ALL UG COURSES EXCEPT B.COM. (HONS.) AND B.COM. (PROGRAMME)

PERSONAL FINANCIAL PLANNING

GENERIC ELECTIVE (GE)

SEMESTER - IV COURSE CREDIT -4

DEPARTMENT OF DISTANCE AND CONTINUING EDUCATION
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LESSON

1

Financial Planning and Financial Products

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STRUCTURE

1.1 Learning Objectives

- Understanding Financial Planning.
- Learning about time value of money.
- Learning about the types of loans.
- Understanding the benefits of savings.
- Learning about the management of Spending and Financial Discipline.

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1.2 Introduction

1.2.1 *Financial Planning*

Financial Planning provides you with a blueprint which helps you realize all your dreams in life in a very systematic and planned manner without causing you any sleepless nights. Remember, financial planning is a process, not a product. It gives you the confidence that you know you are on the right track and in safe hands and that you will have the money when you need it - when you want to buy a house or a car or when you want to get your daughter married or send her off for education. Or when you retire. Financial Planning combines the elements of risk management, investment planning, tax planning and retirement planning to comprehensively plan for your future needs.

1.2.2 *Need for Financial Planning*

- Need for personal financial planning to look at your complete financial situation, including your assets, liabilities, cash flows, financial goals, risk appetite, life situation, family background, etc.
- To plan systematically for your financial goals and objectives, including life insurance, health insurance, retirement, child planning – education and marriage, house purchase, estate planning, investment planning, etc.
- To make your financial life better and secured for yourself and your family and ensuring that all financial goals are achieved.
- To better understand and learn about your financial situation and understand the reasoning and logic behind all recommendations made. Also, to better understand the different asset classes and financial products and their suitability to you.
- To regularly review the progress of financial plans and/or to revise the financial plans to accommodate any major change in personal life or financial situation.

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1.2.3 *Financial Goals*

Financial planning involves analysing the current financial position of individuals to formulate strategies for future needs within financial constraints. Personal finance is specific to every individual's situation and activity; therefore, financial strategies depend largely on the person's earnings, living requirements, goals, and desires.

Individuals must save for retirement, for example, which requires saving or investing enough money during their working lives to fund their long-term plans. This type of financial management decision falls under personal finance.

Personal finance includes the purchasing of financial products such as credit cards, insurance, mortgages, and various types of investments. Banking is also considered a component of personal finance since individuals use checking and savings accounts, and online or mobile payment services such as PayPal.

The Personal Financial Planning Process Identifies Financial Goals and Objectives and Creates a Plan for Achieving Them. Personal financial planning provides you with a long-term strategy for your financial future, taking into consideration every aspect of your financial situation and how each affects your ability to achieve your goals and objectives. For example

- Buying a family health cover
- Managing debt
- Planning for retirement
- Investing to save taxes in efficient manner
- Creating wealth for future generation
- Saving to buy your favourite vehicle
- Saving for purchasing dream home
- Investing for higher education of children, marriage and other purpose

1.2.4 *Financial Planning Process*

There are steps Involved in Financial Planning Process:

1. **Establishing Good Relationship with Client:** The financial planner should have good communication skills and also interpersonal skills

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so that client can easily share his/her financial information. As this is the basis upon which the further financial plan formation depends. Moreover, high ethical standards should be maintained as per financial planning board of India (FPBI)

2. **Clarify Your Present Situation by Collecting the Facts:** You will want to assess all relevant personal and financial data such as lists of assets and liabilities, tax returns, record of securities transactions, insurance policies, wills, trusts, pension plans, etc.
3. **Decide Where You Want to Be, Financially:** This will require you to identify both personal and financial goals and objectives for you and your family. These may include family financial planning issues like providing for your children's college educations, supporting aging parents, or relieving immediate financial pressures that would help maintain your current lifestyle and provide for retirement. These considerations are as important as what is in your bank account in determining your best strategy.
4. **Identify Financial Problems that Create Barriers to You:** Problem areas can include too little or too much insurance, a big tax burden, inadequate cash flow, or current investments that are losing the battle with inflation. These possible problem areas must be identified before solutions can be found.
5. **Provide a Written Financial Plan and also an Alternative Plan:** The length of the financial plan document will vary with the complexity of your individual situation. It should always be structured to meet your needs and objectives for example if client is young and earning reasonably good then it is advisable to invest more in equity and less in debt as he has long time horizon with good risk tolerance.
6. **Implement Agreed-upon Recommendations from Your Plan:** A financial plan is only helpful if the recommendations are put into action. However, the decision to implement, modify, or reject the recommendations presented in your plan remains your sole responsibility.
7. **Periodically Review and Revise Your Plan:** A financial plan can be no better than the data upon which it is based. Periodic reviews and revisions of the plan are essential to account for changes in personal and economic changes in life.

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1.2.5 *Financial Planning Strategy*

A good financial planner should express verbally and in written form the detail financial plan to the client so that he/she is aware of how that person will achieve his/her financial plan. Some of the points of strategy are as follows:-

- **Risk Management:** This involves minimizing the risk involved finances like health insurance, life cover, investment cover, income protection in order to provide income security to oneself and family.
- **Proper Asset Allocation:** This involves investment in proper asset in order to achieve financial goals like debt, equity, mutual fund, bond, commercial paper. Thumb rule for this is investment in debt should be equal to one's age and remaining amount should be in equity. For example, a 30-year-old person should invest 30% in debt and the remaining 70% in equity. It is also dependent upon the risk appetite and income level of client. Adequate amount of money should be kept as liquid asset like cash to meet unexpected expenses.
- **Tax Consideration:** Assessing proper tax planning so as to reduce tax burden effectively. It will help in accumulation of wealth. Following taxes should be considered: - Wealth tax, Entertainment tax, Property tax, Income tax, Gift tax, corporate tax, Security transaction tax. Debt which attracts more tax should be reduced. All details of financial plan should be made clear to the client.
- **Estate Planning:** Estate planning is the preparation of tasks that serve to manage an individual's asset base in the event of their incapacitation or death. The planning includes the bequest of assets to heirs and the settlement of estate taxes. Most estate plans are set up with the help of an attorney experienced in estate law. Assets that could make up an individual's estate include houses, cars, stocks, artwork, life insurance, pensions, and debt. Individuals have various reasons for planning an estate, such as preserving family wealth, providing for a surviving spouse and children, funding children's or grandchildren's education, or leaving their legacy behind to a charitable cause. The most basic step in estate planning involves writing a will. Other major estate planning tasks include the following:

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- Limiting estate taxes by setting up trust accounts in the names of beneficiaries.
- Establishing a guardian for living dependents.
- Establishing annual gifting to qualified charitable and non-profit organizations to reduce the taxable estate.
- Setting up a durable power of attorney (POA) to direct other assets and investments.

- **Time Value of Money:** The time value of money (TVM) is the concept that money you have now is worth more than the identical sum in the future due to its potential earning capacity. This core principle of finance holds that provided money can earn interest, any amount of money is worth more the sooner it is received.

1.3 Time Value of Money in Personal Finance

Here the person wants to receive money today and then in near future. Now the question arises why? This is simply because the person is aware of the time value of money. If the person has money today in hand, then he can earn interest by investing that money, this is referred to as earning capacity of money. Say, if you invest Rs. 100 today – the returns will be more compared to the same investment made 2 months from now. Moreover, there is always a risk that the borrower might delay even more or not pay at all in the future.

Example: If a friend of yours offers you to lend 20,000 today and 20,500 after 2 years and you have option to choose the one. Then clearly the second option i.e. 20,500 may or may not fructified and with first option you would have money today and you could invest and earn return interest.

1.3.1 *Present Value*

Present value is the current value of future payments in lump sum, or several part payments discounted at certain interest rate.

Present Value of One-Time Investment: To calculate the present value of a one-time investment, you'll need to know the amount of the investment, the interest rate, and the number of years until the investment matures. The formula to calculate present value when future value is given.

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PV = FV/(1 + R)^n, where: FV = future value, R = rate of return, n = number of periods.

For example, let's say you're considering investing $10,000 in a bond that matures in 5 years and has an interest rate of 4%. Using the present value formula, you can calculate that the investment's present value is approximately $8,557. This means that the investment is worth $8,557 today, taking into account the time value of money and potential inflation.

1.3.2 *Future Value*

Is the sum of money that any saving scheme with a compounded interest will build to by a pre-decided future date. It applies to both lumpsum as well as recurring investments like SIP. Future investment for one-time investment- The formula for calculating future value where investment earning simple interest: $\boldsymbol{FV = I \times (1 + (R \times T))}$ and where investment earning compound interest: $FV = I \times (1 + R)^T$

where: **I** = Investment amount, **R** = Interest rate, **T** = Number of years

Questions based on future value.

Q.1. You are scheduled to receive Rs. 14000 in two years. When you receive it, you will invest it for six more years at 8 percent per year. How much will you have in eight years?

Ans.: $FV = I \times (1 + R)^T = 14000 \times (1 + 8\%)^6 = 22{,}216.240$

Q.2. You invest Rs. 10,000. During the first year the investment earned 20% for the year. During the second year, you earned only 4% for that year. How much is your original deposit worth at the end of the two years?

Ans: For 1st yr: $10000(1 + 20\%)^1 = 12000$

For 2nd yr: $12000(1 + 4\%)^1 = 12800$

Worth at the end of 2 yr = 4643.28

1.3.3 *Effective Annual Interest Rate*

The effective annual interest rate is the real return on a savings account or any interest-paying investment when the effects of compounding over time are considered. It also reveals the real percentage rate owed in interest on a loan, a credit card, or any other debt.

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Effective Annual Interest Rate **= (1 +** ***i/n*****)**^{n} **– 1**

where: i = Nominal interest rate, n = Number of periods

For example, consider these two offers: Investment A pays 10% interest, compounded monthly. Investment B pays 10.1% compounded semi-annually. Which is the better offer?

In both cases, the advertised interest rate is the nominal interest rate. The effective annual interest rate is calculated by adjusting the nominal interest rate for the number of compounding periods the financial product will experience in a period of time. In this case, that period is one year. The formula and calculations are as follows:

- For investment A, this would be: 10.47% = (1 + (10% / 12)) ^ 12 – 1
- And for investment B, it would be: 10.36% = (1 + (10.1% / 2)) ^ 2 – 1

Investment B has a higher stated nominal interest rate, but the effective annual interest rate is lower than the effective rate for investment A. This is because Investment B compounds fewer times over the course of the year.

1.4 Personal Finance/Loans

Personal finance is a term that covers managing your money as well as saving and investing. It encompasses budgeting, banking, insurance, mortgages, investments, retirement planning, and tax and estate planning. The term often refers to the entire industry that provides financial services to individuals and households and advises them about financial and investment opportunities. A person explores various personal finance option to achieve his or her financial objective.

The strategy involved in personal finance are as follows:

1. **Formulation of Budget:** Here you have to decide how much you have to spend and how much to save for future. Generally, there is 50/30/20 budgeting method, this means 50% you can spend for your daily and household needs/30% you can spend for shopping /20% goes towards future savings to be used during any emergency.
2. **Create an Emergency Fund:** It is important to pay your unforeseeable expenses yourself first, so it is important to create emergency fund.

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3. **Limit Your Debt:** It is advice to limit your debt and try it never goes out of hand. Going for debt to build an asset is good option.
4. **Use your Credit Card Wisely:** Sometimes credit cards are major debt traps. But one should have a credit card as it helps us to build our credit rating and also check our expenditure.
5. **Plan Your Retirement:** Setting aside money now for your retirement not only allows it to grow over the long term, but it can also reduce your current income taxes if funds are placed in a tax-advantaged plan fund like an individual retirement account (IRA).

1.4.1 *Personal Loan*

In order to finance personal needs person took various loans like home loan, educational loan and car loan etc. Now have a look at each of these loans in detail.

1.4.2 *Home Loan*

It refers to sum of money borrowed from a financial institution like banks. It involves flexible or fixed interest and payment terms. Property is mortgaged till the payment of loan. The bank or financial institution will hold the title or deed of the property till the loan is paid. Interest on home loan can be fixed or floating or partly fixed or partly floating. There is tax benefit available on home loan under section 80EE of the Income-tax Act.

1.4.3 *Educational Loan*

Cost of financing education is increasing rapidly. In order to finance education people, take educational loan like loan to do MBA from a reputed institution.

Educational loan cover accommodation charges, fee and other miscellaneous charges. It can be taken for a full-time, part-time or vocational course and graduation or post-graduation in the fields of engineering, management, medical, hotel management, architecture etc. To apply for the loan, one must be an Indian citizen, having secured an admission into a college/

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university recognised by a competent authority in India or abroad. The applicant must have completed his higher secondary level schooling. As per the Reserve Bank of India (RBI) guidelines, there are no restrictions on the upper age limit, but some banks may have it.

1.4.4 *Car Loan*

To finance the car you buy you need to take car loan to cover the cost. It is secured against the vehicle/car you purchase and serves as collateral; in case of any default the banking institution will take the possession of your vehicle. The lender retains the ownership of vehicle till the final payment is made. Usually, a lower interest rate prevails for car loan.

1.5 Saving

Savings is the money a person has left over when they subtract their consumer spending from their disposable income over a given time period. Savings can be used to increase income through investing. The extent to which individuals save is affected by their preferences for future over present consumption, their expectations of future income, and to some extent by the rate of interest. There are two ways for an individual to measure his savings for a given accounting period. One is to estimate his income and subtract his current expenditures, the difference being his savings. The alternative is to examine his balance sheet (his property and his debts) at the beginning and end of the period and measure the increase in net worth, which reflects his savings.

Total national saving is measured as the excess of national income over consumption and taxes and is the same as national investment, or the excess of net national product over the parts of the product made up of consumption goods and services and items bought by government expenditures. Thus, in national income accounts, saving is always equal to investment. An alternative measure of saving is the estimated change in total net worth over a period of time. For example: Saving is the amount left after a person met his/her expenditure for example if you have 10,000 after incurring an expenditure of 8,000 you are left with 2,000. This 2,000 will be termed as your saving.

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1.5.1 *Benefit of Saving*

1. It acts as a Safety net
2. Less Stress
3. Enables you to Travel
4. Financially Independent
5. No worry from Unexpected Expenses
6. Comfortable Retirement

Safety Net: It helps you to meet the unexpected expenses like car repair, expensive medical bills, or a sudden job loss. If you were to lose your job, you'd be thankful you socked away a good amount of money into your emergency fund to tide you over until you found a new job, thereby acting as safety net. Saving should ideally be equivalent to three to six months of expenses.

Less Stress: Saving helps to get rid of your tensions like, will I be able to pay my educational expenses on time, or will I be able to meet my medical expenses? Stop worrying as now you have good amount of savings to meet your obligation, thereby saving reduces your stress level.

Enable You to Travel: Your savings account isn't only for things you need—it can be for things you want, too. Saving up for a big purchase beforehand means you won't pay extra in finance costs such as interest and fees, you can also use that money to plan your desired vacation like visit to Paris, France -the city of lights, Peru, the Grand Canyon etc.

Financially Independent: Freedom gave us the ability to pursue our dreams, so it is equally important to create such independence in our finances too, this is accomplished by saving and investing. As all of us have the desire to have material possession like house, car white goods and spend lifestyle like watches jewellery and clothes. So it is important to save and invest in return that are higher than rate of inflation. To achieve financial independence, it is therefore important that you invest in high yielding assets. But, with small sums of money at our disposal, the only viable option is to invest in equity markets through institutional vehicles like mutual funds. Creating financial independence requires a lot of discipline. As a thumb rule, one should save at least 25 to

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30 percent of one's monthly earnings. Also, the younger you are, the higher percentage should be allocated towards equity investments.

Comfortable Retirement: Retirement is an important reality for everyone. When planning for retirement, it's always better to start as early as possible for best compounding returns and not to rely heavily on one source of savings. Because there are always emergencies in old age. So, having a sufficient corpus to deal with all these is crucial. You can opt for unit linked insurance plan (ULIPs), ULIP are designed in a way that offers you both protection and investment benefit, till the age of 99 to 100 years. These are the plans which not only take care of providing your beneficiaries with death benefit but also take care of your living needs, during your retirement. You have the flexibility to take Whole Life ULIPs at any age between 18 and 100 years and can exit at any age. You can also choose till what age you want to save money or accumulate money. This could be till your retirement.

IN-TEXT QUESTIONS

1. The money you have now is worth more than the identical sum in the

(a) Future *(b)* Present

(c) Past *(d)* None of the above

2. ..... is the current value of future payments in lump sum or several part payments discounted at certain interest rate.

(a) A present value *(b)* Future value

(c) Compounded value *(d)* None of the above

3. MR. RAM borrowed 10,00,000 from a bank on a one year 16% term loan, with interest compounded quarterly. Determine effective annual interest rate on loan?

(a) 12% *(b)* 16.9%

(c) 13% *(d)* 14%

4. You are scheduled to receive Rs. 14,000 in two years. When you receive it, you will invest it for six more years at 8 percent per year. How much will you have in eight years?

(a) 1,00,000 *(b)* 3,00,000

(c) 4,00,000 *(d)* 22,216

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5. The formula for calculating future value where investment earning simple interest = I × (1 + (R × T))

Where I represent _____?

