strategies to maximize returns.

Attribution Analysis is a powerful tool for understanding the sources of portfolio performance. By breaking returns into allocation, selection, and interaction effects, investors and portfolio managers can pinpoint what worked and what didn't.

This method ensures transparency in investment decision-making and helps refine strategies for consistent performance improvement.

10.6 Valuation of Securities by Portfolio Managers

APMI shall prescribe standardized valuation norms for Portfolio Managers. Valuation of the portfolio debt and money market securities by portfolio managers shall be carried out in accordance with these standardized valuation norms prescribed by APMI.

APMI shall empanel valuation agencies for the purpose of providing security level prices to Portfolio Managers. Portfolio Managers shall mandatorily use valuation services obtained only from one or more of such empanelled valuation agencies for the purpose of valuation of debt and money market securities in

portfolios managed by them. The ultimate responsibility for fair valuation shall be that of the Portfolio Manager.

10.7 Due Diligence and Portfolio Manager selection

Selecting a portfolio manager is a complex process. It involve analysing lot more than just returns. Investors are expected to carry out a detailed due diligence process before selecting their portfolio managers. Due diligence involves thorough quantitative and qualitative analysis of the portfolio manager's reputation, key personnel and operations.

Investors should understand the investment process, investment strategies, investing styles to appreciate how the investment returns are generated and gauge the likelihood of the performance persisting in future for the given investment process.

The first step in selecting the portfolio manager is to draft the investment policy statement and determine the asset allocation. Then it becomes easier to select the portfolio manager who offers the "best" means to implement or express those decisions.

Portfolio Managers can be evaluated on the basis of their investment philosophy, investment approach, investment process, strategies, styles and past performance compared against a benchmark or managers' universe. Attention can also be paid to the major provisions in the contract with the portfolio managers. Of course the management fees and the cost, will be a crucial factor too in evaluating the portfolio managers.

Chapter 10: Sample Questions

1. The measure of performance which divides the portfolio's risk premium by the portfolio's beta is the _____.

a. Sharpe measure
b. Jensen measure
c. Fama measure
d. Treynor measure

2. What is the expected return of the three stock portfolio described below?

Common Stock	Weight	Expected Return
Ando Inc.	25%	12%
Bee Co.	50%	10%
Cool Inc.	25%	16%

a. 12.44%
b. 12.22%
c. 12.33%
d. 12%

3. Sharpe's performance measure divides the portfolio's risk premium by the _____.

a. Standard deviation of the rate of return
b. Variance of the rate of return
c. Slope of the fund's characteristic line
d. Risk free rate

4.Compute the Sharpe Measure for the given fund.

Portfolio Return: 17%; Risk Free Rate: 6%; Beta: 1.00; Standard Deviation: 5.02%

a. 4.49
b. 2.74
c. 2.19
d. 1.70

CHAPTER 11: TAXATION

After reading this chapter, the reader should be familiar with:

- Categories of investors from Taxation Perspective
- Taxation of Different Asset Classes
- Understanding if Fee and expenses are tax deductible
- Tax Reporting and Compliance
- Portfolio Investment Scheme (PIS) for NRIs

Portfolio Management Services (PMS) in India have different taxation rules based on the investor category, such as Resident Individuals (RIs), Non-Resident Indians (NRIs), and Non-Individuals (corporates, trusts, etc.). The income generated from PMS investments is subject to taxation under various heads, including capital gains, interest, and dividends.

Understanding the tax implications of PMS investments is crucial for investors to optimize post-tax returns. Resident and non-resident investors need to plan their investments based on tax treatments applicable to different instruments. Proper tax reporting and compliance ensure smooth investment management while avoiding unnecessary tax burdens.

Below is a detailed breakdown of the taxation treatment.

11.1. Categories of Investors

11.1.1 Resident Individuals (RIs)

As per the Indian Income Tax Act, an individual is considered a Resident in India for a financial year if:

- They stay in India for 182 days or more in the financial year, OR
- They stay in India for at least 60 days in the financial year and 365 days or more in the preceding four financial years.

A Resident Individual is further classified into:

- Ordinary Resident (ROR) – Taxed on global income.
- Not Ordinarily Resident (RNOR) – Taxed only on income earned or received in India, along with income derived from a business controlled from India.

The basic rules for a Resident Individual is as follows:

- Taxed as per capital gains on equity and debt instruments.
- No deduction allowed for PMS fees and expenses while computing capital gains.
- Gains are classified into long-term and short-term, taxed accordingly.

11.1.2 Non-Resident Indians (NRIs)

A person of Indian origin (PIO) or Indian citizen is classified as an NRI if they do not meet the conditions for a Resident Individual. NRIs are taxed only on income earned or received in India, while foreign income is exempt from Indian taxation. Special provisions such as lower tax rates on capital gains and exemptions under DTAA (Double Taxation Avoidance Agreement) apply to NRIs.

The basic rules for a Non-Resident Indians is as follows:

- Taxation rules similar to RIs but subject to Tax Deducted at Source (TDS).
- Special tax rates apply for debt and equity investments under DTAA (Double Taxation Avoidance Agreements).

11.1.3 Non-Individuals (Corporates, Trusts, etc.)

This category includes corporate entities, firms, trusts, and associations of persons (AOPs) that are subject to taxation under different rates and conditions. Their tax treatment varies based on their legal structure, business income, and compliance with the Income Tax Act.

The basic rules for a Non-Individual is as follows:

- Taxation depends on the entity structure (corporate tax rate, trust taxation, etc.).
- May claim PMS expenses as business expenses if treated as a trading entity.

11.2. Tax Treatment of Different Asset Class

11.2.1 Taxation on Debt Investments

Long-Term Capital Gains (LTCG) on Debt Investments

- **Holding Period:** Capital gains from debt investments are classified as long-term if the holding period exceeds 24 months.
- **Tax Rate:** LTCG on debt investments is taxed at 12.5% under Section 112 of the Income Tax Act.

- **Indexation Benefit:** This allows investors to adjust the purchase price based on inflation, reducing taxable gains. The benefit has now been removed Since July 2024.
- **Applicability in PMS:** Since PMS portfolios often include debt instruments for stability, LTCG tax is applied when the fund manager sells long-term debt securities at a profit.