(a) Interest rate *(b)* Index value

(c) Investment *(d)* None of the above

1.6 Management of Spending and Financial Discipline

Management of spending can easily be achieved by following the financial planning strategies. This involves following steps:

1. Devising a budget.

2. Cutting down of unnecessary expenditure.

3. Retirement planning.

4. Find ways to save: Mode of saving or different saving scheme.

5. Track your spending.

6. Make plan to pay off your debt.

7. Pay your bills timely.

Devising a Budget

Budgeting and saving money don't come naturally to many people for obvious reasons. Spending money on nonessentials is so easy, even if you're committed to a well-laid spending plan. Budget, which can help you reorganize your finances, prioritize spending, and manage debt, thus allowing you to make progress toward your long-term financial goals. Making a budget involves the following:

- List all your income after taxes—for example, employee and freelance income, investment income, and interest earned on any savings accounts. Then list all expenses—for example, rent or mortgage payments, credit card payments, instalment loan payments, grocery receipts, and utility bills.
- Subtract the expense from the income to get a general picture of your financial health. If your income total is larger than your expense total—congratulations—you just found more money for saving, investing, and paying down your debt.

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- Reduce your expenditure by categorising them into fixed expenses, discretionary expenses and variable expenses. Fixed expenses are those which have to be incurred like rent, medical expenses, you can do nothing with it, it remains constant. The variable expenses can be controlled to an extent by bringing behavioural changes like turning of light can reduce electricity bills. Discretionary expenses can effectively be controlled and generate opportunity for saving.
- Adopt a 50-20-30 approach where 50% of your after-tax income on housing, food, and other necessities, 20% on paying down debt or increasing savings, 30% on whatever you want—discretionary spending.
- Put your budget to work, means you must strictly follow the budget prepared by you to achieve financial goal.

Cutting down Unnecessary Expenses

Start by cutting spending on items you don't need. For example, instead of an expensive vacation, would you be willing to try a stay-at-home vacation (staycation)? You can avoid an expensive luxury car if you need to finance it with loan, you can avoid unnecessary purchases which are just for status symbol. These types of choices are very personal, so there's no right or wrong answer. But laying them out on the table can at least help you understand your priorities and some of the options you may not have realized you had for saving money.

Retirement Planning

Saving for retirement always sounds like a good idea in theory, but it isn't always easy in practice. It involves following steps:

- Start saving early, Sign up for your retirement plan as soon as you're able to. The sooner you start taking advantage of this benefit, the more you'll start to save. For example, if you save at 25 v/s you save at 35, the earlier you start, your savings will be benefited of the power of compounding. Find right retirement investment option which will be in tandem with your monthly income. Some of the options in India are as given below:

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- **Invest in Real Estate:** One of the best ways to create a guaranteed income stream is to own property and lease the property to earn a rental yield. In case of multiple assets, the rental income is higher. In fact, many seniors lease out their residences and move into a senior care community. Since rents increase every year, this form of income also helps stay ahead of inflation. So, it is prudent to invest in property when we are younger and create a steady and guaranteed income stream. In addition, we can also sell the real estate asset and create an addition corpus for investment.
- **Reverse Mortgage:** Another way of creating an income stream from property is to opt for reverse mortgage. Reverse mortgage is not very popular in India. However, it is a good solution for creating an income stream.
- **Senior Citizen Saving Scheme:** This investment scheme offers a guaranteed return of 7.7% per annum, offers a monthly fixed income, keeps the initial capital intact and yields better results than other debt instruments. The scheme also provides for a recurring deposit into which the income can be parked. This accelerates savings.
- **Mutual Fund:** It is also prudent to invest in mutual funds. These investments have higher liquidity and allow the investor to earn a steady income. They carry lesser risks than investing in the primary market and yet offer good returns on investment.
- **Pension Fund:** In addition, seniors should invest in pension funds and savings schemes. Though these investment options are low risk and help them preserve their capital, they also offer much lower returns.
- **Know Your Retirement Goal:** Your expenses during retirement might not be the same as they are when you're working. But that doesn't mean you won't have any expenses. It's a good idea to plan now for what you need later. If you'd like to maintain your current living standards, try to make sure you're contributing enough to cover those costs later in life. If you think you won't have as many expenses in retirement, you'll still need to save, but you can adjust your goals accordingly.

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- **Tax Efficacy:** Once you reach retirement age and begin taking distributions, taxes become a big problem. Most of your retirement accounts are taxed as ordinary income tax. That means you could pay as much as 37% in taxes. An accountant or financial planner can help you work through such tax considerations.
- **Insurance:** A key component of retirement planning is protecting your assets. Age comes with increased medical expenses, and you will have to navigate the often-complicated Medicare system. Many people feel that standard Medicare doesn't provide adequate coverage, so they look to a Medicare Advantage or Medigap policy to supplement it. There's also life insurance and long-term-care insurance to consider.

Find Ways to Save: Mode of Saving or Different Saving Scheme

Savings Schemes are investment options for Indian citizens launched by the government as well as other public sector financial institutions. These saving schemes were introduced as an incentive to cultivate healthy saving and investing habits in India. This is also a way to increase the inflow of money into the Indian economy. In earlier times Indians used to keep their money with themselves and this caused poor circulation as well as stagnation of wealth. By means of saving schemes, which are backed by the government, Indian citizens can allow their wealth to appreciate at higher interest rates and reap benefits such as tax exemption that certain savings schemes offer. Savings schemes cater to a wide demographic and encourage individuals to invest for various milestones of life such as retirement, children's higher education, their marriage etc. They are ideal for long-term wealth creation as they come with a certain lock-in period and offer good returns. Since they are not impacted by market volatility, they are safer investment options, ideal for the conservative investor. Furthermore, the interest rates on various saving schemes are revised on a quarterly or half yearly basis, keeping up with the rising costs of living and inflation.

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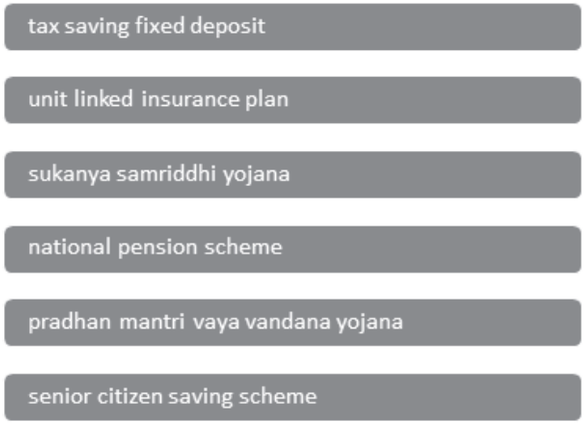
Different saving schemes are depicted in the flow chart given below:



1.7 Financial Discipline

Financial discipline involves control of money, inculcating the habit of saving and avoiding excessive expenditure. One should consider following steps to harness financial discipline in order to achieve our financial goal.

- Prepare a monthly spending budget and stick to it.
- Invest with a goal. Goals give direction and help you in selecting right product.
- Avoid loans for your desires. Better do a financial planning check before going in for a big purchase.
- Invest monthly to become regularise in your savings and this will also help you maintain consistency.
- Motivate yourself by visualising the goals and the end result for which you are working for.

1.8 Summary

In this chapter, we delve into the intricacies of financial planning and management. We discus about the importance of setting financial goals and creating a budget that aligns with those goals. We also discuss the various types of savings accounts, investment options, and retirement plans available. Furthermore, we explore the concept of time value of money, which is the idea that the value of money changes over time due

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to inflation and interest rates. This gives a brief outline about how to calculate the present and future value of your money, and how to use this knowledge to make informed financial decisions. In addition, this chapter provides you with useful tips on how to manage your spending effectively and achieve financial discipline. You also learn about different methods of budgeting, how to prioritize your expenses, and how to avoid common financial pitfalls. This chapter gives an understanding of financial planning and management and be equipped with the knowledge and skills necessary to make smart financial decisions that will help you achieve your goals.

1.9 Answers to In-Text Questions

1. *(a)* Future

2. *(a)* A present value

3. *(b)* 16.9%

4. *(b)* Index value

1.10 Self-Assessment Questions

1. Briefly explain about the time value of money.
2. Discuss the benefits of saving.
3. Explain the management of spending.
4. What is financial planning.

1.11 Reference

- Prof. Rajni. *Personal Financial Planning,* JSR Publishing House LLP.

1.12 Suggested Readings

- Halan, Monika. *Lets Talk Money: You've Worked Hard for It, Now Make It Work for You,* July 2018, Harper Business.
- Madura, J. (2016). *Personal Finance.* Delhi, India: Pearson.

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UNIT - II

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LESSON

1

Investment and Various Alternatives of Investment

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STRUCTURE

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1.1 Learning Objectives

- Understanding the concept of investment.
- Understanding the difference between Real and Financial Investment.
- Learning the features and objective of Investment.
- Understanding the difference between Investment and Speculation.
- Learning about the real estate market in India.
- Learning about the introduction to financial derivative.
- Understanding the classification of financial derivatives.
- Learning about the participants in derivative market.
- Understanding the comparison between forwards and futures.
- Understanding the option contracts.
- Understanding the comparison between futures and option
- Learning about the commodity market in India.
- Learning about the mutual funds.
- Understanding the mutual fund schemes.
- Understanding the latest development regarding mutual fund.

1.2 Introduction

Investment is the backbone of any economy. Saving of an economy must be channelised into productive investment to increase income level. The higher investment will have positive outcome like higher gross national income and economic growth. A good business environment is prerequisite for higher investment and for boasting the morale of investors. The primary investment is channelised through household savings. These are channelised into more productive investment to get higher income. An individual can put his money into savings account or invest in financial market product like equity, debt, mutual fund, or real estate. Therefore, an individual must be financial literate. This chapter will provide an insight to it.

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1.2.1 *Investment*

An investment is an asset or item acquired with the goal of generating income or appreciation. Appreciation refers to an increase in the value of an asset over time. When an individual purchases a good as an investment, the intent is not to consume the good but rather to use it in the future to create wealth. An investment always concerns the outlay of some asset today—time, money, or effort—in hopes of a greater payoff in the future than what was originally put in.

Investment does not always guarantee higher return but at times we also incur losses, investment environment is quite uncertain. We are in fact facing VUCA (volatility, uncertainty, complex, ambiguous) environment in context of investment

For example: in 1986 Microsoft Corporation offered its first stock and in 10 years it has grown 5000% on the other hand Worlds of Wonder also offered stock in the same year and 10 years later the company became defunct.

1.2.2 *Financial Investment v/s Real Investment*

Financial assets are tangible assets that you can quickly convert into cash. Stocks, bonds, cash reserves, bank deposits, trade receivables, notes receivable and shares are all common examples of financial assets. These are tangible or liquid assets that actually represent claims on the underlying value of the other types of assets such as real estate and properties. The main characteristic of a financial asset is that it has some type of monetary value, but that value is not tangible until it's exchanged for cash. Financial assets also have classifications such as equities and fixed income securities. Equities are shareholding rights to a business, and they are issued either as common shares or preferred stock. Unlike preferred stock, common shares carry voting rights. Fixed income securities are instruments of borrowing that earn fixed rates of interest over a specified duration. Public institutions issue some types of fixed income securities, while others are issued by private entities. Examples include treasury,

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municipal and corporate bonds. And when you invest in these assets it is referred to as financial investment.

The real assets definition refers to value-generating physical assets that your business owns. Common examples include land, buildings, inventory, precious metals, commodities, real estate, land and machinery. These physical assets are important for your business because they carry some type of intrinsic value. Intrinsic value is defined as the exact value of an asset as determined by factors such as location, function and acquisition costs. When you invest in this type of asset it is referred to as real investment.

1.2.3 *Objective of Investment*

A person makes investment in order to accomplish certain objective. People forego current consumption in order to avail higher return. Ultimate objective of investment is to minimize risk and maximize return. Nothing can be risk-free in this world, risk and return goes hand in hand, higher the risk higher will be return. Some of the objectives that are kept in mind before making an investment are as follows:

- **Capital Appreciation:** Capital appreciation is concerned with long-term growth and is most common in retirement plans where investments work for many years inside a qualified plan, such as a 401(k) or IRA. However, investing for capital appreciation is not limited to qualified retirement accounts. This objective involves holding stocks for many years and letting them grow within your portfolio while reinvesting dividends to purchase more shares. For example: Let's imagine that you make an initial $1,000 investment and add $100 monthly for the next 20 years. The total amount contributed during that period would be $25,000. However, if your investments generate an 8% return annually, compound interest will place your total savings at $59,575.31.

  Investors using the capital appreciation strategy are not concerned with day-to-day fluctuations. However, they keep a close eye on the fundamentals of the company for changes that could affect long-term growth. A typical strategy involves regular purchases.

- **Current Income:** The current income involves investing in stocks that pay a consistent and high dividend, as well as some top-quality

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real estate investment trusts (REITs) and highly-rated bonds because these products produce regular current income. People concerned with current income should consider investing in blue-chip stocks, which are shares in large, prominent corporations that have shown a long history of growth and consistent dividend pay outs**.**

Many people who focus on current income are retired and use the income for living expenses. In contrast, others take advantage of a lump sum of capital to create an income stream that never touches the principal, yet provides cash for certain current needs—such as college tuition.

- **Capital Preservation:** Capital preservation is often associated with retired or nearly retired people who want to make sure they don›t outlive their money. For this investor, safety is critical—even if it involves giving up return potential for security. The logic for this safety is clear: A retiree who loses money through unwise investments is unlikely to get a chance to replace it. Younger investors can have a stock-dominated portfolio because they have many years to recover from any losses that may occur due to market changes or economic downturns. This isn't the case for older individuals. Investors who want capital preservation tend to invest in bank CDs, U.S. Treasury issues, and savings accounts because they offer modest returns but possess much less risk than stocks.
- **Speculation:** The speculator is not a true investor, but a trader who enjoys jumping in and out of stocks for capital gain. Speculators or traders are interested in quick profits and use advanced trading techniques like shorting stocks, trading on the margin, options, and other special methods. Speculators have no real attachment to the companies they trade, and they may not know much about the underlying business except that the stock is volatile and ripe for a quick profit. Many people try speculating in the stock market with the misguided goal of getting rich, and the overwhelming majority fail at doing so. If you want to try your hand, make sure you are using money you can afford to lose without jeopardizing your livelihood or retirement ambitions. It's easy to get a false sense of competence after initial success, so thoroughly understand

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the real possibilities of losing your investment. However excessive speculation is bad as it takes away from their true fundamental values. Therefore, SEBI keeps check on excessive speculation under the SEBI Act 1992.

Speculation vs Investment

S.No.	Basis of Difference	Investment	Speculation
1.	Time horizon	Long, generally exceeding one year.	Short may be as short as intra day
2.	Risk	Low to moderate	Very high
3.	Funds	Here own funds are used for investment.	Speculator also borrow funds and/or do margin trading.
4.	Return(expected)	Low to moderate and consistent	Very high and inconsistent
5.	Income	Dividend, interest etc.	Change in price of asset
6.	Source of information	Fundamental factor of the company is analysed	Herd instincts, inside information

1.3 Mutual Funds

Mutual fund is financial intermediary that collects funds from individual investor and invest those funds in wide range of assets or securities. The individual investor has claim to the portfolio established by the mutual fund in the proportion of the amount invested, thereby becoming a part owner of assets of mutual funds. The fund employs professional experts and investment consultants who invest money so collected in different stocks, bonds or other securities so as to meet the objective of fund. The mutual fund manager charges fees from unit holder for administering the fund and manging the portfolio of investment. In India the mutual fund is required to get registered with securities and exchange board of India (SEBI).

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1.3.1 *Establishment of Mutual Funds in India*

SEBI (Mutual Fund) Regulation,1996 defines mutual fund as under:

Mutual fund means fund established in the form of trust to raise monies through the sale of units to the public or section of the public under one or more securities including money market instruments or real estate assets. Thus, mutual fund is established in the form of trust and this trust has following major constituents:

- **Sponsor:** It means any person who, acting alone or in combination with another body corporate, establishes a mutual fund. Sponsor is similar to promoter of a company.
- **Board of Trustees:** The board of trustees of the mutual fund holds its property for the benefit of unit holders. The board is vested with general power of superintendence and direction over asset management company. They are required to monitor the performance of mutual fund and ensure SEBI regulation by them. SEBI regulations require that at least two-thirds of trustee company must be independent i.e., that is they should not be associated with sponsor.
- **Asset Management Company (AMC):** AMC is a company established under the Company's Act, 2013 and it is required approval of SEBI to be asset management company of mutual fund. SEBI requires that 50% of the directors of AMC must be independent
- **Custodian:** Custodian is required to be registered with SEBI. Custodian is appointed to keep custody of the securities or gold and gold related instrument or other related instrument of mutual fund and provide such other custodial services as may be authorised by the board of trustees.

1.3.2 *Advantages of investing in Mutual Fund*

- **Professional Management:** The service of highly experienced and skilled professionals is backed up by a dedicated investment research team which first analyses the performance and prospects of companies and then invest accordingly.

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- **Diversification:** Mutual fund invests in vide range of companies of different industries and sectors. Thus, investor enjoy the benefit of diversification with less money and less risk. However, it must be noted that sectoral funds such as IT funds, pharma funds etc. may not provide the benefit of diversification as all the stock in the portfolio of sectoral schemes belong to a particular sector.
- **Convenient Administration:** It reduces the amount of paper work. It helps investor to avoid many problem-like bad deliveries, delayed payment and unnecessary follow up with brokers and companies.
- **Return Potential:** Mutual fund may provide higher returns in medium to long term ass they invest in wide range of securities which is not possible to attain by small investor.
- **Low Costs:** Mutual fund is less expensive way of investing in comparison with direct investing. Indirect investing via mutual funds offers the scale in brokerage, custodial and other fees. All these benefits translate into low cost for investor.
- **Liquidity:** In open ended schemes, investor can get the money back instantly at the prevailing NAV. Also, in close – ended schemes, investors can sell their unit on stock exchange at the prevailing market price.
- **Transparency:** Investor regularly gets information about the value of their investment.

1.3.3 *Limitation of investing in Mutual Fund*

- **No Direct Choice of Securities:** Mutual fund represents indirect mode of investment; hence investor do not have a say in securities selection. They cannot select a security in which they wish to invest.
- **Relying on Mutual Fund Manager's Performance:** Investor has to rely on fund manager for receiving any earning made by the fund. Further, if manager's pay is linked with the fund's performance, then in the zest of earning more, he may go for short-term goals ignoring the long-term. There is always a possibility that mutual fund deviate from its investment objective and serve the interest of its management.

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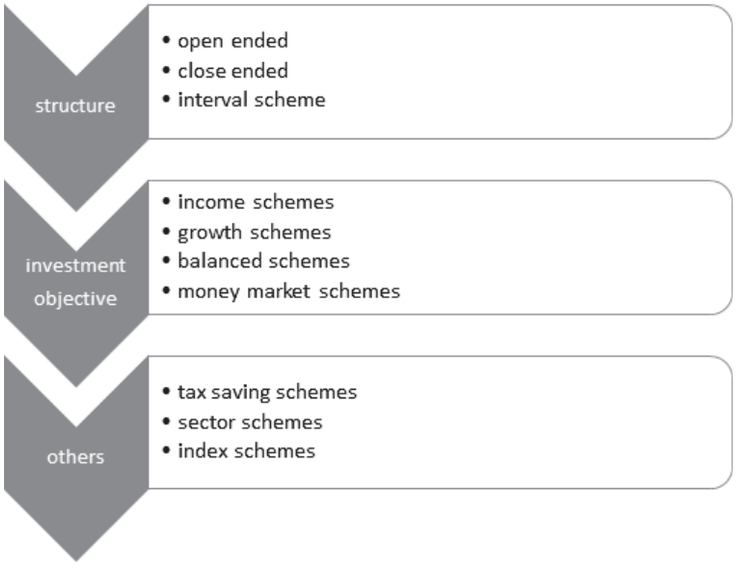
- **High Management Fee and Other Expenses:** All mutual fund does not run efficiently. Mutual funds at times charge management fee so as to pay high compensation to the fund manager.
- **Lock-in Period:** Many mutual funds scheme especially tax saving schemes have strict lock-in period. The mutual fund units cannot be redeemed during lock-in period. Hence during lock-in period, the units of mutual funds become illiquid.

1.3.4 *Mutual Fund Schemes*



- **Open Ended Mutual Fund:** It allows entry and exit of investor at any point of time. The capital of fund is unlimited and there is no fixed maturity date. An investor can buy or sell unit at any time.
- **Close Ended Mutual Fund:** It has fixed maturity period and the investor can only invest only during the initial launch period known as the IPO period. The investor can make an exit from scheme by selling his units in the secondary market or at the end of maturity period or during repurchase period.
- **Interval Funds:** These are hybrid fund and combine the features of open ended and close ended schemes. These schemes are open for purchase and redemption during pre-specified intervals (monthly, quarterly, annually etc. at NAV related prices.

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- **Load Funds:** Load in context of mutual fund means charge or fee. A load fund charges a percentage of NAV as entry or exit fee. The charge ranges from 4% to 8% of the amount invested or it could be a flat fee. For example, if you invest 1000 into a 5% load fund, the actual investment would be 950 as Rs. 50 will be charged going to the company.
- **No Load Fund:** Under this category there is no charge for entry or exit.
- **Domestic Fund:** There fund is open for investment in the company where the mutual fund is registered. Most of the mutual fund in India are domestic funds.
- **Off-shore Mutual Fund:** These are open for subscription by foreign investors only. These fund channelise foreign investment in mutual fund in a country, at present number of off shore fund launched by mutual funds in India. For example - ICICI Prudential US blue chip equity fund.
- **Growth Fund:** Scheme which offers capital appreciation and dividend opportunity to the investor. The major investment in such fund is in equity. The main idea behind such fund is to provide capital gain rather than regular income.
- **Income Fund:** These funds promise a regular income to its investors. Majority of funds are channelised towards fixed income securities such as debentures, government securities and other debt instruments. This is relatively low risk-low return investment avenue. This scheme is ideal for investor seeking capital stability and regular income
- **Balanced Fund:** The combination of growth fund and balanced fund. A balance fund invests about 50:50 in equity shares and bonds. They invest in shares for growth and invest in bonds for regular income. These are ideal for investors who are looking for a regular income source and moderate growth over a period of time.
- **Gilt Funds:** Those funds which invest exclusively in government securities; therefore, these funds provide low return at a very low risk. They are preferred by risk averse and conservative investors

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who wish to invest in the shadow of secure government bonds. Almost every mutual fund operating in India has launched a gilt fund. SBI magnum gilt is a gilt fund operating in India.

- **Money Market Funds:** These funds provide easy liquidity and moderate income. These schemes invest in short-term debt i.e., money market instrument and seek to provide reasonable returns for the investors. Investment in money market instrument such as treasury bills, certificate of deposit, commercial paper and inter-bank money.
- **Tax saving Schemes [or Equity Linked Savings Scheme (ELSS)]:** These schemes offer tax benefits to its investors under specific provision (section 80c) of the Income-tax Act 1969. This helps the investor in reducing tax liability. These also invest in equities, thus offer long term growth opportunities. However, these schemes have 3-year lock-in period.
- **Index Schemes:** Index funds or index schemes attempt to replicate the performance of benchmark market index such as BSE SENSEX OR NSE NIFTY. The collected funds are allocated on the basis of proportionate weight of different securities as stated on the benchmark index and earn the same return as earned by market.
- **Sectoral Funds:** These funds invest exclusively in the stock of companies belonging to a specific set of companies or sector. The idea is to reap the benefit of the sector or industry cycle. If industries are going through good times these schemes offer good returns to the investors.
- **Ethical Fund:** Ethical fund make investment on the basis of certain ethics or values especially shariah value. These funds used a screening criterion to decide about a company or stock which are suitable for investment. There are two ethical funds operating in India. They are TATA ETHICAL FUND TAURAS ETHICAL FUND. The investment in this fund is based on fundamental of shariah or shariat, which are guided by Islamic investment philosophy which invests in companies based on certain screening norms.

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1.4 Latest Developments regarding Mutual Funds

1.4.1 *Exchange Traded Fund*

ETFs are baskets of securities that are traded on a stock exchange like individual stock. They track an index and money is invested in securities of index in same proportion, thus has similarity with index mutual fund. However, unlike the mutual fund's ETFs can be bought and sold throughout the trading day like any stock. These funds charge lower expense then an index mutual fund but investor has to pay the brokerage to buy and sell ETF units. The first ETF in India "Nifty BeEs (nifty benchmark exchange traded scheme)" based on S&P CNX Nifty was launched in January 2002 by benchmark mutual fund.

1.4.1.1 Advantages of ETFs

ETFs provide exposure to an index or a basket of securities that trade on exchange like single stock. Following are the advantages of ETFs.

- While redemption of index fund takes place at a fixed NAV price (usually end of day), ETFs offer the convenience of intra-day purchase and sale on the exchange, to take advantage of prevailing price, which is close to actual NAV of the scheme at any point in time.
- They are low-cost investment options than traditional funds.
- Since an ETF is listed on an exchange, costs of distribution is lower and the reach is wider
- ETFs protect long-term investors from inflows and outflows of short-term investor. This is because the fund does not incur extra cost for buying /selling the index shares due to frequent subscription and redemption.

1.4.2 *Funds of Funds*

A fund of funds scheme means scheme which invests in other mutual fund schemes. In other words, a scheme where the subscription proceeds are invested in other mutual funds, instead of investing in equity or debt instruments. Since these funds invest in other mutual funds,

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they offer and achieve greater diversification than traditional mutual funds. Expense and fee for such fund is higher as they need to pay to underlying fund.

1.4.3 *Systematic Investment Plan*

A systematic investment plan or SIP is a smart mode for investing money in mutual funds. SIP allows an investor to invest a certain pre-determined amount at a regular interval (weekly, monthly, quarterly, etc). An SIP is planned approach towards investment and helps to inculcate the habit of saving and build wealth for future. SIPs are ideal for retail investor who do not have the resources to pursue active investments.

Following are the benefits of SIP.

- **Rupee-cost Averaging:** An investor invests a fixed amount irrespective of NAV, so he gets fewer units when NAV is higher and more units when NAV is lower. This smooth out the market ups and downs thereby reducing the risk of investment when markets are volatile. Thus, SIP allows its investors to achieve.
- **Power of Compounding:** Albert Einstein once said "compound interest is the eighth wonder of the world. He who understand it, earns it… he who doesn't ... pays it ... the sooner you start investing, the more time your money has to grow".
- **Disciplined Saving:** When investment is made through SIP, investor commits to himself to save regularly. This leads to discipline in saving and investment.
- **Flexibility:** While it is preferred to invest in SIP for a long term, there is no compulsion. Investor can discontinue the plan at any time. Moreover, one can also increase/decrease the investment amount.
- **Long-term gains:** Due to rupee – cost averaging and the power of compounding SIPs have the potential to deliver attractive return over long investment horizon.
- **Convenience**: SIP is a hassle – free mode of investment. One can issue a standing instruction to his bank to facilitate auto debits from bank account.

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1.4.4 *Systematic Withdrawal Plans*

Systematic withdrawal plan or SWP Permit the investor to make an investment at one go and systematically withdraw at periodic interval, at the same time permitting the balance amount to remain invested. Withdrawal can be done either on monthly basis or on a quarterly basis, based on need and investment goal of investor. SWP includes convenient pay out options and has several tax advantages. Under SWP, neither tax is deducted nor is dividend distribution tax applicable. Moreover, there is no entry or exit loads in SWP.

1.5 Financial Derivative

Derivative are financial instrument whose value depends upon or derived from some underlying asset. The underlying asset can be real asset such as commodities, gold etc. or financial asset such as index, interest rate etc. A derivative does not have its own physical existence. It emerges out of contract between buyer and seller of derivative instrument. Its value depends upon the value of underlying asset. Hence return from derivative instrument depends upon the return from underlying assets. Nowadays we find derivative based on other derivatives. The derivative itself is merely a contract between two parties.

Securities Contracts (Regulation) Act, 1956 defines derivative as under:

Derivative includes-

(a) 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

(b) A contract which derives its value from the prices or index of prices, of underlying securities

1.5.1 *Classification of Derivative*

Derivative can be classified into broader category based upon underlying asset, nature of derivative contract or the trading of derivative contract.

- **Commodity Derivative or Financial Derivative:** Derivative can be classified into financial derivative or commodity derivative based

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upon the underlying asset. In case of commodity derivative, the underlying asset is physical or real asset such as wheat, rice, jute, pulses, or even metal such as gold, silver, copper, etc.

In case of financial derivative, the underlying asset is financial asset such as equity share, bonds, debenture, stock index etc. The financial derivative is more popular around the world. The commodity derivative is traded on multi commodity exchange (MCX) and the national commodities and derivatives exchange (NCDEX) In India.

Financial derivatives are traded on BSE, NSE, United stock exchange (USE) and MCX-SX in India.

- **Elementary Derivatives and Complex Derivatives:** Elementary derivative are those derivatives which are simple and easily understandable. Such derivative are futures and options. Complex derivative has complex provisions and features which make them difficult to understand by investor. Complex derivatives include exotic options, synthetic futures and options.
- **Exchange Traded Derivatives and Over-the-Counter (OTC) Derivative:** Derivative may be traded on exchange or they may be privately traded over the counter (OTC). exchange traded derivative are standardised derivative product traded as per rules and regulations of exchanges of the exchange. For example, stock index future, stock index options and stock futures. OTC derivative are private bilateral contracts between two parties and are non-standardised. These derivatives are specific to the needs of parties involved. For example, forward contracts in foreign exchange market are OTC derivatives.

1.5.2 *Participants (or Trader) in Derivatives Market*

There are many parties in derivative market and make it liquid and smooth market. Derivatives were initially developed to provide hedging against price risk. There are three kinds of traders in derivative market are - hedgers, speculators and arbitrageurs.

Hedgers: Investors having long position in market are exposed to price risk i.e., the risk that asset prices will go down. On the other hand, the investor having short position in asset are exposed to price risk i.e., the price of asset may go up. Hence, they want to hedge their position against

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price risk. Hedger use financial derivatives to reduce or eliminate the risk associated with price of an asset. In hedging risk is actually transferred from hedger to the speculator. Options are widely used by hedgers to reduce their risk exposure.

Speculators: Speculators use derivative to get extra leverage and earn quick gain on the basis of future movements in price of asset. They can increase both the potential gain or potential losses by usage of derivatives in a speculative venture. Futures are widely used by speculator. If a speculator expects that stock price will go up, he buys futures and vice versa.

Arbitrageurs: Arbitrageurs are those who take advantage of any discrepancy in pricing and exploit it to bring equilibrium. They take advantage of price discrepancy in two markets.

1.5.3 *Type of Financial Derivative*

Financial derivatives are those whose underlying asset is the financial asset or instrument such as index, stock, bonds, currency etc. Financial derivatives are generally classified as forward, futures, options and swaps.

1.5.3.1 Forwards

A forward contract is a private bilateral agreement between two parties to buy and sell a specified asset at a specified price on specified future date.

For example, Mr. X grows 6000 kg of wheat. He can sell this wheat at any price in future but he has an option of getting the price fixed now by selling a forward contract that obligate him to sell 6000kg of wheat to Ashirwaad Atta after harvest for a fixed or specified price.

By locking price now, he can eliminate the risk of falling price in near future. But if the prices rise in near future then he stands at loss. Here Mr. X played safe and secure himself against the falling prices.

Features of Forward Contract

- **Customised:** Each contract is customised designed and parties may agree upon the contract size, expiration date, the asset type, quality etc.
- **Underlying Asset:** Underlying asset can be a stock, bond, commodity, foreign currency, interest rate or any combination thereof.

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- **Symmetrical Rights and Obligation:** both the parties to a forward contract have equal rights and obligations. The buyer is obliged to buy and seller is obliged to sell at maturity. They can also enforce each other to perform the contract.
- **Non-Regulated Market:** Forward contract is usually made by private and large non-regulated consisting of banks, government, corporations and investment banks. It is not regulated by exchange.
- **Counter Party Risk or Default Risk:** This is risk of non-performance of obligation by either party as regards payment (buyer) or delivery (seller). Being a private contract, there are chance of default or counter party risk.
- **Held Till Maturity:** The contract is generally held till maturity. A forward contract cannot be squared up at the wish of one party. It can be cancelled only with the consent of one party.
- **Liquidity:** Liquidation is low as contracts are customised catering to needs of parties involved. They are not traded on exchange
- **Settlement of Contract:** Settlement of derivative can be in two ways- through delivery or through cash settlement. Most of forward contracts are settled through delivery.

1.5.3.2 Futures

A future is a redefined or modified forward contract. A futures contract is a contract to buy or sell a specified asset (physical or financial asset) at a specified price at a specified date. It is traded on an exchange and it is a standardised contract

Features of Future Contract

- **Standardised Contract:** Terms and conditions of future contract are standardised. They are specified by exchange where they are traded.
- **Exchange Based Trading:** Trading takes place on formal exchange which provides a place to engage in these transactions and sets a mechanism for parties to trade in these contracts.
- **No Default Risk**: The clearing house protects the parties from default by requiring the parties to deposit margin and settle gain or loss (mark to market their positions) on daily basis.

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- **Liquidity**: Future contracts are highly liquid contracts as they are continuously traded on exchange. Any party can square off position any time.
- **Before Maturity Settlement Possible:** an investor can offset his future position by engaging in an opposite transaction before the stipulated maturity of contract.
- **Margin Requirement:** All the future contracts have margin requirements. Margin money is required to be deposited with exchange by both the buyer as well as seller at the time of entering into contract. There are two types of margins – initial margin and maintenance margin. The margin account is settled on daily basis i.e., mark-to-market settlement. If margin amount falls below maintenance margin, then the variable call is made to replenish the margin amount to the level of initial margin.
- **Settlement Mechanism:** Settlement of derivative contract can be in two ways – through delivery or cash settlement.

Future Contract Terminology

- **Spot Price:** The price at which underlying asset are traded in the spot market.
- **Future Price:** The price which is agreed upon at the time of future contract for delivery at specified date.
- **Contract Cycle:** It is the period over which the contract trades on the exchange.
- **Expiry Date:** It is the last date on which the finale settlement takes place. Last Thursday of every month is expiry date for futures contracts if that day is holiday, then previous working day.
- **Contract Size or Lot Size:** The quantity of asset that has to be delivered under one contract.
- **Price Steps:** The minimum difference between two price quotes.
- **Price Band:** The minimum and maximum price change allowed in a day is termed as price bands. It is generally ±10%. There are no day minimum/maximum price range applicable for CNX nifty futures contracts.