Short-Term Capital Gains (STCG) on Debt Investments

- **Holding Period:** Gains from debt instruments held for 24 months or less are treated as short-term capital gains.
- **Tax Rate:** STCG on debt investments is taxed as per the investor's applicable income tax slab rate.
- **Applicability in PMS:** If the portfolio manager engages in frequent trading of debt securities within short durations, gains are subject to STCG tax without indexation benefits.

Interest Income on Debt Investments

- Interest earned from bonds, debentures, fixed deposits, or debt mutual funds is treated as income from other sources and is taxed at the individual's applicable tax slab rate.
- **TDS on Interest:** Some debt instruments deduct Tax Deducted at Source (TDS) before crediting interest to investors.
- **Applicability in PMS:**
    - PMS structures often generate regular interest income from debt instruments, which is added to the investor's taxable income.
    - No indexation or capital gains benefit applies to interest income.

Key Takeaways for PMS Investors in Debt Investments

- **LTCG (Holding > 2 years):** 12.5% without indexation.
- **STCG (Holding ≤ 2 years):** Taxed at the investor's slab rate.
- **Interest Income:** Taxed as per slab rates without indexation benefits.
- **Tax Reports in PMS:** Portfolio managers must provide detailed tax reports summarizing capital gains, interest income, and tax liabilities for efficient tax planning.

11.2.2 Taxation on Equity Investments

Portfolio Management Services (PMS) investors are subject to taxation on capital gains and dividend income from equity investments. Below is the tax treatment for Long-Term Capital Gains (LTCG), Short-Term Capital Gains (STCG), and Dividend Income in PMS.

Long-Term Capital Gains (LTCG) on Equity Investments

- **Holding Period:** Equity shares and equity-oriented mutual funds qualify as long-term capital assets if held for more than 12 months.
- **Tax Rate:** LTCG on equity is taxed at 12.5% (without indexation benefit) under Section 112A of the Income Tax Act, if total LTCG exceeds Rs.1.25 lakh in a financial year.
- **Exemption Limit:** LTCG up to Rs.1.25 lakh per financial year is tax-free.
- **Applicability in PMS:**
    - If a PMS portfolio manager holds stocks for more than 12 months, gains are taxed at 12.5% beyond the Rs.1.25 lakh threshold.
    - Investors need to aggregate their PMS LTCG with their direct stock or mutual fund investments for total tax liability calculation.

Short-Term Capital Gains (STCG) on Equity Investments

- **Holding Period:** Equity shares and equity-oriented mutual funds sold within 12 months of purchase attract short-term capital gains tax.
- **Tax Rate:** STCG on equity investments is taxed at 20% under Section 111A.
- **Applicability in PMS:**
    - If a PMS portfolio manager engages in frequent trading and sells stocks within 12 months, STCG applies at 20% on profits.
    - Unlike LTCG, there is no exemption limit on STCG.

Dividend Income from Equity Investments

- Tax Treatment:
    - Dividends received from equity shares and equity mutual funds are taxable in the hands of the investor as per their income tax slab rate under Section 56 (Income from Other Sources).
    - Companies paying dividends deduct TDS at 10% on dividends exceeding Rs.5,000 in a financial year. This exemption limit has been increased to Rs. 10,000 from FY 2025-26.
- Applicability in PMS:
    - PMS investors receive dividends directly, and these are added to their taxable income.
    - If total dividend income exceeds Rs.5,000 in a financial year (Till FY 2024-25), TDS is deducted, but investors in lower tax slabs can claim refunds while filing returns. The TDS exemption limit of Rs. 5,000 has been increased to Rs. 10,000 from FY 2025-26.

Key Takeaways for PMS Investors in Equity Investments

Tax Type	Holding Period	Tax Rate	Exemption/Benefit
LTCG	> 12 months	12.50%	Rs.1.25 lakh exemption per year
STCG	≤ 12 months	20.00%	No exemption
Dividend Income	N/A	As per slab rate	TDS @ 10% if > Rs.5,000 and from FY 2025-26, TDS would be 10% if > Rs. 10,000

11.2.3 Taxation on Derivatives

In Portfolio Management Services (PMS), derivatives (such as futures and options) are treated differently from equity investments. The taxation of derivatives in PMS follows the principles of business income Below is a detailed explanation of how income or losses from derivatives are treated for PMS investors.

Classification of Derivatives Income in PMS

- Treated as Business Income:
    - Income from futures and options (F&O) transactions is classified as business income rather than capital gains.
    - This applies to both resident individuals (RIs) and non-resident Indians (NRIs), subject to tax rules for business income.
- Taxed under "Profits and Gains from Business or Profession" (PGBP):
    - Since PMS providers actively manage trades in derivatives, gains or losses from such trades are not capital gains but business income for tax purposes.

Tax Treatment for Derivative Income in PMS

- Tax Slab Rates for Resident Individuals
    - The income from derivatives trading is added to the total taxable income and is taxed as per the individual's income tax slab rates:

Treatment of Losses from Derivatives in PMS

- **Set-Off of Losses**

- Business losses from derivatives can be set off against any other business income or non-salaried income in the same financial year.
- However, derivative losses cannot be set off against salary income.

- **Carry Forward of Losses**
  - If the loss is not completely set off in the current year, it can be carried forward for up to 8 assessment years.
  - The carried-forward loss can only be adjusted against business income in future years.

- **Audit Requirement for Derivative Transactions**

Please see below the tax audit applicability for F&O trading turnover in the form of three cases:

- ✓ **Case 1 - Turnover Up to ₹2 Crore**: If profits are less than 6% of the turnover, and you've opted out of the presumptive taxation scheme in the past five years, a tax audit is mandatory under Section 44AB(e), provided your total income exceeds the basic exemption limit. If profits are 6% or higher, no tax audit is required.
- ✓ **Case 2 - Turnover Between ₹2 Crore and ₹10 Crore**: If over 95% of transactions are digital, no tax audit is required, irrespective of profit or loss.
- ✓ **Case 3 - Turnover Above ₹10 Crore**: A tax audit is mandatory under Section 44AB(a), regardless of profit or loss.

For more clarity on taxation aspects of Derivative accounting, one must consult certified tax consultant.