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Comparison between Forwards and Futures

Basis	Forwards	Futures
Standardisation of contract	Forward contracts are private agreements between two parties and are non-standardised.	Future contracts are exchange traded and standardised contracts are set in advance.
Trading and regulation	Forwards are not traded on stock exchange. They are not regulated.	Futures are traded on stock exchange and are regulated.
Counter party default risk	There is always a possibility that party may default.	Clearing houses guarantee the transaction, thus minimising the default risk.
Liquidity	Liquidity is low, as contracts are tailor – made contracts catering to the needs of parties involved. Further, they are not easily accessible to other market participants.	Liquidity is high as contracts are standardised exchange- traded contracts.
Price discovery	Price discovery is not efficient as markets are scattered.	Price discovery is efficient as markets are centralized.
Settlement	Settlement of the forward contract occurs at the end of the contract i.e., settlement date only.	Future contracts are marked – to market on daily basis which means that they are settled day by day until the end of the contract.
Hedging/speculation	Forward contracts are popular among hedgers.	Futures are popular among speculators.
Margin requirement	There is no requirement for depositing margin money by either party.	Both the buyer and seller have to deposit margin money with the exchange.
Example	Foreign currency market in India.	Commodities futures, index futures and individual stock futures in India.

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1.5.3.3 Options

An option is a contract which gives the buyer (holder) a right (but not obligation) to buy or sell a specified asset at specified price (exercise price) on or before a specified future date. An option is a contract sold by one party (option writer) to another party (option holder). The holder of option can exercise the option at a specified price or may allow it to lapse.

This specified price is also known as strike price or exercise. The option contract gives right to buyer. The seller has obligation but no right. If the option holder exercises the option, then the writer or seller is obliged to perform. When option holder has right to sell, then option writer has obligation to buy. The option buyer has a privilege position. Since the buyer has right but no obligation, he has to pay some price, known as option premium to seller or writer of option. No right comes free of cost.

Comparison between Futures and Options

Basis	Futures	Options
Right	Both the parties have right to ask for performance of the contract.	Only the buyer (or holder) of the options has a right to buy or sell. Sellers do not have any right.
Obligation	Both parties are obliged to perform the contract.	Only the seller is obliged to perform the contract.
Premium payment	No premium is paid by either party.	The buyer pays the options premium to seller.
Margin requirement	Both parties have to deposit some initial margin as per the requirement.	Only the option writer has to deposit initial margin with the exchanges as only seller is exposed to price risk. No margin is to be deposited by the option holder, as he has right but no obligation.

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Basis	Futures	Options
Profit and loss potential	The gain to buyer is loss to the seller and the loss to the buyer is gain to the seller. There is unlimited gain and loss possibility for both the parties.	The option holder's loss is limited (to the extend of premium paid), but has potential for upside profits. The seller's gain is limited to the amount of options premium but he is exposed to all the downside risk.
Realisation of profit/ losses	Profit loss are 'marked to market' daily, meaning the change in the value of the position is attributed to the accounts of the parties at the end of every trading day-but a future holder can realise profits/ losses by going to the market and taking the opposite position.	The gain of option can be realised in following ways: 1. Exercising the option at expiry. 2. Going to market and taking the opposite position. 3. Waiting until expiry and collecting the difference between asset price and the strike price.

1.5.3.3.1 Types of Option

(a) **Call Option:** An option contract that gives its holder the 'right to buy' a specified asset at a specified price on or before a specified future date, is termed as call option. The seller has obligation to sell. A call option is bought when buyer has a rise in underlying asset's price. In such as the holder of the call option can buy the stock or asset at the exercise price which is lower than the market price.

For example: Assume current market price of SBI share is 120. Mr A expects that the price of share will go up, hence he buys a call option for SBI share at a price of 125. The expiry date is 2 months, and after two months the market price of SBI share is more than 125, say 130, then Mr A will exercise option at price of 125 and make a gain of Rs. 5.

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(b) **Put Option:** A put option provides a right to sell. An option contract that gives its holder the 'right to sell' a specified asset at a specified price on or before a specified future date, is termed as put option. The seller has the obligation to buy. A put option is bought when the buyer of the put option fears a decline in underlying asset's price. A put option is exercised when the stock price is lower than the exercise price.

For example: let us assume current SBI shares is Rs. 120. Mr. A assumes that current price of SBI shares is Rs. 119. Mr A expects that price of SBI share will go down, hence he buys a put option on SBI at exercise price of Rs. 120. The expiration date is after 1 month. Further assume that option can be exercised only on the expiry date and note before that. Now on expiration date the market price of SBI is less than 120 say 117 then Mr A will exercise option.

1.5.3.3.2 Style of Option

(a) **European Option:** A European style option can only be exercised on expiration date only**.**

(b) **American Option:** An American option can be exercised at any time before expiration or on the expiration date.

IN-TEXT QUESTIONS

1. What is a financial derivative?

(a) A physical commodity

(b) A contract whose value is derived from an underlying asset

(c) A type of stock

(d) A government bond

2. Which of the following is a characteristic of a forward contract?

(a) Traded on organized exchanges

(b) Standardized terms

(c) Customizable terms between the parties

(d) Settled daily

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3. What can be a common underlying asset for futures contracts from the following?

(a) Real estate

(b) Foreign exchange

(c) Antique collectibles

(d) Rare gemstones

4. What is the primary purpose of using financial derivatives?

(a) To transfer risk

(b) To eliminate profits

(c) To increase volatility

(d) To encourage speculation

5. Which party has the right, but not the obligation, to buy or sell an underlying asset at a specified price in an options contract?

(a) Buyer of the option

(b) Seller of the option

(c) Both parties

(d) Government regulator

6. What is the expiration date of a future contract?

(a) Set by the government

(b) Determined by the exchange

(c) Decided by the buyer

(d) Anytime the parties agree

7. In options trading, what is the premium?

(a) The maximum loss

(b) The upfront cost of the option

(c) The underlying asset

(d) The strike price

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8. How do options differ from futures contracts?

(a) Options involve buying or selling of rights to one party only, while in future contract both parties have the obligation to complete the contract.

(b) Options contracts have standardized terms, while futures contracts are customizable.

(c) Options are traded on organized exchanges, while futures are traded over-the-counter.

(d) Options have no expiration date, while futures contracts do.

1.6 Commodity Market in India

A commodity market is a place for investors to trade in commodities like precious metals, crude oil, natural gas, energy, and spices, among others. Currently, the Forward Markets Commission allows futures trading in India for around 120 commodities. Trading in commodities is great for investors seeking to diversify their portfolio, as these investments often help with inflation.

India has 22 commodity exchanges that have been set up under the Forward Markets Commission. The following commodity exchanges are popular choices for trading in India-

1. Multi Commodity Exchange of India (MCX)

2. Indian Commodity Exchange (ICEX)

3. National Multi Commodity Exchange of India (NMCE)

4. National Commodity and Derivative Exchange (NCDEX)

1.6.1 *Commodity Future Contracts*

The 'commodity futures contract' is the assurance that a trader will buy or sell a certain amount of their commodity at a pre-decided rate at a certain time. When a trader purchases a futures contract, they are not required to pay the whole price of the commodity. Instead, they can pay a margin of the cost which is a predetermined percentage of the original

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market price. Lower margins mean one can buy a futures contract for a large amount of a precious metal like gold by spending only a fraction of the original cost.

1.6.2 *How Commodity Market Works*

Suppose you bought a gold futures contract on MCX at Rs. 72,000 for every 100 gm. Gold's margin is 3.5% on MCX. So, you will be paying Rs. 2,520 for your gold. Suppose that the following day, the cost of gold increases to Rs. 73,000 per 100 gm. Rs. 1,000 will be credited to the bank account you have linked to the commodity market. Assume that the day-after, it drops to Rs. 72,500. Accordingly, Rs. 500 will be debited from your bank account.

1.6.3 *Type of Trading Strategies in Commodity Market*

There are two type of trading strategies in commodity market in India.

- Speculator and hedger

Speculator: These dealers constantly examine the costs of commodities in addition to forecasting the expected price changes. For instance, if a speculator predicts that the price of gold was to increase, they purchase the commodity futures contract. If the cost of gold subsequently grows, the trader will then sell the contract for a higher price than they bought.

If the speculator anticipates that the rate of gold will decrease, they sell their futures contract. Once the prices lower, speculators buy the contract again for a lower price than what they sold it for. This is how speculators make profits in both cases of market change.

Hedgers: Those who produce or manufacture commodities typically 'hedge their risk' by trading in a commodity futures market. For instance, if the prices of wheat fall during the harvest period, the farmer will face a loss. The farmer can hedge this risk by entering a futures contract. In this case, when the price of his produce falls in his local market, the farmer can offset this loss by making profits through the futures market.

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The opposite situation is when the cost of wheat increases during the harvest period. At this time, the farmer would encounter losses in the futures market. However, these losses can be compensated for by selling his produce for a higher cost in his local market.

1.7 Real Estate

Real estate is the land along with any permanent improvements attached to the land, whether natural or man-made—including water, trees, minerals, buildings, homes, fences, and bridges. Real estate is a form of real property. It differs from personal property, which are things not permanently attached to the land, such as vehicles, boats, jewellery, furniture, and farm equipment.

1.7.1 *Difference between Land, Real Estate and Real Property*

- **Land:** Refers to the earth's surface down to the centre of the earth and upward to the airspace above, including the trees, minerals, and water.
- **Real Estate:** is the land, plus any permanent man-made additions, such as houses and other buildings.
- **Real Property:** One of the two main classifications of property—is the interests, benefits and rights inherent in the ownership of real estate.

1.7.2 *Physical Characteristics of Real Estate*

- **Immobility:** While some parts of land are removable and the topography can be altered, the geographic location of any parcel of land can never be changed.
- **Indestructibility:** Land is durable and indestructible (permanent).
- **Uniqueness:** No two parcels of land can be exactly the same. Even though they may share similarities, every parcel differs geographically.

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1.7.3 *Economic Characteristics of Real Estate*

- **Scarcity:** While land isn't considered rare, the total supply is fixed.
- **Improvements:** Any additions or changes to the land or a building that affects the property's value is called an improvement. Improvements of a private nature (such as homes and fences) are referred to as improvements *on* the land. Improvements of a public nature (e.g., sidewalks and sewer systems) are called improvements *to* the land.
- **Permanence of Investment:** Once land is improved, the total capital and labour used to build the improvement represent a sizable fixed investment. Even though a building can be razed, improvements like drainage, electricity, water, and sewer systems tend to be permanent because they can't be removed (or replaced) economically.
- **Location or Area Preference:** Location refers to people's choices and tastes regarding a given area, based on factors like convenience, reputation, and history. Location is one of the most important economic characteristics of land (thus the saying, "location, location, location!").

1.7.4 *Type of Real Estates*

- **Residential Real Estate:** Any property used for residential purposes. Examples include single-family homes, condos, cooperatives, duplexes, townhouses, and multifamily residences with fewer than five individual units.
- **Commercial Real Estate:** Any property used exclusively for business purposes, such as apartment complexes, gas stations, grocery stores, hospitals, hotels, offices, parking facilities, restaurants, shopping centres, stores, and theatres.
- **Industrial Real Estate:** Any property used for manufacturing, production, distribution, storage, and research and development. Examples include factories, power plants, and warehouses.
- **Land:** Includes undeveloped property, vacant land, and agricultural land (farms, orchards, ranches, and timberland).

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- **Special Purpose:** Property used by the public, such as cemeteries, government buildings, libraries, parks, places of worship, and schools.

1.7.5 *Important Points to be Considered while Investing in Real Estate in India*

- Check for Real Estate Regulatory Authority (RERA) registration of the housing project. These are comparatively cheaper housing opportunities. Verify the RERA number and approvals online or through municipal authorities. However, before zeroing down compare monthly maintenance charges, amenities like security, social clubs), electricity supply, water charges, etc. You should also compare the market prices of other ready-to-move-in or under-construction projects, along with the brand value of the developer is also important for future valuation as well as the infrastructure of the building. Know that poor construction could cost you extra in the future.
- Before you start looking out, establish a budget. Experts say, keep it within your loan re-payment capacity so that you do not hamper your essential needs. Brokers usually persuade new investors to spend more and speculate higher returns, however, keep it within your limits.
- Have a long-term perspective, while choosing a location. For instance, if your investment is in a residential space, proximity to amenities like bus stops, malls, hospital, schools, should be looked at, as that will either benefit your family or increase your prospects of rental income. However, if you are investing in commercial spaces, proximity to airports, ports, warehouses, etc. will be beneficial. Experts suggest the location of a property is vital for the re-sale value that the investor will receive in the future.
- Before you invest in real estate, be clear about what you want to do with the property – earn rental income, own use, or investment re-sale value. Having these points clear will help you judge a property better. Depending on your purposes, you need to calculate return on investment over the short or long-term.

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- For first-time home buyers, there are attractive housing loan incentives offered by the government. House owners get interest rate benefits under the PM Awas Yojana. Additionally, there are tax benefits on home loan interest rate under Section 24 and on principal payment under Section 80C along with payments towards registration and stamp duty.
- Again, compare interest rates and home loan features before deciding on the lender. The PMAY benefits are offered across all major banks. Enquire about the transfer of loan options, as you could transfer your loan if you get a cheaper interest rate at another bank in the future.

1.8 Gold Bond

Sovereign Gold Bonds, or SGBs, are government securities that are denominated in grams of gold. These bonds proffer investors an alternative to holding physical gold, thereby serving as a substitute for the same. The Reserve Bank of India issues these bonds on behalf of the Government of India, and investors must render payment of the issue price in cash. The bonds are then redeemed in cash upon maturity. Investors are indemnified against fluctuations in the market, as they are offered the ongoing market price at the time of redemption or premature redemption. Moreover, SGBs eliminate the risks and costs of storage associated with physical gold. Investors are assured of the market value of gold at the time of maturity and periodical interest. SGBs are free from issues such as making charges and purity, which are associated with gold in jewellery form. The bonds are held in the books of the RBI or in demat form, which eliminates the risk of loss of scrip, etc. While there may be a risk of capital loss if the market price of gold declines, the investor does not lose in terms of the units of gold they have paid for.

Regarding the eligibility for investment in SGBs: Persons who are residents in India, as defined under the Foreign Exchange Management Act, 1999, are eligible to invest in SGBs. Eligible investors include individuals, trusts, Hindu Undivided Families, charitable institutions, universities. Individual investors with a subsequent change in residential status from resident to non-resident may continue to hold SGBs till maturity.

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Advantages of Investment in Gold Bonds

1. **Regular Income:** Gold Bonds offer a fixed rate of return of 2.5% per annum, which is paid out to investors every six months. This makes it a great investment option for those who want to earn a regular income from their gold holdings.
2. **Safe and Secure:** Gold Bonds are issued by the Reserve Bank of India (RBI), which is the central bank of the country. The bonds are held in a dematerialized form, which means there is no risk of theft or loss of physical gold. This makes it a safe and secure investment option.
3. **Better Returns:** Investing in Gold Bonds offers better returns as compared to physical gold, as the bonds also earn interest on the investment.
4. **Liquidity:** Gold Bonds are tradable on the stock exchanges, which means investors can sell them before the maturity period if they wish to. This provides investors with a high degree of liquidity and flexibility.
5. **Tax Benefits:** If an investor holds the bonds till maturity, they are exempt from capital gains tax. In addition, investors who apply for the bonds online and pay through digital modes of payment can avail of an additional interest rate of 0.5% per annum.
6. **Diversification:** Investing in Gold Bonds is a great way to diversify one's investment portfolio, as gold is considered a safe-haven asset and can help in reducing the overall risk of the portfolio.

Overall, investing in Gold Bonds is a great option for those who want to earn a regular income from their gold holdings in a safe and secure manner. It offers several advantages over physical gold and is an excellent way to diversify one's investment portfolio. While investing in Gold Bonds in India has several advantages, there are also a few disadvantages that investors should be aware of.

Disadvantages of Investment in Gold Bonds

1. **Fixed Tenure:** Gold Bonds have a fixed tenure of 8 years, which means that investors cannot redeem the bonds before the maturity period. This lack of flexibility can be a disadvantage for some investors who may need the funds before the maturity period.

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2. **Annual Interest Rate:** While the interest rate offered on Gold Bonds is fixed at 2.5% per annum, it may not be sufficient to beat inflation. This means that investors may not be able to generate substantial returns on their investment, especially if the inflation rate is high.
3. **Market Fluctuations:** The value of gold is subject to market fluctuations, which means that the value of Gold Bonds may also fluctuate based on the prevailing market conditions. This can be a disadvantage for investors who are looking for stable returns on their investment.
4. **Lack of Physical Possession:** While Gold Bonds offer a safe and secure way to invest in gold, investors do not have physical possession of the gold. This can be a disadvantage for investors who prefer to hold physical gold as an investment.
5. **Limited Availability:** Gold Bonds are issued in tranches by the government, which means that they may not be available for investment at all times. This limited availability can be a disadvantage for investors who want to invest in gold at a particular time.

Overall, while investing in Gold Bonds has several advantages, investors should also be aware of the disadvantages to make an informed investment decision.

1.9 Investment in Greenfield and Brownfield Projects

Investment in greenfield and brownfield projects is an important consideration for businesses and investors. Greenfield projects refer to new projects that are built from scratch, while brownfield projects refer to existing projects that are expanded or improved upon. Both types of projects offer unique advantages and challenges. Investing in greenfield projects can be an attractive option for businesses looking to enter new markets or create new products. These projects offer a blank slate and the opportunity to design and build a facility that is customized to the company's specific needs and goals. However, greenfield projects can also be more expensive and riskier, as they require significant upfront investment and may face unforeseen challenges during construction.

On the other hand, investing in brownfield projects can offer a more cost-effective and efficient way to expand operations or enter new markets.

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These projects already have existing infrastructure and resources in place, which can reduce costs and shorten the timeline for completion. However, brownfield projects may also come with certain limitations and challenges, such as the need to work around existing structures or environmental remediation. Ultimately, the decision to invest in greenfield or brownfield projects will depend on a variety of factors, including the company's goals, budget, and risk tolerance. Careful planning and due diligence are critical to ensure a successful outcome for any investment project.

Advantages of Investing in Greenfield Projects

1. **Customization:** Greenfield projects offer businesses the opportunity to design and build a facility that is customized to their specific needs and goals. This can result in a more efficient and effective operation.
2. **Location:** Greenfield projects can be built in any location, which means businesses can choose a location that is optimal for their needs, such as proximity to suppliers or customers.
3. **Branding:** Investing in a greenfield project can give businesses the opportunity to create a new brand identity and differentiate themselves from their competitors.

Advantages of Investing in Brownfield Projects

1. **Cost Savings:** Brownfield projects may be more cost-effective than greenfield projects, as they already have existing infrastructure and resources in place. This can reduce the need for new construction and save money.
2. **Time Savings:** Brownfield projects can often be completed more quickly than greenfield projects, as they do not require as much time for planning and construction.
3. **Sustainability:** Brownfield projects can have a positive impact on the environment, as they often involve reusing existing resources and infrastructure instead of building new ones.

Ultimately, the decision to invest in greenfield or brownfield projects will depend on a variety of factors, including the company's goals, budget, and risk tolerance.

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Disadvantages of Investing in Greenfield Projects

1. **Higher Costs:** Greenfield projects require significant upfront investment, as they involve building from scratch. This can be more expensive than investing in brownfield projects.
2. **Longer Timelines:** Greenfield projects may take longer to complete, as they require more time for planning and construction.
3. **Higher Risk:** Greenfield projects can be riskier than brownfield projects, as they may face unforeseen challenges during construction.

Disadvantages of Investing in Brownfield Projects

1. **Limited Options:** Brownfield projects may be limited by the existing infrastructure and resources, which can limit customization and flexibility.
2. **Environmental Concerns:** Brownfield projects may require environmental remediation, which can be costly and time-consuming.
3. **Location Limitations:** Brownfield projects may be limited to specific geographic locations, which may not be optimal for the business's needs.

Ultimately, the decision to invest in greenfield or brownfield projects will depend on a variety of factors, including the company's goals, budget, and risk tolerance. Careful planning and due diligence are critical to ensure a successful outcome for any investment project. The key difference between greenfield and brownfield projects is that greenfield projects refer to new projects that are built from scratch, while brownfield projects refer to existing projects that are expanded or improved upon.

IN-TEXT QUESTIONS

9. What is a key advantage of investing in brownfield projects?

(a) Lower initial investment

(b) Higher risk compared to greenfield projects

(c) Faster project implementation

(d) Limited growth potential

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10. Brownfield projects are characterized by:

(a) Unused or undeveloped land

(b) Existing infrastructure or facilities

(c) Newly established businesses

(d) Minimal environmental impact

11. Why do investors often prefer brownfield projects?

(a) Higher uncertainty

(b) Easier regulatory approvals

(c) Longer project timelines

(d) Limited access to existing resources

12. What risk factor is typically lower in brownfield investments compared to greenfield investments?

(a) Market risk *(b)* Regulatory risk

(c) Technological risk *(d)* Financial risk

1.10 International Investment Avenues

There are several international investment avenues available for investors. Some of the popular options include investing in foreign stocks, bonds, mutual funds, exchange-traded funds (ETFs), real estate investment trusts (REITs), and commodities. Investors can also consider investing in emerging markets, which are countries with rapidly growing economies but may carry higher risks due to political instability, currency fluctuations, and other factors. Another option is investing in global companies that have a significant presence in multiple countries, which can provide exposure to various markets and currencies. It's important to do your research and understand the risks associated with each investment avenue before making any decisions.

- **Foreign Stocks:** Investing in stocks of companies listed on foreign stock exchanges, which can provide exposure to different industries and economies.
- **Bonds:** Investing in foreign governments or corporations' debt securities, which can offer higher returns than domestic bonds.

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- **Mutual Funds:** Investing in a professionally managed portfolio of international securities that can provide diversification across multiple countries and industries.
- **ETFs:** Investing in a basket of international securities that track various indices, sectors, or asset classes.
- **REITs:** Investing in real estate companies that own and operate properties in foreign countries, which can offer exposure to different markets and currencies.
- **Commodities:** Investing in physical assets like gold, oil, or agricultural products, which can provide a hedge against inflation and currency fluctuations.
- **Emerging Markets:** Investing in countries with rapidly growing economies, such as China, India, or Brazil, which can offer high potential returns but come with higher risks.
- **Global Companies:** Investing in multinational corporations that have a significant presence across multiple countries and regions, which can provide exposure to various markets and currencies.

Keep in mind that each investment avenue carries its own unique set of risks and potential rewards, so it's important to do your research and consult with a financial advisor before making any investment decisions.

1.11 Currency Derivatives

Investing in currency derivatives can be a way to manage currency risk or to speculate on currency movements. However, it is important to note that currency derivatives are complex financial instruments that carry a high degree of risk. They are not suitable for all investors and should only be used by those who fully understand the risks involved. Investors who wish to invest in currency derivatives should have a thorough understanding of the underlying currency markets and the factors that influence currency values. They should also be familiar with the different types of currency derivatives and how they work. It is also important to have a clear investment strategy and to carefully manage risk by setting stop-loss orders and limiting the amount of capital invested in any one trade.

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Overall, currency derivatives can be a useful tool for managing currency risk and for speculating on currency movements, but they should only be used by experienced investors who understand the risks involved. Investing in currency derivatives can be a complex undertaking that carries a high degree of risk. If you are considering investing in currency derivatives, there are several important points to consider:

1. **Understand the Underlying Currency Markets:** Before investing in currency derivatives, it is important to have a thorough understanding of the currency markets, including the factors that influence currency values and the different types of currency derivatives.
2. **Develop a Clear Investment Strategy:** To succeed in currency derivatives trading, it is important to have a clear investment strategy that takes into account your investment objectives, risk tolerance, and time horizon.
3. **Manage Risk:** Currency derivatives are highly leveraged instruments that can magnify gains and losses. To manage risk, investors should set stop-loss orders and limit the amount of capital invested in any one trade.
4. **Monitor Market Conditions:** Currency markets can be highly volatile, and it is important to monitor market conditions closely and adjust your investment strategy as needed.
5. **Work with a Reputable Broker:** When investing in currency derivatives, it is important to work with a reputable broker who can provide guidance and help you navigate the complexities of the market.

Overall, investing in currency derivatives can be a way to manage currency risk or to speculate on currency movements, but it requires a thorough understanding of the market and careful risk management.

1.12 Digital Currency

Digital currency, also known as cryptocurrency, is a relatively new type of currency that is entirely digital and operates independently of traditional banking systems. It is based on decentralized blockchain technology, which provides a secure and transparent way to verify and record transactions. This means that digital currencies are not subject to the same

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regulations and government controls as traditional currencies, and their value is determined solely by market supply and demand. Transactions with digital currencies are typically faster and cheaper than traditional banking methods, making them an attractive option for many users around the world. Some of the most popular digital currencies include Bitcoin, Ethereum, and Litecoin. Investing in digital currency can be a lucrative opportunity, but it is important to consider several factors before making any investment decisions. Here are some important factors to consider:

1. **Market Volatility:** Digital currency is known for its volatility, with prices often fluctuating rapidly and unpredictably. It is important to be prepared for the possibility of significant price swings.
2. **Security:** Because digital currencies are not backed by a central authority, they are vulnerable to hacking and other security breaches. It is important to choose a reputable exchange and take steps to secure your digital assets.
3. **Regulation:** Digital currency is a relatively new and largely unregulated market, which can make it difficult to know how to comply with legal and tax requirements. It is important to stay up-to-date on changing regulations and seek professional advice if needed.
4. **Adoption:** The adoption of digital currency is still in its early stages, and it is important to consider whether there is enough demand and use cases to support the value of a particular currency.
5. **Technology:** Digital currencies are based on blockchain technology, which is still evolving and developing. It is important to understand the technology behind a digital currency and its potential for future growth and innovation.

By considering these factors and doing your research, you can make informed decisions about investing in digital currency.

1.13 Summary

This chapter is designed to provide individuals with a comprehensive understanding of the investment opportunities available in the market. It begins by outlining the objectives of investing, such as generating income, preserving capital, and achieving capital growth. It then delves into various types of investments. The chapter also provides a detailed

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analysis of financial products such as derivatives and mutual funds along with their advantages and limitations. For example, derivatives are financial instruments that allow investors to speculate on the price movements of an underlying asset, while mutual funds are investment vehicles that pool money from multiple investors to invest in a diversified portfolio of securities. Overall, this chapter provides individuals with a comprehensive understanding of the various investment opportunities available in the market, helping them make informed decisions.

1.14 Answers to In-Text Questions

1. *(b)* A contract whose value is derived from an underlying asset

2. *(c)* Customizable terms between the parties

3. *(b)* Foreign exchange

4. *(a)* To transfer risk

5. *(a)* Buyer of the option

6. *(b)* Determined by the exchange

7. *(b)* The upfront cost of the option

8. *(a)* Options involve buying or selling of rights to one party only, while in future contract both parties have the obligation to complete the contract.

9. *(c)* Faster project implementation

10. *(b)* Existing infrastructure or facilities

11. *(b)* Easier regulatory approvals

12. *(b)* Regulatory risk

1.15 Self-Assessment Questions

1. Briefly explain about the difference between financial investment and real investment.
2. Discuss the benefits of investment in MFs.
3. How SIP is better than other investment options.
4. Explain the difference between futures and options.
5. What is the objective of an investment?

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1.16 References

- Introduction to Financial Planning (4th Edition 2017) – Indian Institute of Banking & Finance.
- Sinha, Madhu. *Financial Planning: A Ready Reckoner July 2017*, McGraw Hill.

1.17 Suggested Readings

- Halan, Monika. *Let's Talk Money: You've Worked Hard for It, Now Make It Work for You,* July 2018, Harper Business.
- Pandit, Amar. *The Only Financial Planning Book that You Will Ever Need,* Network 18 Publication Ltd.

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LESSON

2

Risk and Return

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STRUCTURE

2.1 Learning Objectives

- Understanding the concept of return and risk.
- Differentiate between systematic and unsystematic risk.
- Estimate total risk, systematic risk and unsystematic risk on a security.
- Determine the effect of taxes on investment decision.
- Analyse the impact of inflation on investment return.

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2.2 Introduction

An Investment is an asset or item acquired with the goal of generating income or appreciation. Appreciation refers to an increase in the value of an asset over time. When an individual purchases a good as an investment, the intent is not to consume the good but rather to use it in the future to create wealth. A businessman invests in plant and machinery in expectation of making profit in future (return). A person puts the money in fixed deposit account so that he can get higher return in future including interest income in future. An investor invests in house property expecting that his price will go up in future. At times he can sell the property and make capital gain. Some people invest in gold and other precious metal expecting a reward i.e., increase in the price of these metals. Therefore, major motivation behind investment is reward i.e., return. This return has two component that is capital return or loss and revenue return (i.e., interest or dividend) which arise due to change in investment. Some investment has capital gain or loss due to price change as they do not provide any revenue return to investor. For example, if an investor invests in the shares of company which does not pay any dividends, then his return will only comprise the second part i.e., change in price leading to capital gain or loss.

However, there is always a possibility that the actual return may not be same as expected return. This may be due to number of factors such as pandemic, global slowdown, poor performance of company. Hence there is always a RISK attach to investment that the actual return will be different from expected return. Risk is defined as variability in expected returns. It must be noted that no investment is risk free (except hypothetical risk-free asset). Return and risk go hand in hand. The higher will be the risk the higher will be the return. Therefore, every investment requires careful analysis of risk and return.

The two-basic component of investment are risk and return. An investor should make his investment keeping in mind the risk and return appetite. Therefore, one analyses every security in terms of risk -return. This is known as security analysis. Investors try to reduce their exposure to risk by picking diverse securities for investment. It is often said that “do not put all your eggs in one basket”. The same is true for investment. A

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rational investor holds diverse portfolio. A portfolio is combination of two or more securities.

2.3 Return

Return may be defined as income generated by an investment expressed as a percentage of the cost of investment. Income from investment may be revenue income (like interest and dividend) and capital income revenue income is generated on regular basis say every year. The second part capital gain or loss is the difference in end price or selling price and beginning price or purchase price of investment. It is generated only at the end of investment period.

2.3.1 *Return from a Financial Asset*

A financial asset which is purchased at purchased priced held for a year, provide some income at the end of year and sold at selling price will generate the following return.

Return = income from asset + (selling price – purchase price)/purchase price × 100

2.3.1.1 Return on Equity Share

Return on equity share held for one year can be calculated as follows:

Return on equity share = d1 + p1 − p0/p0

Where d1 = dividend receive at the end of one year

p1 = price at the end of one year

p0 = initial price or price at the beginning of year

return on equity has two component, dividend and capital appreciation/ capital gain (arise due to change in price.

Return on equity = dividend/p0 + (p1 − p0)/p0

= dividend yield + capital gain yield/loss

Example: Mr. X purchased shares of Voda ltd. At price of 850. He sold the share after receiving Rs. 50 as dividend at end of year at price 1050. Calculate total return from investment. How much is dividend yield and how much is capital yield?

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Solution. Return from share = 50 + (1050 − 850)/850 × 100

= 29.4111%

Dividend yield = 50/850 = 0.0588

Capital yield = (1050 − 850)/850 = 0.235294

Return on equity = dividend yield + capital yield

= 0.0588 + 0.235294

= 0.294111 or 29.4111%

2.3.1.2 Return on Bond

Return on bond held for one year can be calculated as follows:

Return on bond = i1 + (p1 − p0)/p0

Where, i1 = interest earned during the year.

p0 = initial price of bond or investment

p1 = selling price or bond price at the end of year

Therefore, there are two component of bond return, interest yield and capital appreciation/capital gain which arise due to change in prices.

Return on bond = int/po + p1 − p0/p0

= interest yield + capital gain yield/capital loss

Example: Mr. Y purchased a Rs. 1000, 10% bond maturing after 5 years at a price of Rs. 950. He sold the bond after one year at price of Rs. 975 and also received interest income.

Solution. Return from bond = 100 + (975 − 950)/950 × 100

= 13.16%

IN-TEXT QUESTIONS

1. What does Return on Equity (ROE) measure?

(a) Profitability

(b) Liquidity

(c) Solvency

(d) Efficiency

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2. ROE is calculated as:

(a) Net Income/Total Assets

(b) Net Income/Shareholders' Equity

(c) Total Revenue/Net Income

(d) Total Assets/Shareholders' Equity

3. A high ROE is generally considered:

(a) Negative

(b) Positive

(c) Irrelevant

(d) Unrelated to financial performance

4. ROE provides insight into the company's ability to:

(a) Generate profit from its assets

(b) Manage its debt

(c) Increase total revenue

(d) Pay short-term liabilities

5. What does Return on Bond (ROB) measure?

(a) Profitability of a company

(b) Return on investment for bondholders

(c) Stock market performance

(d) Liquidity of a bond

6. The return on a bond is primarily influenced by:

(a) Stock prices

(b) Interest rates

(c) Dividend payments

(d) Earnings per share

2.4 Type of Return and their Calculation

There are various types of return based on the purpose and calculation. These returns are explained below:

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2.4.1 *Average Return*

The average return is the simple mathematical average of a series of returns generated over a period of time. Average return may be used to make expectation about future return on security. In some of the cases past average return is used as the expected return on that security. We can calculate average return on the basis of historical returns of a security. This average return is helpful in comparing investment alternatives and building up expectations about the return on investment.

For calculation of average return, we either use arithmetic mean or geometric mean.

2.4.2 *Average Return based on Arithmetic Mean*

Mostly average return is calculated using arithmetic mean or simple mean**.** The average return is simple average of annual returns earned every year over the holding period or the assessment period.

Average return $= R_1 + R_2 + R_3 \ldots\ldots\ldots R_N/N$

Where, R_1 = return earned in first year

N = number of years for which investment is earned

For example

Year	Total return
2008	7.33%
2009	7.5%
2010	7.06%
2011	7.22%
2012	−31.58%
2013	13.88%
2014	41.5%
2015	−6.43%

Average return $= 7.33 + 7.5 + 7.06 + 7.22 - 31.88 + 41.5 - 6.43/8$

$= 9.36\%$

Hence average return on share has been 9.36%

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Limitation of Average Return based on Arithmetic Mean

Average return based on arithmetic return based on arithmetic mean suffers from following limitations.

1. It does not consider the effect of compounding because it is simple average of number of returns. This makes it less useful in investment analysis because compounding is extremely important in investment
2. Average return based on arithmetic mean may at times give misleading return.

For Example: An investor buys a share of Rs. 20. At the end of year 1 its price become becomes Rs. 25 but holds it. In the end of second year, it again becomes Rs. 20. Thus, it gives 25% return in first year and 20% loss in second year. Find out average return using arithmetic mean.

Solution: Average return (based on arithmetic mean) = 25% + (−20%)/2

= 2.5%

However, the value of share is Rs. 20 i.e. equal to purchase price and hence actual investor has not made any gain over two-year period. It must be noted that if use average return based on average or arithmetic return in this case, we get incorrect value of return.

Hence it is better to calculate average return based on geometric mean.

2.4.3 *Average Return based on Geometric Mean*

Average return calculated using geometric mean considered the effect of compounding. Average return based on geometric mean is actually average return compounded annually. It is calculated as follows:

Average return based on geometric mean = $[(1 + R1)\ (1 + R2)\ (1 + R3)\ \ldots\ldots \times (1 + Rn)]^{1/n} - 1$

Where R1, R2, R3…. are return generated in year 1,2,3…. respectively. n is the total number of years.