11.2.4 Taxation for Non-Resident Indians (NRIs)

An NRI can trade in F&O through a Portfolio Management Service (PMS) in India, but they must adhere to the regulations set by the Reserve Bank of India (RBI) and use their NRO account to do so, meaning they can only trade on a non-repatriable basis with funds held within India; they cannot use their NRE account for F&O trading.

- NRIs cannot trade in derivatives directly, but they can invest through PMS.
- Gains from derivatives trading in PMS are also classified as business income and are taxable at slab rates applicable to NRIs.

- TDS (Tax Deducted at Source) may apply if the PMS provider is required to deduct tax on behalf of the NRI investor.

11.3. Fees and Expenses – Are They Tax Deductible?

Tax Treatment of PMS Fees for Resident Individuals

- Fees such as management fees, brokerage, GST, and performance fees are not deductible while computing capital gains tax.
- Capital gains tax is calculated only on the sale price minus the acquisition cost, without any deduction for PMS fees.

Tax Deduction under Business Income

- If an investor treats investments as a business, PMS expenses may be deductible under business income.
- However, most individual investors report their PMS income under capital gains, making PMS fees non-deductible.

GST on PMS Fees

- PMS fees attract 18% GST, which increases the total cost of investing but is not deductible from taxable income.

11.4. Tax Reporting and Compliance

Under the SEBI (Portfolio Managers) Regulations, 2020, Portfolio Managers (PMs) are required to provide investors with periodic taxation reports to ensure transparency, compliance, and ease of tax filing. These reports help investors understand their tax liabilities on different types of income earned through Portfolio Management Services (PMS).

Portfolio Managers must provide detailed taxation reports to investors, ensuring transparency and regulatory compliance. These reports cover capital gains, derivatives income, dividends, and interest, helping investors meet their tax obligations efficiently.

11.4.1 Regulatory Requirement for Taxation Reports

- As per Regulation 30 of SEBI (Portfolio Managers) Regulations, PMs must disclose details of transactions, fees, and income.
- Investors must receive audited account statements and periodic reports covering realized and unrealized gains, income tax liabilities, and expenses.

- The frequency of reports is typically quarterly and annually, ensuring compliance with tax regulations.

11.4.2. Components of a Taxation Report

A taxation report under PMS generally includes:

Capital Gains Summary

- Long-Term Capital Gains (LTCG) & Short-Term Capital Gains (STCG) on equity and debt investments.
- Details on applicable LTCG tax (12.5%) and STCG tax (20%) on equity investments.
- Capital gains from debt instruments taxed as per slab rates for individuals.

Income from Derivatives

- Futures & Options (F&O) gains/losses classified as business income.
- Details on carry-forward of losses for 8 years (as per the Income Tax Act).

Dividend Income

- Taxable in the hands of investors at applicable slab rates after deduction of TDS for NRIs.

Interest Income

- Interest from bonds, debentures, and fixed income instruments reported separately.
- Taxed at slab rates for individuals and corporate investors.

Expense and Fee Deduction Details

- Management and performance fees, brokerage, STT, and GST are not tax-deductible for individuals.
- Reports specify taxable income after accounting for expenses.

11.4.3 Timelines for Providing Tax Reports

- Quarterly Reports: Sent within 30 days after each quarter, covering realized and unrealized gains.
- Annual Tax Report: Provided at the end of the financial year for income tax filing.
- Form 16A / TDS Certificates: Issued for tax deducted at source (TDS) on dividends and interest.

11.4.4 Importance of Taxation Reports for Investors

- Helps in accurate income tax return (ITR) filing.
- Ensures compliance with Indian tax laws and SEBI regulations.
- Provides transparency in portfolio performance and tax liabilities.
- Allows investors to plan tax-saving strategies effectively.

11.5 Portfolio Investment Scheme (PIS) for NRIs

The Portfolio Investment Scheme (PIS) is a facility provided by the Reserve Bank of India (RBI) that allows Non-Resident Indians (NRIs) and Overseas Citizens of India (OCIs) to invest in the Indian stock market through a designated bank account. When NRIs invest in Portfolio Management Services (PMS), compliance with PIS regulations is crucial.

PIS enables NRIs to invest in India, but PMS offers a more structured and professionally managed investment option. While PIS approval is necessary for direct stock trading, it is not required for PMS, making it an attractive choice for NRIs seeking exposure to Indian markets.

11.5.1 Advantages of PIS for NRIs

- Professional Fund Management: PMS ensures expert decision-making, avoiding regulatory restrictions on direct stock investments.
- Diversification: Investment in multiple asset classes beyond equities.
- Ease of Tax Compliance: PMS providers assist in tax filings and TDS deductions.

11.5.2 Understanding PIS for NRIs in PMS

- Under PIS, NRIs can invest in listed equity shares and convertible debentures on a repatriation (NRE) or non-repatriation (NRO) basis.
- PMS allows NRIs to participate in actively managed investment strategies beyond direct stock investments.
- However, PIS approval is not required for PMS investments, as PMS operates in a discretionary or non-discretionary mode where the Portfolio Manager makes the investment decisions.

11.5.3 Structure of NRI Investments in PMS

Investment Routes: NRIs investing in PMS typically choose from:

- NRE PMS Account (Repatriable): Allows repatriation of funds back to the foreign country.
- NRO PMS Account (Non-Repatriable): Gains and capital remain within India and are subject to Indian taxation.

Key Compliance Requirements

- NRIs need to open an NRE or NRO account with a designated bank.
- Investments must be made through RBI-approved PMS providers under SEBI (Portfolio Managers) Regulations, 2020.
- NRIs cannot engage in intraday trading or short-selling.