Average return based on geometric mean in generally lower than average return based on arithmetic because geometric mean considers compounding effect.

If time period is long then the difference between arithmetic mean and geometric mean is negligible.

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2.4.4 *Expected Return based on Probability Distribution*

The investment environment is quite uncertain, so it is not advisable to use historic data to make future prediction of return. Therefore, may have a number of probable return and assign probabilities to each expected outcome. Based on this probability distribution, they can calculate single expected return.

Expected return $= \sum_{i=1}^{N} pIrI$ .....

Where N = total number of outcomes of returns

pI = probability in ith return

rI = ith return outcome

For example: if expected return from a share is dependent upon state of economy is given and also its probability distribution

State of Economy	Return	Probability
Good	18%	0.4
Bad	−5%	0.3
Normal	15%	0.3

Solution: Expected return $= 18 \times (0.4) - 5 \times (0.3) + 15 \times (0.3)$

$= 10.2\%$

2.4.5 *Holding Period Return*

Holding period return is return earned during the holding period of investment. Holding period is also known as investment horizon. If investor holds the investment more than one year then we calculate its holding period return as the total income plus price change during the holding period expressed as percentage of purchase price. It is not expressed as a per annum form rather it is the absolute return over a specified holding period such as 4-year return, 5-year return etc.

$$\text{Holding period return} = \frac{T \cdot I + (p_n - P_0)}{P_0}$$

Where, T.I = total income received during the holding period

P_0 = purchase price

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P_n = sale price at the end of holding period

n = number of years for which shares are held.

Question. An investor invests in non-dividend paying share at a cost of Rs. 100 in beginning of year 2004. At the end of year 2013 he sells the share for Rs. 150. Calculated the holding period return on share?

Solution. Holding period return $= \frac{150-100}{100} \times 100$

$= 50\%$

It must be noted 50% return is earned over a period of 10 years. It is not 50% per annum rather 50% over 10 years.

Limitation of Holding Period Return

- It fails to consider how long it took to earn the return. If time period is greater than 1 year then holding period return over states the true annual return.
- Holding period returns on two investment alternatives cannot be compared if holding periods of the investment are different.

2.4.6 *Absolute Return*

Absolute return means return calculated without considering the risk on an investment. Hence absolute return is return generated by an investment without adjusting it for the underlying risk. Absolute return is often quoted in magazine and newspaper advertisements. Absolute return is not good measure to compare investment alternative. This is because different investments have different risks. S and T provide absolute return of 15% and 20% respectively. It does not mean that share T is better than S as it provides higher absolute return of 20%. It is possible that T has a very high risk as compared to S. Every investor is risk averse or tries to avoid risk. All investor likes return but disklike risk. Hence while comparing different investments the investor should consider both risk and return. This can be done by calculating risk adjusted returns.

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2.4.7 *Risk Adjusted Return*

Risk adjusted return is a relative measure of return because it is expressed in terms of per unit of underlying risk. It is the return adjusted for underlying risk of security. There are a variety of methods for calculating risk adjusted returns such as Sharpe's ratio, Treynor's ratio etc. The most important risk adjusted return is calculated as Sharpe ratio also known as return to volatility ratio. It is expressed in terms of per unit of the underlying standard deviation or total risk. The higher the Sharpe ratio, the better the security in terms of risk return relationship.

Sharpe ratio = average return - risk free return/total risk

2.5 Risk

In above section we have calculated return of various types. However, return cannot be generated without undertaking risk. So now we will discuss the type of risk, concept, source and calculation of risk associated with financial investment i.e., investment in securities. **Risk** is defined in financial terms as the chance that an outcome or investment's actual gains will differ from an expected outcome or return. Risk includes the possibility of losing some or all of an original investment. Risk arises because returns are not certain or fixed or cannot be predicted in advance. Level of risk differs from security to security

2.5.1 *Risk and Uncertainty Are Different*

Risk and uncertainty are not same. Risk is defined as situation where we can assign some probabilities to the expected outcome of an event. In case of uncertainty, it is not possible to predict at all i.e., we cannot assign probabilities to the expected outcomes of an event. However, in practice, terms risk and uncertainty are often used inter-changeably.

All rational investors like return but dislike risk hence all investors are risk averse i.e., they want higher return for every unit of risk and try to avoid risk. However, there are various degrees of risk aversion. Some investors are most risk averse (i.e., conservative investor) and others are less risk averse (aggressive investor).

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In order to avoid risk, some investors invest in a large number of securities. The basic idea here is DO NOT PUT ALL EGGS IN ONE BASKET.

2.5.2 *Causes and Types of Risk*

Return is affected by host of factors both external and internal to the company which issues that security. Thus, risk is caused by host of external and internal factors. These are known as causes of risk.

External Factors	Internal Factors
Economic policies	Management
Taxation	Labour condition
Political condition	Efficiency
Social and cultural changes	Governance

External factor influences the return of all securities whereas internal factor influences the specific security only. It does not influence the return of all the securities.

Risk on securities can be classified into **systematic risk** and **unsystematic risk** depending upon the factors causing it.

I. Systematic Risk

Systematic risk is that part of total risk which is caused by factors beyond the control of a specific company or individual. Systematic risk is caused by factors such as economic, political, socio, cultural etc. All the investments or securities are subject to systematic risk and therefore it is non-diversifiable risk. Systematic risk cannot be diversified away by holding a large number of securities. Systematic risk primarily include-market risk, purchasing power risk and exchange rate risk.

- **Market Risk:** It is caused due to herd mentality of investors i.e., the tendency of investor to follow the direction of market. If market prices fall then even good performing companies' shares fall in prices. Thus, decline in share prices due to market factors is called market risk. Market risk causes almost 2/3 of total systematic risk. Therefore, sometimes systematic risk is also referred to as market risk. Market price change is the most prominent source of risk in a security.

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- **Interest Rate Risk:** Interest rate risk arises due to market interest rate. This primarily affects the fixed income securities because bond price is inversely related to market interest rate. An increase in market interest rate causes bond prices to fall and vice versa. In fact, interest rate has two opposite component - price risk and reinvestment risk. Both these risks work in opposite directions. If price is negative (i.e., fall in prices), reinvestment would be positive (i.e., increase in earning on reinvesting money). Price risk is the risk associated with the changes in price of security due to change in interest rate.

  For example, a bond issued at par Rs. 1000 has 5-year maturity and a coupon rate of 10%. now if market interest rate increases to 12%, we will not find any buyer for this bond at Rs. 1000 because bond will provide interest income of 10% while market rate is 12%. Therefore, this bond will become attractive only at price lower than Rs. 1000. The bond price will be:

  $$\text{Bond price} = \frac{10}{12} \times 1000 = \text{Rs. } 8333.33$$

  Hence an increase in interest rate makes bond price fall and vice versa. This is price risk component of interest rate risk.

  'Reinvestment risk' is the risk associated with reinvesting interest/ dividend income .it arises when market interest rate falls. In such case, the investor is able to reinvest his interest/dividend income at lower rate which implies lower future incomes.

  For example, if market interest falls to 8% from 12% then income generated from interest income of bond of Rs. 1000 @10% will fetch Rs. 100. And this Rs. 100 income can be reinvested at 8% market interest rate, hence this will generate lower income.

  It must be noted as market rate falls the bond price rises but reinvestment risk arises. Therefore, price risk and reinvestment risk work in opposite directions.

  Interest rate changes are the main source of risk especially in case of fixed income securities such as bonds and debentures.

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- **Purchase Power Risk (Inflation Risk):** Purchase power risk arises due to inflation. Inflation is persistent and sustained increase in general price level. Inflation erodes the purchasing power of money i.e., same money can buy fewer goods and services due to increase in prices therefore if investor income does not rise during inflation, then investor is getting lower and lower income in real terms. Fixed income securities are subjected to purchasing power risk because income from such securities is fixed in nominal terms.

  For example, an investor in a 5 year 10% bond at par value of Rs. 1000. At the end of year inflation is 5%.

  Here interest income in nominal terms = Rs. 100(10% of 1000)

  However real terms $= \frac{100}{1+0.05} = \text{Rs. } 95.23$

  It is often said that equity shares are good hedge against inflation and hence subjected to lower purchasing power risk.

- **Exchange Rate Risk:** In globalised world most of economies are exposed to foreign currency. Exchange rate risk is associated with change in foreign currency. The exchange rate risk is caused by fluctuations in the investor's local currency compared to the foreign investment currency.

  For example, if rupee depreciates (say from Rs. 40 per USD to Rs. 60 per USD) then the value of imported material will increase in terms of rupee even though there is no change in quantity of imported material. Therefore, the company importing this material will have to spend more rupees to buy dollar for paying for imported material.

II. Unsystematic Risk

Unsystematic risk is risk which is within the control of the company like management, assets, labour or capital. Therefore, unsystematic risk can be diversified using an efficient portfolio of securities which are least correlated (preferably not correlated). Hence unsystematic risk is also called diversifiable risk.

Source of unsystematic risk:

- Business risk
- Financial risk

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- **Business Risk:** Business risk is associated with investment decision of company. It arises due to presence of fixed operating cost in company's cost structure. Fixed cost is to be paid by the company irrespective of amount of its revenue. Therefore, in times of declining sales, fixed operating cost results into losses for the company. Business risk is measured by degree of operating leverage. Degree of operating leverage measures the resultant change in operating income due to change in its sale revenue.

  Degree of operating leverage (DOL) = % change in operating income/% change in sales

  Operating risk arises when DOL > 1. The higher the degree of operating risk the greater will be business risk

  Other source of business risk includes labour unrest, inefficient management and corporate governance issues.

- **Financial Risk:** Financial risk is associated with financing decision or capital structure of a company. It arises due to the presence of fixed financial cost or debt capital in company. As a result a change in operating profit will have a more than proportionate change in its earning per share (EPS). the interest cost is a must for the company to be paid irrespective of its operating profit. Financial risk is measured by degree of financial leverage which is the ratio of change in EPS to change in operating profit of a company.

  Degree of financial leverage (DFL) = % change in EPS/% change in operating profit or EBIT

  Financial risk arises when DFL > 1. Therefore, companies using excessive debt capital are subjected to high financial risk

2.5.3 *Measurement of Risk*

Risk is defined as variability in expected return. Therefore, total risk on security can be measured by using statistical method of measuring variability or dispersion such as range, standard deviation or variance

I. Range: Range is difference between highest and lowest possible return in case of an investment. The higher the range the greater will be

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the dispersion and higher will be risk. This is not good measure of risk because it does not provide single estimate of risk.

II. Variance or Standard Deviation

This is most popular and commonly used measure to calculate total risk of security.

We can calculate standard deviation in two cases:

1. When only return is given

$$\text{S.D.} = \sqrt{\frac{\sum_{i=1}^{n}\left(R_i - \bar{R}\right)^2}{n}}$$

Where R_i = i^{th} return

n = number of observations

$\bar{R}$ = mean return

2. When probability distribution of return is given

$$\text{S.D.} = \sqrt{\sum_{i=1}^{n} p_i\left(R_i - \bar{R}\right)^2}$$

$$\text{Or variance} = \sum_{i=1}^{n} p_i\left(R_i - \bar{R}\right)^2$$

Question: Calculate the total risk of security whose past return are given.

Year	R_i (%)
1	10
2	12
3	8
4	5
5	10
6	13
7	7
8	5
9	8
10	12

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Solution:

Year	R_i(%)	$\left(R_i - \bar{R}\right)^2$
1	10	1
2	12	9
3	8	1
4	5	16
5	10	1
6	13	16
7	7	4
8	5	16
9	8	1
10	12	9

Mean return $(\bar{R}) = \frac{90}{10} = 9\%$

$$\text{S.D.} = \frac{\sum (R_i - \bar{R})^2}{N} = \sqrt{\frac{74}{10}} = 2.72\%$$

Hence mean return of security is 9% with total risk of 2.72%.

Question: Calculate expected return and total risk of security B.

Return (R_i)%	Probability%
20	0.1
15	0.2
−5	0.2
10	0.3
25	0.2

Solution:

R_i	P_i	$R_i P_i$	P_i
20	0.1	2	6.4
15	0.2	3	1.8
−5	0.2	−1	57.8
10	0.3	3	1.2
25	0.2	3	33.8

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Notes

$\Sigma R_i P_i$ 12Σ P_i $\left(R_i - \bar{R}\right)^2 = 101$

$\bar{R}$ = *expected return* = $\Sigma R_i P_i$ = 12%

Total risk = S.D. = $\sum P_i \left(R_i - \bar{R}\right)^2 = \sqrt{|0|} = 10.5\%$

A security B has average return of 12% and total risk of 10.05%

III. Coefficient of Variation: A Relative Measure of Risk

The major limitation of standard deviation as a measure of total risk is that it is absolute measure of risk. Therefore, when expected return is same for two investments then their risk can be compared using standard deviation. However, if we want to compare two or more securities having different average returns, we should not use standard deviation to conclude about the riskiness of securities. In such case we should use coefficient of variation. Coefficient of variation is relative measure of risk. It can be calculated as given below:

Coefficient = standard deviation/mean return

Question: A person wants to analyse following two securities with respect to risk

Security	A	B
Expected return (%).	20	30
S.D. of returns (%).	15	18

Solution: In this question although S.D. of returns of security B is higher than that of security A, it cannot be concluded that security B is more risky. This is because return on security B is also higher. In this case we should not assess riskiness of security by S.D. which is an absolute measure of risk. Rather we should use coefficient of variation (C.V.) which is a relative measure of risk

Coefficient of variation = S.D./MEAN RETURN

Coefficient of variation of security A = 15/20 = 0.75

Coefficient of variation of security B = 18/30 = 0.60

Since C.V. of security A is higher, we can say that security A is riskier than security B.

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Notes

2.5.4 *Calculation of Systematic Risk*

Total risk of security comprises two components-systematic risk and un-systematic risk. Systematic risk is caused by factors which are beyond the control of company such as economic, political or social. It can be captured by sensitivity of security of security's return with respect to market return. This sensitivity can be calculated by β (beta) coefficient. β coefficient is calculated by regressing a security's return on market return.

$Rs = \alpha + \beta Rm + e$

Where, Rs = return on particular security

Rm = market return

β = regression coefficient of Rs on Rm

Alpha(α) = security return independent of market return.

The β can also be calculated as: cov (S, M)/σm^2

Where cov (S, M) = Covariance between returns of security S and market return

σm^2 = variance of market or simply market variance

The higher the beta (β) the greater is systematic risk

If β = 1 then the security is as risky as market portfolio or market index

If β < 1 then the security is less sensitive or risky than market portfolio and hence termed as defensive stock.

If β > 1 then the security is more sensitive or risky than the market portfolio and hence termed as aggressive security.

For example, if β = 0.8 then 10% change in market return will result in 8% change in security return in same direction. On the other hand if β = 1.20 then a 10% change in market return will cause a 12% change in security's return in the same direction.

The β can also be negative. If security has negative β it means security's return are moving in opposite direction of market return. When market return is decreasing then security is increasing or vice versa.

Magnitude of Systematic Risk: The β is indicator systematic risk of security. It is a number independent of unit of measurement. Hence it

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Notes

does not tell us what is the quantity of systematic risk i.e., how much of the total risk is systematic risk?

Systematic risk = $\beta\alpha_m$

systematic risk is expressed in % term

2.5.5 *Calculation of Unsystematic Risk*

it is that component of risk which is not explained by market. This can be calculated by subtracting systematic variance from total variance of a security's return.

Total risk = systematic risk + unsystematic variance

Hence, unsystematic risk = total risk – systematic variance

$$= \sqrt{\sigma_s^2 - \beta^2\sigma_m^2}$$

Question: The total risk on security (expressed in terms of S.D.) is 10% and its beta is 1.2 calculate systematic risk and unsystematic risk of the security if market variance is 36% squared percentage (i.e., market S.D. is 6%)?

Answer: Total variance = $10)^2 = 100$ Sq %

Systematic variance = $\beta^2\sigma_m^2 = (1.2)^2 (36) = 51.84$ sq %

Systematic risk in terms of S.D. = 7.2%

Unsystematic variance = 100 – 51.84

= 48.16 squared

Unsystematic risk in terms of S.D. = 6.9%

2.5.6 *Expected Return based on CAPM*

As per CAPM (**capital asset pricing model)** there is positive and linear relationship between expected return and systematic risk as measured by beta.

$$E(Ri) = Rf + (E(Rm) - Rf)\,\beta i$$

Where, E(Ri) = expected return on a security i.

Rf = risk free return

E(Rm) = expected market return

βi = beta of security

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Notes

beta of security measures the sensitivity of security's return vis-à-vis market return. This can be calculated by regressing a security's returns on market returns. (E(Rm) – Rf) is nothing but market risk premium i.e., risk premium on market portfolio. E(Rm) – Rf)βi is the risk premium of the security. Hence risk premium of a security is calculated by multiplying market risk premium with the beta of that security.