Taxation of PMS Investments for NRIs under PIS

- **Capital Gains Tax**
    - Short-Term Capital Gains (STCG): 15% on equity holdings sold within 12 months.
    - Long-Term Capital Gains (LTCG): 10% on gains exceeding Rs.1 lakh after 12 months.
- **Taxation of Dividends and Interest**
    - Dividend income is taxable at applicable slab rates for NRIs, with 20% TDS.
    - Interest earned on NRO accounts is taxable at 30% (plus cess and surcharge).
- **Tax Deducted at Source (TDS):** Capital gains from equity transactions are subject to TDS:
    - 15% TDS on STCG
    - 10% TDS on LTCG (if gains exceed Rs.1.25 lakh)

Chapter 11: Sample Questions

1. Which of the following is tax deductible for an individual investor availing Portfolio Management Services by a Portfolio Manager?.

a. Management Fees

b. Performance Fees

c. GST

d. None of the Above

2. Which of the following reports are not mandatory for the Portfolio Manager to provide to the Investor with respect to tax calculation?

a. Capital Gains Report

b. Interest or Dividend received in the portfolio

c. Expenses and Fee Details

d. All of the above to be provided

CHAPTER 12: REGULATORY, GOVERNANCE AND ETHICAL ASPECTS OF PORTFOLIO MANAGERS

LEARNING OBJECTIVES:

After studying this chapter, the candidates should know about:

- Prevention of Money Laundering Act, 2002
- SEBI (Prohibition of Insider Trading) Regulation 2015
- SEBI (Prohibition of Fraudulent and Unfair Trade Practices Relating to Securities Market) Regulations, 2003
- SEBI (Portfolio Managers) Regulations, 2020
- Investor Charter for Portfolio Management Services

12.1 Prevention of Money Laundering Act, 2002

The Prevention of Money Laundering Act, 2002 (PMLA) forms the core of the legal framework put in place in India to combat money laundering. The provisions of PMLA came into force on July 1 2005. The objective of PMLA is, "to prevent money-laundering and to provide for confiscation of property derived from, or involved in, money-laundering and for matters connected therewith or incidental thereto."

Provisions of the PMLA stipulate 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. Such transactions include:

- All cash transactions of the value of more than Rs. 10 lakh or its equivalent in foreign currency.
- All series of cash transactions integrally connected to each other which have been valued below Rs. 10 lakh or its equivalent in foreign currency where such series of transactions take place within one calendar month and the aggregate value of such transaction exceeds Rs. 10 lakh.
- All suspicious transaction whether or not made in cash. For the purpose of suspicious transactions apart from 'transactions integrally connected', 'transactions remotely connected or related' shall also be considered.

The records which have been referred to in the above paragraphs have to be maintained for a period of 10 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.

Section 3 of the PMLA 2002, defines offence of money laundering as:

"Whosoever directly or indirectly attempts to indulge or knowingly assists or knowingly is a party or is actually involved in any process or activity connected with the proceeds of crime including its concealment, possession, acquisition or use and projecting and claiming it as untainted property shall be guilty of offence of money laundering."

Any person found indulging in any offence of money laundering as defined in section 3 of the PMLA, shall be punished as per provisions mentioned in section 4 of the Act.

The Obligations on banking companies, financial institutions and intermediaries has been specified in Section 12 of the PMLA 2002:

1. Every reporting entity shall –
    a. maintain a record of all transactions, including information relating to transactions covered under clause (b) in such manner as to enable it to reconstruct individual transactions. This records shall be maintained for a period of five years from the date of transaction between a client and the reporting entity.
    b. furnish to the Director within such time as may be prescribed, information relating to such transactions, whether attempted or executed the nature and value of which may be prescribed.
    c. maintain record of documents evidencing identity of its clients and beneficial owners as well as account files and business correspondence relating to its clients. This records shall be maintained for a period of five years after the business relationship between a client and the reporting entity has ended or the account has been closed whichever is later.

2. Every information maintained, furnished or verified, save as otherwise provided under any law for the time being in force, shall be kept confidential.

Section 12 AA of PMLA stipulates enhanced due diligence by reporting entities. The details are given below:

1. Every reporting entity shall, prior to the commencement of each specified transaction:
    a. verify the identity of the clients undertaking such specified transaction by authentication under the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016 (18 of 2016) in such manner and subject to such conditions, as may be prescribed, provided that where verification requires authentication of a person who is not entitled to obtain an Aadhaar number under the provisions of the said Act, verification to authenticate the identity of the client undertaking such specified transaction shall be carried out by such other process or mode, as may be prescribed.
    b. take additional steps to examine the ownership and financial position, including sources of funds of the client, in such manner as may be prescribed.
    c. take additional steps as may be prescribed to record the purpose behind conducting the specified transaction and the intended nature of the relationship between the transaction parties.

The information obtained while applying the enhanced due diligence measures shall be maintained for a period of five years from the date of transaction between a client and the reporting entity.

2. Where the client fails to fulfil the above conditions, the reporting entity shall not allow the specified transaction to be carried out. Specified transaction means:
    - any withdrawal or deposit in cash, exceeding such amount;
    - any transaction in foreign exchange, exceeding such amount;
    - any transaction in any high value imports or remittances;
    - such other transaction or class of transactions, in the interest of revenue or where there is a high risk of money-laundering or terrorist financing, as may be prescribed.

3. Where any specified transaction or series of specified transactions undertaken by a client is considered suspicious or likely to involve proceeds of crime, the reporting entity shall increase the future monitoring of the business relationship with the client, including greater scrutiny or transactions in such manner as may be prescribed.

As per provisions of PMLA, intermediaries registered under SEBI Act, shall have to adhere to the provisions as given in the PMLA. A 'Principal Officer' needs to be designated who shall be responsible for ensuring compliance of the provisions of the PMLA. SEBI has issued necessary directives vide circulars from time to time, covering issues related to Know Your Client (KYC) norms, Anti-Money Laundering (AML), Client Due

Diligence (CDD). These directives lay down minimum requirements and it is emphasised that the intermediaries may, according to their requirements specify additional disclosures to be made by the clients to address the concerns of money laundering and suspicious transactions undertaken by the clients.

12.2 SEBI (Prohibition of Insider Trading) Regulations 2015[19]

Any dealing/trading done by an insider based on information which is not available in public domain, gives an undue advantage to insiders and affects market integrity. This is not in line with the principle of fair and equitable markets. In order to protect integrity of the market, the SEBI (Prohibition of Insider Trading) Regulations have been put in place.

Schedule C of the regulation specifies the minimum standards for code of conduct for intermediaries and fiduciaries to regulate, monitor and report trading by Designated Persons. The details are given below:

1. The compliance officer shall report to the board of directors or head(s) of the organisation (or committee constituted in this regard) and in particular, shall provide reports to the Chairman of the Audit Committee or other analogous body, if any, or to the Chairman of the board of directors or head(s) of the organisation at such frequency as may be stipulated by the board of directors or head(s) of the organization but not less than once in a year.
2. All information shall be handled within the organisation on a need-to-know basis and no unpublished price sensitive information shall be communicated to any person except in furtherance of legitimate purposes, performance of duties or discharge of legal obligations. The code of conduct shall contain norms for appropriate Chinese Wall procedures, and processes for permitting any designated person to "cross the wall".
3. Designated persons and immediate relatives of designated persons in the organisation shall be governed by an internal code of conduct governing dealing in securities.
4. Designated persons may execute trades subject to compliance with these regulations. Trading by designated persons shall be subject to pre-clearance by the compliance officer(s), if the value of the proposed trades is above such thresholds as the board of directors or head(s) of the organisation may stipulate.
5. The compliance officer shall confidentially maintain a list of such securities as a "restricted list" which shall be used as the basis for approving or rejecting applications for pre-clearance of trades.
6. Prior to approving any trades, the compliance officer shall seek declarations to the effect that the applicant for pre-clearance is not in possession of any unpublished price sensitive information. He

[19] "the Board" refers to SEBI and Act refers to the SEBI Act.

shall also have regard to whether any such declaration is reasonably capable of being rendered inaccurate.

7. The code of conduct shall specify any reasonable timeframe, which in any event shall not be more than seven trading days, within which trades that have been pre-cleared have to be executed by the designated person, failing which fresh pre-clearance would be needed for the trades to be executed.

8. The code of conduct shall specify the period, which in any event shall not be less than six months, within which a designated person who is a connected person of the listed company and is permitted to trade in the securities of such listed company, shall not execute a contra trade. [In case of dealing in the units of mutual funds, the code of conduct shall specify the period, which in any event shall not be less than two months, within which a Designated Person who is a connected person of the mutual fund/asset management company/trustees and is permitted to trade in the units of such mutual fund, shall not execute a contra trade.] The compliance officer may be empowered to grant relaxation from strict application of such restriction for reasons to be recorded in writing provided that such relaxation does not violate. these regulations. Should a contra trade be executed, inadvertently or otherwise, in violation of such a restriction, the profits from such trade shall be liable to be disgorged for remittance to the Board for credit to the Investor Protection and Education Fund administered by the Board under the Act. Provided that this shall not be applicable for trades pursuant to exercise of stock options

9. The code of conduct shall stipulate such formats as the board of directors or head(s) of the organisation (or committee constituted in this regard) deems necessary for making applications for pre-clearance, reporting of trades executed, reporting of decisions not to trade after securing pre-clearance, and for reporting level of holdings in securities at such intervals as may be determined as being necessary to monitor compliance with these regulations.

10. Without prejudice to the power of the Board under the Act, the code of conduct shall stipulate the sanctions and disciplinary actions, including wage freeze, suspension, recovery, clawback etc., that may be imposed, by the intermediary or fiduciary required to formulate a code of conduct under sub-regulation (1) and sub-regulation (2) of regulation 9, for the contravention of the code of conduct. Any amount collected under this clause shall be remitted to SEBI for credit to the Investor Protection and Education Fund administered by SEBI under the SEBI Act.

11. The code of conduct shall specify that in case it is observed by the intermediary or fiduciary required to formulate a code of conduct under sub-regulation (1) or sub-regulation (2) of regulation 9, respectively, that there has been a violation of these regulations, such intermediary or fiduciary shall promptly inform the stock exchange where the concerned securities are traded, in such form and such manner as may be specified by SEBI from time to time.

12. All designated persons shall be required to disclose name and Permanent Account Number or any other identifier authorized by law of the following to the intermediary or fiduciary on an annual basis and as and when the information changes:

    a. immediate relatives

    b. persons with whom such designated person(s) shares a material financial relationship

    c. Phone, mobile, and cell numbers which are used by them

    In addition, names of educational institutions from which designated persons have graduated and names of their past employers shall also be disclosed on a one time basis.

    Explanation – the term "material financial relationship" shall mean a relationship in which one person is a recipient of any kind of payment such as by way of a loan or gift from a designated person during the immediately preceding twelve months, equivalent to at least 25% of the annual income of such designated person but shall exclude relationships in which the payment is based on arm's length transactions.

13. Intermediaries and fiduciaries shall have a process for how and when people are brought 'inside' on sensitive transactions. Individuals should be made aware of the duties and responsibilities attached to the receipt of Inside Information, and the liability that attaches to misuse or unwarranted use of such information.

12.3 SEBI (Prohibition of Fraudulent and Unfair Trade Practices Relating to Securities Market) Regulations, 2003

SEBI (Prohibition of Fraudulent and Unfair Trade Practices relating to Securities Market) Regulations, 2003 prohibits fraudulent, unfair and manipulative trade practices in securities.

Regulation 2(1)(c) defines fraud as inclusive of any act, expression, omission or concealment committed to induce another person or his agent to deal in securities.

Chapter II of the regulations prohibits certain dealings in securities covering buying, selling or issuance of securities. The regulations prohibit a person to, directly or indirectly:

- buy, sell or deal in securities in a fraudulent manner.

- use or employ in connection with issue, purchase or sale of any security listed or proposed to be listed, any manipulative or deceptive device or contrivance in contravention of the provisions of SEBI Act or rules or regulations made thereunder.
- employ any device, scheme or artifice to defraud in connection with dealing in or issue of any security listed or proposed to be listed.
- engage in any act, practice, course of business which would operate as a fraud or deceit in connection with any dealing in or issue of securities, which are listed or proposed to be listed.
- indulge in a fraudulent or an unfair trade practices in securities.