IN-TEXT QUESTIONS

7. What is a primary cause of market risk?

(a) Government regulations

(b) Economic indicators

(c) Interest rate fluctuations

(d) Company management decisions

8. Political instability, natural disasters, and geopolitical events are examples of:

(a) Credit risk

(b) Operational risk

(c) Systemic risk

(d) Unsystematic risk factors

9. Market risk can arise from changes in:

(a) Currency exchange rates

(b) Employee satisfaction

(c) Advertising strategies

(d) Customer loyalty

10. Which of the following is a cause of systematic risk in the market?

(a) Company-specific events

(b) Industry-wide trends

(c) Product innovation

(d) Employee turnover

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Notes

11. The risk associated with changes in interest rates affecting bond prices is known as:

(a) Credit risk

(b) Liquidity risk

(c) Interest rate risk

(d) Operational risk

12. Market risk that results from unexpected events impacting a particular company is referred to as:

(a) Systemic risk

(b) Company-specific risk

(c) Regulatory risk

(d) Market liquidity risk

2.5.7 *Type of Investors Based on Risk Appetite*

Investor can be divided into following categories depending upon the risk appetite:

- Risk averse
- Moderates
- Aggressive

Risk averse investor is the one who chooses the preservation of capital over the potential for a higher-than-average return. Generally, the return on a low-risk investment will match, or slightly exceed, the level of inflation over time.

Moderate investors are generally described as "middle of the road" risk-takers. The goal is to balance out opportunities and risks, and the approach is sometimes described as a balanced approach**.** Typically use a mixture of stocks and bonds. They might be roughly 50/50 or 60/40. That is: 60% of their assets might be in stocks (large companies, small companies, overseas stocks, etc) while 40% of assets are in bonds (including government and agency bonds, corporate bonds, high-yield bonds, foreign issues, etc).

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Aggressive investor typically invests in portfolio that attempts to maximize returns by taking a relatively higher degree of risk. They are the one who can take higher risk for higher return. Strategies for achieving higher than average returns typically emphasize capital appreciation as a primary investment objective, rather than income or safety of principal. Such a strategy would therefore have an asset allocation with a substantial weighting in stocks and possibly little or no allocation to bonds or cash. Aggressive investment strategies are typically thought to be suitable for young adults with smaller portfolio sizes.

2.5.8 *Risk Return Trade Off*

The risk-return trade-off principle is a useful tool for investors who want to make informed decisions about their investments. By understanding the relationship between risk and potential returns, investors can make more informed decisions about where to put their money. This principle teaches us that in order to maximize our returns, we need to be willing to accept a certain level of risk. This means that we have to carefully weigh the potential rewards against the potential risks before making any investment decisions.

At the same time, it's important to remember that risk is not always a bad thing. In fact, taking on a certain level of risk can actually be beneficial in the long run, as it can help us to achieve our investment goals more quickly. Ultimately, the key to successful investing is finding the right balance between risk and reward. By using the risk-return trade-off principle as a guide, we can make more informed decisions about where to put our money and increase our chances of achieving our financial goals.

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2.6 Impact of Taxes on Investment Return

This graph shows the relationship between risk and return. It shows that there is a direct relationship between both, since with increase in risk, expected return also increases and investors are not willing to bear more risk without compensatory return for the same.

Taxes play an important role in investment decision making. Income from investment is subjected tax. However, rate of tax differs from investment to investment. Some income from investments is also exempt from tax such as tax-free bonds. In order to make good investment one need to take into consideration the impact of taxes and compare the alternative investments benefits either pre-tax or post-tax.

Post-tax rate = pre-tax rate (1 – tax rate)

2.6.1 *Taxable Equivalent Yield*

In case of tax-free investment no tax is paid on annual interest income. Here we can calculate taxable equivalent yield to compare it with an investment the yield of which is taxable. Taxable equivalent yield is the equivalent pre-tax yield of a tax-free investment.

Taxable equivalent yield = tax-free rate/(1 − tax rate)

If tax-free rate is 10% and the investor is in 30% tax bracket,

then taxable equivalent yield = 0.10/(1 − 0.30) = 0.143 or 14.3 %

2.7 Impact of Inflation on Return from Investment

Inflation affects the purchasing power of money therefore it is necessary to take into account the rate of inflation before making an investment. We can understand the impact of inflation on investment by calculating the real rate of return rather than nominal rate of return. Real rate of return is rate of return adjusted for inflation i.e., it does not have element of inflation rate. Nominal rate contains the element of inflation rate.

Real rate = [1 + *nominal rate of return* 1 + *inflation rate*] – 1

Real rate of return = nominal rate of return – inflation rate

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Notes

If nominal rate of return on investment is 14% and the inflation rate is 4%.

then the real rate of return is $= \left(\frac{1.14}{1.04}\right) - 1 = 9.615\%$

This implies in real terms the investment is only generating 9.615% while we can be misguided by the nominal rate of return on investment i.e. 14% and hence make our investment accordingly. In the time of high rate of inflation, the investment in the economy falls because the investor will focus on current spending rather than future investment as purchasing power of money erodes due to high inflation.

2.8 Summary

The chapter focuses on understanding the concepts of return and risk of securities. It provides insights on how to calculate the return of an investment, and how to compare different investment alternatives in terms of expected return. The chapter also differentiates between systematic and unsystematic risk and explains how to calculate beta of security and its significance. Moreover, the chapter highlights the impact of taxes on investment decisions and how to analyze the effect of inflation on investment returns. By understanding these concepts, an individual can make informed decisions about their investments and better manage the risks associated with their investments.

2.9 Answers to In-Text Questions

1. *(a)* Profitability
2. *(b)* Net Income/Shareholders' Equity
3. *(b)* Positive
4. *(a)* Generate profit from its assets
5. *(b)* Return on investment for bondholders
6. *(b)* Interest rates
7. *(c)* Interest rate fluctuations
8. *(c)* Systemic risk
9. *(a)* Currency exchange rates

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Notes

10. *(b)* Industry-wide trends

11. *(c)* Interest rate risk

12. *(b)* Company-specific risk

2.10 Self-Assessment Questions

1. What is return and how it is calculated?
2. What are types of return?
3. What is risk and how it is different from uncertainty?
4. What are the measurements of risk?
5. What is systematic risk?
6. What is beta?
7. Explain between systematic risk and unsystematic risk.

2.11 Reference

- Prof. Rajni. *Personal Financial Planning,* JSR Publishing House LLP.

2.12 Suggested Readings

- Halan, Monika. *Let's Talk Money: You've Worked Hard for It, Now Make It Work for You,* July 2018, Harper Business.
- Madura, J. (2016). *Personal Finance.* Delhi, India: Pearson

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LESSON

3

Portfolio Analysis

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STRUCTURE

3.1 Learning Objectives

- Understanding the portfolio return and its calculation.
- Understanding portfolio risk and its calculation.
- Construct portfolio for given expected return.
- Determining the minimum variance portfolio.
- Portfolio construction or selection.
- Portfolio theory of Harry Markowitz or mean variance optimisation model.
- Capital market line.
- Capital asset pricing model.

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Notes

3.2 Introduction

An investor does not invest in one security rather he/she invests in multiple security in order to meet his investment goals. These investment goals or objectives are guiding factor in decision making. The combination of asset or security in which investor makes an investment is termed as Portfolio.

3.3 Portfolio Management Process

A **portfolio** is basically a collection of assets or securities which are so collected together to reduce the risk. The basic idea behind a portfolio is diversification. **Portfolio management** is the process of construction, revision and evaluation of a portfolio. The objective of portfolio is to build a portfolio which gives return in accordance with the risk profile of the investor.

Steps of portfolio management process are explained below:

Step 1: Security Analysis

An investor can use the multiple security to construct different type of portfolio. These securities can differ in their risk and return characteristic. There are three approaches to security analysis –

- Fundamental analysis
- Technical analysis
- Efficient market hypothesis

In **fundamental analysis** the value of security will be equal to its intrinsic value. Intrinsic value. Intrinsic value of security is the present value of all future expected cash inflows from the security. Once the intrinsic value is calculated we compare it with actual market price to find out whether the security is under-priced, overpriced or fairly priced in the market. Securities which are under-priced in the market are good investment options for prospective investor. Fundamental analysis makes use of EIC (Economy industry and company analysis) framework to arrive at reasonable estimate of future cash flow from securities.

Technical analysis used past trend in price to predict future price. It assumes that history repeats itself. Here charts and indicators are used to predict future direction and prices.

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Efficient market hypothesis implies that current prices of security fully reflect all the available information. Security prices change only in case of inflow of new information and new information is completely random. As per efficient market hypothesis current market price is the best price to buy or sell the security.

Step 2: Portfolio Analysis and Selection

The next step is to analyse the various securities in terms of risk and return profile of securities. The larger the number of securities the larger will be the feasibility of infinite portfolio. Then the investor has selected an efficient portfolio which provides maximum return for a given level of risk or which has lowest risk or a given level of return.

Step 3: Portfolio Selection

Once an investor has identified an efficient portfolio then he/she has to select a portfolio which suits the risk return appetite of investor. This process is known as portfolio selection.

Step 4: Portfolio Revision

Due to changing financial environment, portfolio management is continuous process. With passage of time an efficient portfolio may turn out to be an inefficient portfolio. Hence there is need to revise the optimum portfolio in light of changing financial environment like capital market, economic and industry wide factor. The change in investor objective can also generate the need to revise the optimum portfolio. Therefore, portfolio revision is integral part of portfolio management.

Step 5: Portfolio Performance Evaluation

Now the step is to evaluate the portfolio as to whether it has performed according to the expectation of investor. It involves assessing the actual return and risk of portfolio over a specified time. The method which is used to evaluate the portfolio are – Sharpe ratio, Treynor's ratio, Jensen's alpha, Fama's decomposition ratio. To evaluate we need to compare our optimum portfolio with that of some benchmark i.e., market portfolio.

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Notes

3.4 Portfolio Return

Portfolio return is weighted average returns of the individual return on asset or securities comprising that portfolio. The weights are the proportion of total funds invested in a particular asset or security.

For example:

Market Condition	Probability	Security A (%)	Security B (%)
GOOD	0.3	22	6
NEUTRAL	0.5	14	10
BAD	0.2	7	11

Expected return on security A = (0.3 × 22) + (0.5 × 14) + (0.2 × 7) = 15%

Expected return on security B = (0.3 × 6) + (0.5 × 10) + (0.2 × 11) = 9%

Now the investor wants to invest 50% in security A and 50% in security B. now we have to compute expected return on portfolio. Expected return on portfolio is weighted average of returns of the individual securities comprising that portfolio.

$$E(Rp) = \sum_{i=1}^{n} wi \times E(Ri)$$

Where, E(Rp) = portfolio return.

Wi = proportion of total fund invested in a particular asset or security i

Ri = expected return on security i.

N = number of asset or securities in the portfolio

So, expected return on portfolio = weight × expected return on security A + weight × expected return on security B.

= 0.5 × 15 + 0.5 × 9

= 12%

3.5 Portfolio Risk

Portfolio risk is combined risk of securities comprising that portfolio. Risk of individual security is measured by variance or standard deviation. But we simply can't combine that variance together because in portfolio

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securities also have co-variance i.e., inter-active risk. A covariance between two securities captures the tendency of them moving together. Hence portfolio risk is based on both variance and covariance between securities. Portfolio risk considers the standard deviation together with co-variance of returns on these assets or securities.

3.5.1 *Portfolio Risk in Two Security Case*

$$\sigma p = \sqrt{w_1^2\sigma_1^2 + w_2^2\sigma_2^2 + 2w_1w_2}\ \text{cov}12$$

Cov12 = $p_{12}\sigma_1\sigma_2$

Calculation of correlation coefficient – $P_{ab} = \frac{covAB}{\sigma_A\sigma_B}$

Where, w_1 = proportion of total funds invested in security 1

W_2 = proportion of total funds invested in security 2

σ_1 = standard deviation of return of security 1

σ_2 = standard deviation of return of security 2

Cov12 = co-variance between security 1 and 2 (Covariance is equal to the product of coefficient of correlation and standard deviation of security 2).

As we increase the number of securities the covariance also increases as if we have 5 securities then we have 10 covariance. Therefore, main limitation of Markowitz model is that it requires substantial amount of input data so as to calculate portfolio return and risk. Covariance is expressed in specified unit of measurement and hence an absolute measurement. Hence, we move towards a relative measure i.e., Coefficient of correlation. And coefficient of correlation is independent of the unit of measurement. It measures the degree of linear relationship between two variables. Its value ranges from +1 and –1.

EXAMPLE

Constructing a Portfolio for a Given Expected Return

Question: Construct a portfolio, using securities A and B, for an investor who wants expected return of 13%. Expected return from security A is 15% and expected return from security B is 9% calculate this portfolio's return as well.

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Solution: We require 13% expected return from portfolio

Let's assume weight of security A is w1 and then the weight of security B i.e., w2 will be (1 − w1)

Hence 13 = (15 × w1) + (9 × (1 − w1)

w1 = 0.67, hence w2 = 1 − 0.67 = 0.33

thus, the portfolio providing a return of 13% would be the one which invests 67% of funds in security A and 33% in security B.

portfolio risk of such portfolio will be calculated as below:

σ_p^2 = (0.672 × 5.3 2) + (0.33 2 × 2 2) + 2 0.67 0.33 (−0.94) 5.3 2 = 8.63

Hence σp = 2.94 %

3.5.2 *Minimum Variance Portfolio*

It means construction of such type of portfolio which has minimum risk or variance. Minimum variance portfolio is also the optimum portfolio for an investor who wants to minimize exposure to risk. We can estimate the weight of two securities in minimum variance portfolio using the following formula. It can be calculated as:

$$\text{W min A} = \frac{\sigma_B^2 - cov\ AB}{\sigma_A^2 + \sigma_B^2 - 2\ cov\ AB}$$

EXAMPLE

Question: Construct a minimum variance portfolio of securities A and B from the following information. Calculate this portfolio's return as well as risk.

Security	A	B
Expected Return	15	9
S.D. of returns	5.3	2

Covariance between the return of A and B = −10

Solution: The weight of security A in minimum variance portfolio is calculated as:

Wmin A = ((2)(2) − (−10))/(5.3)^2 + 2^2 − 2(−10)) = 14/52 = 0.27

Wmin B = 1 − 0.27 = 0.73

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Notes

Hence minimum variance portfolio is one which has 27 % of security A and 73% of security B.

Portfolio risk σ_p^2 = (0.272 × 5.32) + (0.732 × 22) + 2 × 0.27 × 0.73 × (–10)

σ_p = 0.50 %

This minimum variance portfolio risk will have the following portfolio return:

$$E(Rp) = (15 \times 0.27) + (9 \times 0.73) = 10.62\%$$

3.6 Portfolio Selection

Now the step is to select an optimum portfolio. The main guiding principle for selecting an optimum portfolio is that it should be a portfolio which provides maximum return for a given level of risk or which has minimum risk for a given level of return. The portfolio selection has been dealt in detail by Harry Markowitz in his portfolio theory, which was extended by Sharpe in capital market theory. Hence for selecting an optimum portfolio we have two theories which are:

- Portfolio theory
- Capital market theory

***(a)* Portfolio Theory of Harry Markowitz (1992) or Mean Variance Optimization Model**

The portfolio theory is popularly known as Markowitz model which provides logical and analytical tool for selection of optimum portfolio. This model is based on expected return i.e. (mean) and risk (variance) and it is also termed as mean variance optimisation model.

Assumption of Portfolio Theory

- Investors are risk averse.
- Portfolio can be analysed in terms of their risk and return. Portfolio return is weighted average of return on individual securities. Portfolio risk is calculated using variance and covariance.
- Selecting of optimum portfolio is based only on return and risk.

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Notes

- Investors are rational, they attempt to have maximum return for a given risk and minimum risk for a given return
- Investors have different risk return preference i.e., their indifference curves are different.

Steps of Portfolio Selection in Portfolio Theory/Markowitz Model

Step 1: Setting the Portfolio Opportunity Set or Investment Opportunity Set

Portfolio opportunity set shows the risk and return of all possible portfolio which can be made from set of available securities. In case of N number of securities, we can have infinite number of possible portfolios in which investor can invest. The graphical presentation of these portfolios is termed as portfolio or investment opportunity set. The opportunity set comprises of infinite number of feasible portfolios which can be constructed using available securities.

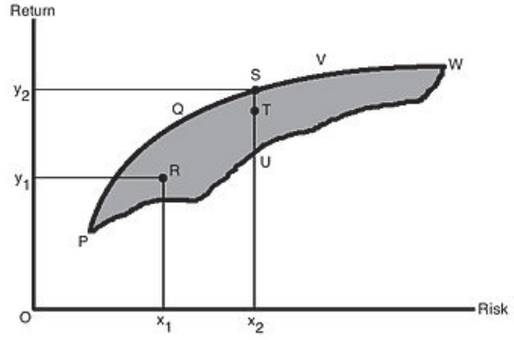

Figure 3.1: Portfolio Opportunity Set in case of N Securities

Step 2: Defining the Efficient Set of Portfolios i.e., the Efficient Frontier

Now we need to identify the efficient frontier out of all feasible portfolios. All feasible portfolios are not efficient. An efficient portfolio is one which has maximum return for given level of risk or which has minimum risk for a given level of return. An investor is rational they prefer more return to less risk. If investor chooses a portfolio which has same level of return, then he will choose the one with less risk. Here we apply the rule of dominance. As per rule of dominance the portfolio having highest return dominates all other portfolio having same return. Further a portfolio having lowest risk dominates all other portfolio having same return.