Dealing in securities shall be deemed to be a manipulative, fraudulent or an unfair trade practice if it involves any of the following:

a) knowingly indulging in an act which creates false or misleading appearance of trading in the securities market;

b) dealing in a security not intended to effect transfer of beneficial ownership but intended to operate only as a device to inflate, depress or cause fluctuations in the price of such security for wrongful gain or avoidance of loss;

c) inducing any person to subscribe to an issue of the securities for fraudulently securing the minimum subscription to such issue of securities, by advancing or agreeing to advance any money to any other person or through any other means;

d) inducing any person for dealing in any securities for artificially inflating, depressing, maintaining or causing fluctuation in the price of securities through any means including by paying, offering or agreeing to pay or offer any money or money's worth, directly or indirectly, to any person;

e) any act or omission amounting to manipulation of the price of a security including, influencing or manipulating the reference price or bench mark price of any securities;

f) knowingly publishing or causing to publish or reporting or causing to report by a person dealing in securities any information relating to securities, including financial results, financial statements, mergers and acquisitions, regulatory approvals, which is not true or which he does not believe to be true prior to or in the course of dealing in securities;

g) entering into a transaction in securities without intention of performing it or without intention of change of ownership of such security; selling, dealing or pledging of stolen, counterfeit or fraudulently issued securities whether in physical or dematerialized form.

12.4 SEBI (Portfolio Managers) Regulations, 2020

The following section gives a summary of the SEBI (Portfolio Managers) Regulations, 2020**.** Major parts of the regulation have been covered in the previous chapters as and where required.

As per the Regulation:

Portfolio means the total holdings of securities and goods belonging to any person;

Principal officer means an employee of the portfolio manager who has been designated as such by the portfolio manager and is responsible for (i) the decisions made by the portfolio manager for the management or administration of portfolio of securities or the funds of the client, as the case may be; and (ii) all other operations of the portfolio manager.

Registration as Portfolio Manager

No person shall act as portfolio manager unless he holds a certificate granted by SEBI under SEBI PMS Regulations.

12.4.1 Conditions of registration

The certificate of registration granted under Portfolio Managers Regulations is subject to the following conditions, namely: -

a. the portfolio manager shall abide by the provisions of the SEBI Act and SEBI Portfolio Managers regulations;

b. the portfolio manager shall obtain prior approval of SEBI in case of change in control in such manner as may be specified by SEBI.

c. the portfolio manager shall forthwith inform SEBI in writing, if any information or particulars previously submitted to SEBI are found to be false or misleading in any material particular or if there is any material change in the information already submitted;

d. the portfolio manager shall pay the fees for registration in the manner provided in SEBI PMS regulations;

e. the portfolio manager shall take adequate steps for redressal of grievances of the investors within [the prescribed days by SEBI] of the date of the receipt of the complaint and keep SEBI informed about the number, nature and other particulars of the complaints received;

f. the portfolio manager shall maintain the net worth specified in PMS Regulations at all times during the period of the certificate. (This is not applicable in case of co-investment portfolio manager).

12.4.2 Management or administration of clients' portfolio

The money or securities accepted by the portfolio manager shall not be invested or managed by the portfolio manager except in terms of the agreement between the portfolio manager and the client. Any renewal of portfolio on maturity of the initial period shall be deemed as a fresh placement.[20]

Notwithstanding anything contained in the agreement as referred in the PMS regulation, the funds or securities can be withdrawn by the client before the maturity of the contract under the following circumstances, namely;

a) voluntary or compulsory termination of portfolio management services by the portfolio manager or the client;[21]

b) suspension or cancellation of the certificate of registration of the portfolio manager by SEBI;

c) bankruptcy or liquidation of the portfolio manager.

The discretionary portfolio manager shall invest funds of his clients in the securities listed or traded on a recognized stock exchange, money market instruments,[22] units of Mutual Funds and other securities as specified by SEBI from time to time, on behalf of their clients.

The portfolio manager offering non-discretionary or advisory services to clients may invest or provide advice for investment up to 25% of the assets under management of such clients in unlisted securities, in addition to the securities permitted for discretionary portfolio management

The portfolio manager may offer discretionary or non-discretionary or advisory services for investment upto 100 % of the assets under management of the large value of accredited investors in unlisted securities, subject to the appropriate disclosures in the disclosure document and the terms agreed between the client and the portfolio manager.

[20] This is not applicable to co-investment portfolio manager.

[21] Not applicable to co-investment portfolio manager.

[22] "Money market instruments" includes commercial paper, trade bill, treasury bills, certificate of deposit and usance bills.

The portfolio manager shall segregate each clients' funds and portfolio of securities and keep them separately from his own funds and securities and be responsible for safekeeping of clients' funds and securities.

The portfolio manager shall not hold the securities belonging to the portfolio account, in its own name on behalf of its clients either by virtue of contract with clients or otherwise.

The portfolio manager may, subject to authorization by the client in writing, participate in securities lending.

Foreign portfolio investors may avail of the services of a portfolio manager. Every portfolio manager shall appoint a custodian in respect of securities managed or administered by it, however, this regulation shall not apply to a) portfolio manager who provides only advisory services b) co-investment portfolio manager.

Every portfolio manager shall furnish to SEBI a net worth certificate issued by a chartered accountant as and when required by SEBI.

12.4.3 Reports to be furnished to the client

The portfolio manager shall furnish periodically a report to the client, as agreed in the contract, but not exceeding a period of 3 months and as and when required by the client and such report shall contain the following details, namely:[23]

a. the composition and the value of the portfolio, description of securities and goods, number of securities, value of each security held in the portfolio, units of goods, value of goods, cash balance and aggregate value of the portfolio as on the date of report;

b. transactions undertaken during the period of report including date of transaction and details of purchases and sales;

c. beneficial interest received during that period in the form of interest, dividend, bonus shares, rights shares, etc.;

d. expenses incurred in managing the portfolio of the client;

e. details of risk foreseen by the portfolio manager and the risk relating to the securities recommended by the portfolio manager for investment or disinvestment;

[23] The report referred to in sub-regulation may be made available on the website of the portfolio manager with restricted access to each client.

f. default in payment of coupons or any other default in payments in the underlying debt security and downgrading to default rating by the rating agencies, if any;

g. details of commission paid to distributor(s) for the particular client.

On termination of the contract, the portfolio manager shall give a detailed statement of accounts to the client and settle the account with the client as agreed in the contract.

The client shall have the right to obtain details of his portfolio from the portfolio managers.

The portfolio manager shall take steps to rectify the deficiencies made out in the auditor's report within two months from the date of the auditor's report as specified.

12.4.4 Disclosures

A portfolio manager shall disclose to SEBI as and when required the following information namely:

i. particulars regarding the management of a portfolio;

ii. any change in the information or particulars previously furnished, which have a bearing on the certificate granted to him;

iii. the names of the clients whose portfolio he has managed;

iv. particulars relating to the net worth requirement.

12.4.5 Prior consent of client in regarding investments in the securities of associates/related parties[24]

The portfolio manager may make investments in the securities of its related parties or associates only after obtaining the prior consent of the client in such manner as may be specified by SEBI from time to time. The consent form shall have an option to indicate dissent in case the client does not want to undertake any investment in the securities of associates/related parties of the Portfolio Manager. The client can even specify a limit on investment in such securities. The portfolio managers are required to maintain records and documents pertaining to prior positive consent or dissent as the may be; instances of the passive breach of

[24] Regulation 22 (1A) and SEBI Circular SEBI/HO/IMD/IMD-I/DOF1/P/CIR/2022/112 darted August 26, 2022 https://www.sebi.gov.in/legal/circulars/aug-2022/circular-for-portfolio-managers_62374.html

investment limits (if any), steps taken to rectify the passive breach of investment limits; waiver obtained from the client regarding rebalancing in the event of a passive breach of investment limits.

The portfolio manager shall ensure compliance with the prudential limits on investments as specified by SEBI.

12.5 Code of conduct for PMS Distributors[25]

The code of conduct requires all PMS distributors to:

i. Adhere to SEBI (Portfolio Managers) Regulations, 2020 and APMI circulars issued from time to time related to distributors, distribution, advertising practices of Portfolio Management Services, etc.

ii. Maintain high standards of integrity, promptitude and fairness in the conduct of all their business.

iii. Act with due skill, care and diligence in the conduct of all their business.

iv. Consider investor's interest, risk profiling and suitability to their financial needs while marketing Portfolio Management Services.

v. Take necessary steps to ensure that the clients' interest is protected.

vi. Ensure that commission or incentive shall never form the basis for recommending Portfolio Management Services.

vii. Be fully conversant with the Disclosure Document, Investment Approaches, fees and charges and the terms of agreement to be entered between the client and the Portfolio Manager.

viii. Disclose to the clients all material information including the details of distribution commissions for various investment approaches.

ix. Assist clients in completing KYC and In-Person Verification related procedures.

x. Provide full and latest information about investment approaches and also highlight the assumptions made in performance calculations, risk assessments, performance projections etc., if any, for such investment approaches.

[25] https://www.sebi.gov.in/legal/circulars/feb-2020/guidelines-for-portfolio-managers_45981.html
https://www.sebi.gov.in/sebi_data/commondocs/feb-2020/Ann_c_p.pdf

xi. Inform the clients about the risks and level of control over the administration of Portfolio associated with the type of Portfolio Management Services offered (i.e. Discretionary, Non-discretionary or Advisory).

xii. Abstain from assuring returns in any type of Investment Approach and from any kind of mis-representation.

xiii. Abstain from attracting clients through unethical means such as offer of rebate/gifts etc.

xiv. Maintain necessary infrastructure to provide support to clients in timely receipt of disclosure document, statement of portfolio and performance, statement of fees, audit report, etc.

xv. Maintain confidentiality of clients' details, deals and transactions, which they come to know in their business relationship.

xvi. Abstain from making negative statements about other Portfolio Managers or Investment Approaches. Make comparisons, if any, only with the similar and comparable products along with complete facts.

xvii. Not indulge in any manipulative, fraudulent or deceptive practices or spread rumours with a view to make personal gain.

xviii. Hold valid Certification, as specified by SEBI, at all times.

In order to facilitate collective oversight of PMS distributors at the industry level, it has been decided that any person or entity involved in the distribution of portfolio management services shall obtain registration with APMI. Portfolio Managers shall ensure that any person or entity engaged in the distribution of its services has obtained registration with APMI, in accordance with the criteria laid down by APMI.

[Distributors have to mandatorily obtain registration from APMI][26]

12.6 Investor Charter for Portfolio Management Services[27]

With a view to enhancing awareness of investors about the various activities which an investor deals with while availing the services provided by the portfolio managers, an investor charter has been issued by SEBI. The investor charter details different services provided by the portfolio managers to the investors along with

[26] Facilitating collective oversight of distributors for Portfolio Management Service through APMI. (See SEBI Circular No SEBI/HO/IMD/IMD-PoD-1/P/CIR/2024/32 dated May 02, 2024) – https://www.sebi.gov.in/legal/circulars/may-2024/facilitating-collective-oversight-of-distributors-for-portfolio-management-services-pms-through-apmi_83146.html

[27]https://www.sebi.gov.in/legal/circulars/dec-2021/publishing-of-investor-charter-and-disclosure-of-investor-complaints-by-portfolio-managers-on-their-websites_54546.html

estimated timelines, like account opening, agreement with the portfolio manager, periodic statements to the investors, investor grievance redressal mechanism, responsibility of investors at one single for ease of reference. All registered portfolio managers have to notify the same to their clients and also are required to prominently display on their websites. The investor charter provides for

A. Vision and mission statement of investors
B. Details of business transacted by the organization with respect to the investors
    - appropriate risk profiling of investors
    - to provide Disclosure Document to investors
    - executing the PMS agreement
    - making investment decisions on behalf of investors (discretionary) or investment decisions taken at the discretion of the Investor (non-discretionary) or advising investors regarding their investment decisions (advisory), as the case may be.
C. Details of services and estimated timelines of the services provided to the investors as per the time stipulated by SEBI. Some of these are mentioned below:

- Opening of PMS account (including demat account) for residents/non-individual clients.
- Opening of PMS account (including demat account, bank account and trading account) for non-resident clients.
- Registration/Modification of nominee in PMS account and demat account.
- Uploading of PMS account in KRA and CKYC database.
- Intimation of type of PMS account – discretionary/ PMS account - non discretionary.
- Intimation to client what discretionary/ non-discretionary account entails and powers that can be exercised by portfolio manager.
- Copy of executed PMS agreement to be sent to the candidate
- Issuance of funds and securities balance statements held by client.
- Intimation of name and demat account number of custodian for PMS account.
- Conditions of termination of contract.
- Intimation regarding PMS fees and modes of payment or frequency of deduction.
- Intimation to client about what all transactions can portfolio manager do using PoA.
- Frequency of providing audited reports to clients.

- Explanation of risks involved in investment.
- Intimation of tenure of portfolio investments.
- Intimation clearly providing restrictions imposed by the investor on portfolio manager: Negative list of securities should be taken from the client at the time of client signing the agreement; this information should be a part of the account opening form.
- Intimation regarding settling of client funds and securities
- Frequency of intimation of transactions undertaken in portfolio account.
- Intimation regarding conflict of interest in any transaction: The portfolio manager should provide details of related party transactions and conflict of interest in the Disclosure Document which should be available on website of portfolio manager at all times
- Timeline for providing disclosure document to investor.
- Intimation to investor about details of bank accounts where client funds are kept.
- Redressal of investor grievances.

D. Details of grievance redressal mechanism and how to access it.
E. Expectations from the investor (Responsibilities of Investors)

Chapter 12: Sample Questions

1. Record of transactions to be maintained under the Prevention of Money Laundering Act includes Cash transactions of the value of more than _____.

a. Rs.10 lakh

b. Rs. 20 lakh

c. Rs. 25 lakh

d. Rs. 1 crore

2.A foreign portfolio investor can invest in the following securities?

a. Domestic Mutual Fund Schemes

b. Derivatives traded on a recognised stock exchange

c. Rupee denominated credit enhanced bonds

d. All of the above

3.The objective of the SEBI (Prohibition of Insider Trading) Regulations is to prohibit insider from _____ on matters relating to insider trading.

a. Dealing

b. Communicating

c. Counselling

d. All of the above

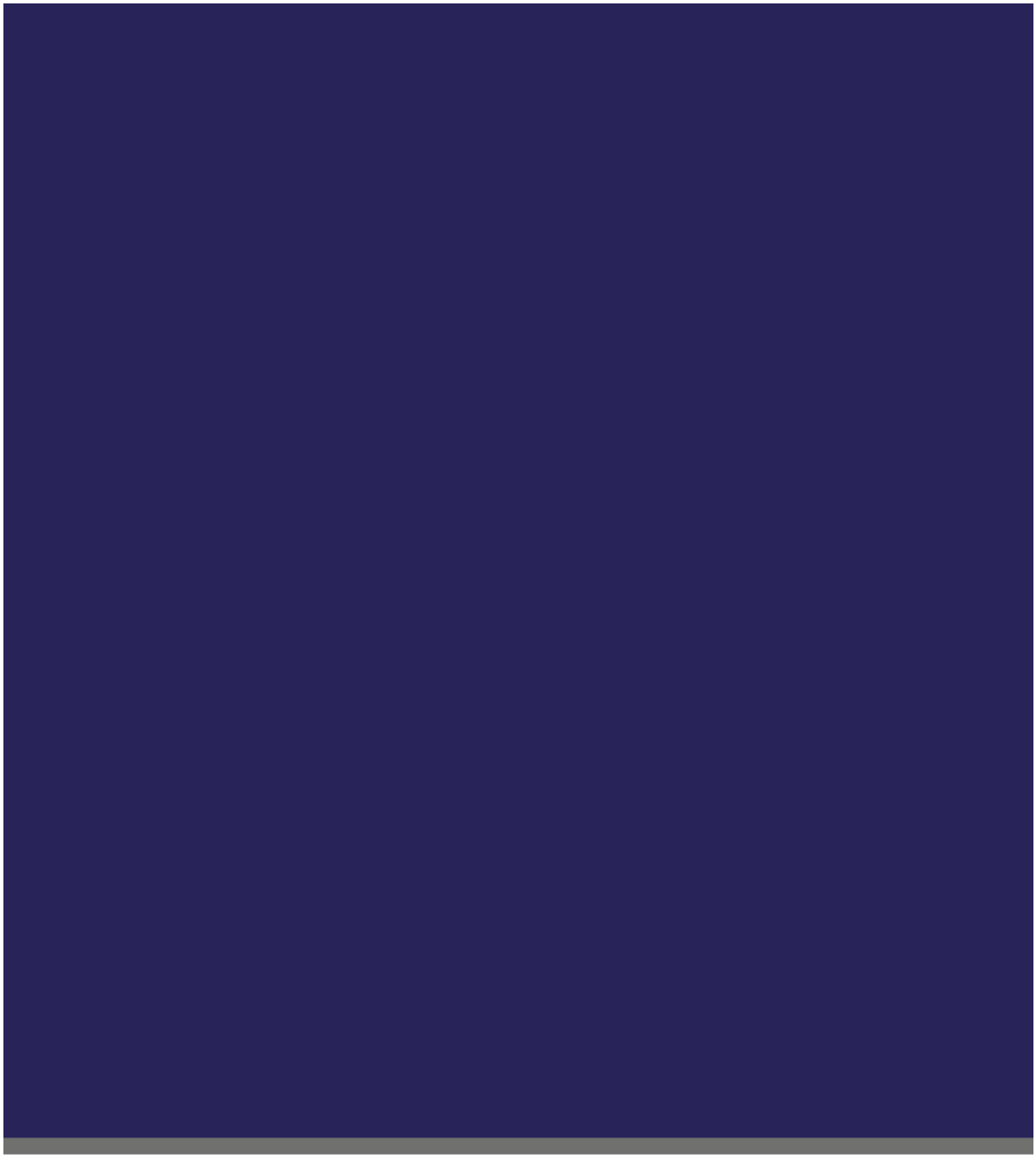
4.The SEBI Fraudulent and Unfair Trade Practices Regulations prohibit a person to, directly or indirectly _____ securities in a fraudulent manner.

a. Buy

b. Sell

c. Deal In

d. All of the above



NATIONAL INSTITUTE OF SECURITIES MARKETS

NISM Registered Office
5th floor, NCL Cooperative Society,
Plot No. C-6, E-Block, Bandra Kurla Complex,
Bandra East, Mumbai, 400051
Tel: +91-22-41738811

NISM Campus
Plot No. IS 1 & 2, Patalganga Industrial Area,
Mohopada, District Raigad,
Maharashtra–410222
Tel: +91-2192-668300

NISM Bhavan
Plot No. 82, Sector–17,
Vashi, Navi Mumbai, Maharashtra–400703
Tel: +91-22-66735100/5101
Fax: 022-66735110

www.nism.ac.in