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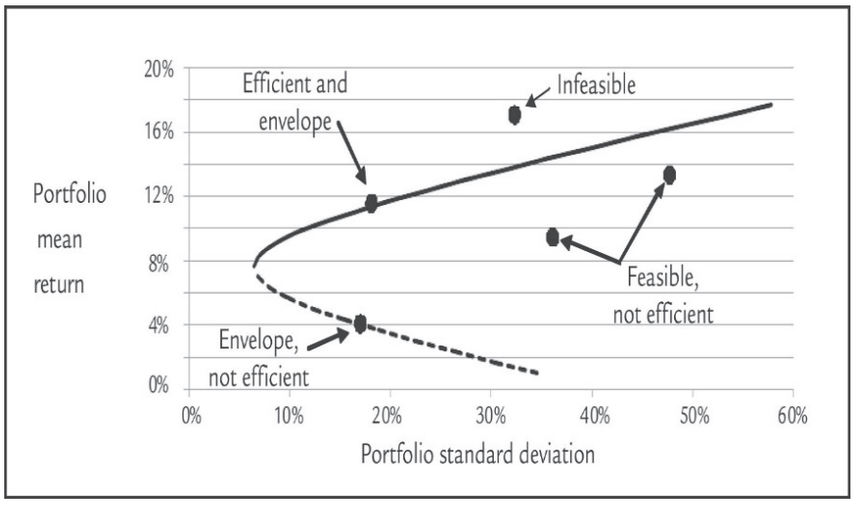

Figure 3.2

The above graph depicts the efficient portfolio and not efficient portfolio as the efficient portfolio gives the higher return of 12% for a given level of risk of 20% on the other hand the not efficient portfolio given 4% return at a level of approximately 20% risk.

Step 3: Constructing Indifference Curves of the Investor

The investor will now choose from the optimum portfolio from the efficient portfolio. As we all know that investor is risk averse and some are less risk averse. The more risk averse investor should select an optimum portfolio in the lower region of efficient frontier, while less risk averse investor should select a portfolio in upper region of efficient frontier. But efficient frontier cannot help an investor to select the optimum portfolio. The basic criterion for selection of optimum portfolio is that satisfaction/utility of investor is maximised. For this we construct indifference curve for investor. An indifference curve shows all the combination of risk and return which provide the investor same utility. Since all investor are risk averse that is why the indifference curve is upward slopping. The less risk averse will have rather flatter indifference curves while more risk averse investor will have steeper indifference curves. But indifference curve of investor cannot intersect. They will be parallel.

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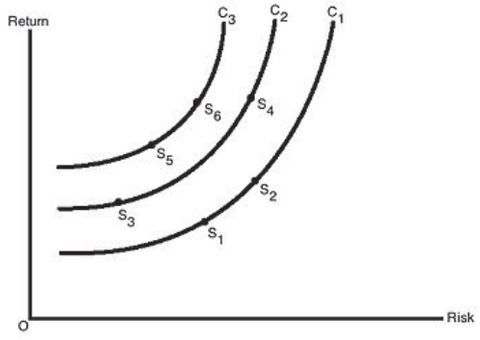

Figure 3.3: Indifference Curve of Risk Averse Investor

We construct three indifference curves for investor i.e. C_3, C_2, C_1. The C_3 will provide higher utility than C_1. Hence portfolio S_5 will provide higher utility than other portfolio. We did not choose S_6 as it will also provide higher return but with higher risk as well.

Step 4: Selecting the Optimal Portfolio

The selection of optimum portfolio or best portfolio must meet the following two conditions

- The portfolio is efficient that is it lies on efficient frontier.
- The utility of investor is maximised i.e., it should lie on the highest possible indifference.

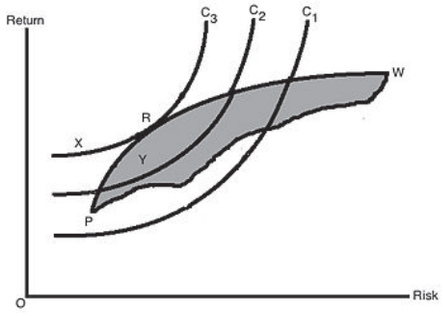

Figure 3.4: Optimum Portfolio

It should be noted that optimum portfolio is at point R where their higher indifference curve meets the efficient frontier. No portfolio is better than portfolio R. According to Markowitz model the optimum portfolio is the point of tangency between efficient frontier and highest possible indifference curve. This is also referred as point of equilibrium.

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Notes

A more risk averse investor will have steeper indifference curves and hence his optimal will be at lower region of efficient frontier. A less risk averse investor will have more flat indifference curves and hence his optimum portfolio will lie on the upper region of efficient frontier

Limitation of Markowitz Model

- Markowitz model is quite demanding in terms of data requirements. In order to analyse N securities, we need $(3n + N^2)/2$ data inputs. It becomes cumbersome and complex to handle such large data set. For example, in order to analyse 100 securities, we need 100 returns, 100 variances and 4950 co variances i.e., a total of 5150 data inputs. This is substantial.
- As per Markowitz model there are as many optimal portfolios as there are number of investors. However, this limitation is removed when we introduced a risk-free asset in the capital market.

(b) Capital Market Theory

Capital market theory extends the Markowitz model to a situation where risk free asset is introduced in capital market. The problem of optimum portfolio can be resolved when a risk-free asset is introduced in the market which will allow the investor to lend or borrow at risk free rate. This theory assume that all investors are rational.

Assumption of Capital Market Theory

- Investors make decision solely on the basis of risk and return assessment. This means that expected return and variance are the only factor considered in investment decisions.
- There is no restriction on short selling.
- There are many investors and buy or sell transaction of any investor will not affect the price of the securities.
- There are no transaction cost or taxes.
- There is risk free asset beside risky assets. Hence investor can borrow or lend any amount at the same risk-free rate.
- Investors have identical or homogeneous expectation about expected returns, variance of expected returns and covariances of all pairs

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Notes

of securities. This assumption is important so as to have a unique efficient frontier. If the expectation of investor differs in terms of returns, variances and covariance then there would be a number of efficient frontiers which would further complicate the problem.

Introduction of Risk-free Asset in Capital Market

In portfolio theory efficient frontier is a concave curve but when risk free asset is introduced in capital market then the efficient frontier becomes straight line which originates from risk free return on Y axis and is tangent to original efficient frontier at point M. This line is called RfMD. This new efficient frontier which is a straight line is called capital market line (CML).

Thus, capital market line is the line which starts from Rf and is tangent to the efficient frontier at point M. The capital market line shows linear relationship between risk and return. Every point on CML shows an efficient portfolio. The interception of CML is Rf i.e., risk free rate which shows that if there is no risk, the return earned must be equal to Rf.

The slope of CML $= [(E(Rm) - Rf)]/\sigma_m$

The capital market line:

$E(Rp) = Rf + [(E\ (Rm) - Rf)]/\sigma_m.\sigma p$

Where: E(Rp) = expected return of portfolio

Rf = risk free rate of interest

E(Rm) = expected return on market portfolio

σ_m = standard deviation (total risk) of market portfolio

σp = standard deviation (total risk) of the portfolio

Features of Capital Market Line

- CML shows linear and positive relationship between expected return and risk of a portfolio.
- It originates from Rf i.e., risk free rate. Hence the interception of CML is Rf.
- The slope of CML is reward to variability ratio i.e.$[(E(Rm) - Rf)]/\sigma_m$
- CML is tangent to original efficient frontier at point M, i.e., the market portfolio or the optimal portfolio of risky assets

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Notes

- Only efficient portfolio consisting of risk-free asset and portfolio M lie on CML
- CML is upward sloping because price of risk must be positive since investors are risk averse.

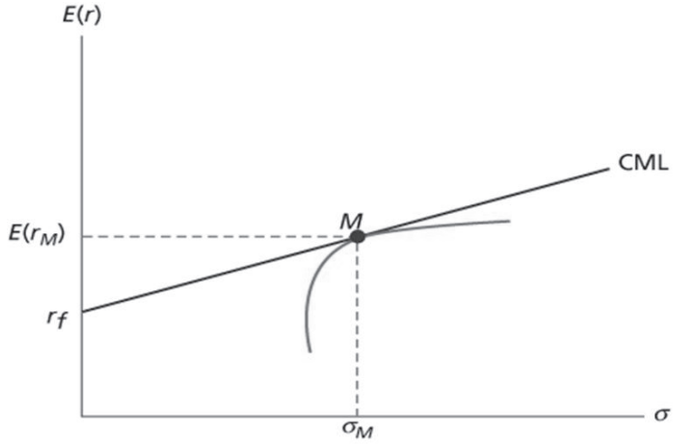

Figure 3.5: Capital Market Line

Question: The Details of Three Portfolios are provided to an Investor:

Portfolio	Expected Return	Total Risk (S.D)
P	15%	3%
Q	19%	6%
R	20%	10%

It is further given that the risk-free rate of interest is 4% and expected market return is 12%, risk (S.D) of the market portfolio is 5%. Find out whether these portfolios are efficient or not.

Solution: We know that portfolio is efficient if it lies on capital market line. Hence, we need to calculate expected return of these portfolios as per CML. The given expected returns are based on the probability distribution of returns or some other analysis.

If expected return as per CML = given expected return then the portfolio lies on CML and hence is efficient. Otherwise, the portfolio is inefficient.

Expected return as per CML is calculated using following equation.

$$E(Rp) = Rf + [(E(Rm) - Rf)]/\sigma_m.\sigma p$$

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Notes

Portfolio	Expected Return (given)	Expected Return as per CML	Efficient or Not
P	7%	4 + (12-4)3/5 = 8.8%	NOT EFFICIENT
Q	19%	4 + (12-4)6/5 = 13.6%	NOT EFFICIENT
R	20%	4 + (12-4)10/5 = 20%	EFFICIENT

The above table depicts that only R portfolio is efficient portfolio because in case of other portfolios the expected return as per CML does not match with the given returns.

IN-TEXT QUESTIONS

1. The risk that can be reduced through diversification across different assets in a portfolio is known as:

(a) Systemic risk

(b) Unsystematic risk

(c) Market risk

(d) Interest rate risk

2. Unsystematic risk is also referred to as:

(a) Diversifiable risk

(b) Inflation risk

(c) Market risk

(d) Liquidity risk

3. The expected return of a portfolio is influenced by the:

(a) Unsystematic risk only

(b) Systematic risk only

(c) Both systematic and unsystematic risks

(d) None of the above

4. The Capital Market Line (CML) represents the relationship between:

(a) Risk and return of individual assets

(b) Risk-free rate and market portfolio

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Notes

(c) Portfolio risk and inflation rate

(d) Portfolio return and company earnings

5. In the context of portfolio management, what is the Sharpe ratio used to measure?

(a) Risk-adjusted return

(b) Market volatility

(c) Liquidity risk

(d) Interest rate risk

6. What is the formula for calculating the expected return of a portfolio?

(a) Portfolio Return = Risk-Free Rate + Beta * Market Risk Premium

(b) Portfolio Return = Weighted Average of Individual Asset Returns

(c) Portfolio Return = Market Risk Premium/Beta

(d) Portfolio Return = Risk-Free Rate + Inflation Rate

3.7 Capital Asset Pricing Model (CAPM)

Capital asset pricing model is extension of capital market theory. CAPM is developed by Sharpe (1964), Lintner (1965) and Mossin (1966). CAPM is used to find out whether a security is earning more or less than expected return. From investment point of view investor should select securities which provide higher return than the one expected by CAPM. Before going ahead with explanation of CAPM we will see the type of risk.

Capital asset pricing model used to predict expected return on security or portfolio. Capital asset pricing model shows that there is a positive and linear relationship between expected return and systematic risk (β). securities differ in terms of their sensitivity to market portfolios. Some securities are less sensitive while other are more sensitive. Hence beta of different securities and portfolios are also different.

Assumption of CAPM

- All investors are risk averse.

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Notes

- Investor make decision solely on the basis of risk and return assessments.
- Securities are indefinitely divisible. One can buy or sell securities even in fractions
- There is no restriction on short selling.
- There are infinite investor and buy or sell transaction of any investor will not affect the prices of securities. There is perfect competition in capital market.
- There are no transaction costs or taxes.
- All the investor holds efficiently diversified portfolio having no systematic risk.

CAPM

$$E(Ri) = Rf + [(E(RM) - Rf]\beta i$$

Where E(Ri) = expected rate of return from a security or asset

Rf = risk free rate of return

E(RM) = Expected return on market portfolio

βi = beta coefficient or beta factor of security I

As per CAPM

Expected return = risk free rate + market risk premium × systematic risk

Expected return = risk free rate + risk premium

The market portfolio is the efficiently diversified portfolio which contain all the securities available in the market. Market risk premium is the excess of expected return on market over risk free return.

The expected return from security depends upon the following three factors

- Risk free rate of return = this pure time value of money. This is the compensation an investor must get for time without assumption of risk
- Market risk premium or the market price for risk = this is the reward an investor must get for bearing one unit of market risk or systematic risk.
- The amount of systematic risk indicated by β: this is the relative amount of systematic risk in security. The higher the systematic risk the higher will be the expected return.

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Notes

For example, Rf = 5%, E(Rm) = 11 % and β of security T is 1.5. Calculate expected return.

$E(Ri) = Rf + [(E(Rm) - Rf]\beta i$

$= 0.05 + (0.11 - 0.05)\ (1.5)$

$= 0.14$ or 14%

There are two types of risk systematic risk and unsystematic risk

Systematic Risk or Non-diversifiable Risk: This type of risk is caused by factors which are beyond the control of specific company. These factors affect all the companies and cause variability in return. Systematic risk cannot be reduced by holding an efficiently diversified portfolio. It is indicated by beta coefficient (β). β captures the security return with respect to market return.

Unsystematic risk or diversifiable risk: This type of risk is caused by the factors which are within the control of company such as management, operational efficiency, labour condition, financial leverage. It is called diversifiable because in an efficiently diversified portfolio unsystematic risk can be completely eliminated.

Unsystematic risk reduces to zero in an efficiently diversified portfolio and hence the only relevant risk in such a portfolio is systematic risk. Therefore, as per capital market theory the only relevant risk which is priced in capital market is systematic risk not the total risk.

- **β: An Indicator of Systematic Risk**

Measures the sensitivity of a security's returns with respect to market return. The more sensitive a security's returns are to market return, the higher will be the value of β.

- If security has $\beta < 1$ then it is less responsive to market returns.
- If $\beta > 1$ then security is more responsive to change in market return.
- A risk-free asset is not responsive to change in market in market returns and hence the β of risk-free asset is always zero.
- β of market portfolio is always 1. This is because here we are relating market portfolio with itself and hence it must be 1.

Beta (β) = cov (S, M)/σ_M^2

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Notes

Where cov (S, M) = Covariance between return of security S and market return

We know cov(s, m) = $\sigma_s \times \sigma_m$ *X coefficient of correlation (s, m)/σM²*

EXAMPLE

Question: Following information is available in respect of security G and the market portfolio M.

Probabilities	Security G	Market portfolio M
0.3	10	12
0.4	12	15
0.3	14	18

Find out beta of security G.

Solution:

Pi	G	m	PiG	PiM	Pi (G-exp G)2	Pi (M-exp M)2	Pi (G-exp G) (M-exp M)
0.3	10	12	3	3.6	1.2	2.7	1.8
0.4	12	15	4.8	6	0	0	0
0.3	14	18	4.2	5.4	1.2	2.7	1.8
			Σ = 12	Σ = 15	Σ = 2.4	Σ = 5.4	Σ = 3.6

Mean return of G = 12%, Mean market return = 15%

Variance of G = 2.4sq%, variance of M = 5.4sq %, covariance = 3.6sq %

Beta (β) = cov/market variance = 3.6/5.4 = 0.67

Hence beta of security G is 0.67

Whether a Security is Efficiently or Fairly Priced in the Market?

If actual return is equal to return as per CAPM, then the security is efficiently priced in market.

If actual return is less than return as per CAPM then the security is over-priced in the market as expected return based on CAPM is higher.

If actual return is more than return as per CAPM, then the security is underpriced in market as its expected return based on CAPM is lower while it is providing a higher actual return.

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Notes

IN-TEXT QUESTIONS

7. What does CAPM stand for in finance?

(a) Capital Asset Profitability Model

(b) Corporate Asset Pricing Measure

(c) Capital Asset Pricing Model

(d) Credit and Portfolio Management

8. According to CAPM, the expected return on an asset is composed of:

(a) Risk-free rate and security risk premium

(b) Market risk premium and company-specific risk

(c) Dividend yield and earnings per share

(d) Beta and market risk premium

9. In the CAPM formula, the risk-free rate represents the return on:

(a) A risk-free investment

(b) A highly volatile stock

(c) The market portfolio

(d) A government bond

10. Beta in the CAPM model measures:

(a) Market risk premium

(b) Company-specific risk

(c) Risk-free rate

(d) Total portfolio return

11. If a stock has a beta of 1, it implies:

(a) The stock is riskier than the market

(b) The stock has no risk

(c) The stock has the same risk as the market

(d) The stock has a negative risk

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Notes

12. According to CAPM, what happens to expected return if beta increases?

(a) Expected return increases

(b) Expected return decreases

(c) No impact on expected return

(d) Expected return becomes negative

13. The market risk premium is calculated as:

(a) Market return – Risk-free rate

(b) Risk-free rate – Market return

(c) Beta – Risk-free rate

(d) Risk-free rate – Beta

14. In the CAPM formula, what does (Rm – Rf) represent?

(a) Market risk premium

(b) Risk-free rate

(c) Company-specific risk

(d) Expected stock return

Security Market Line (SML)

Graphical presentation of capital asset pricing model is called security market line. Security market line shows linear relationship between expected return and β factor. It has interception as Rf i.e., it originates from risk free rate. It must be noted that when β is zero then the return an investor gets is equal to risk free return.

SML and Pricing of Securities

- Securities lies on SML are efficiently priced in market. For such securities the actual return (based on probability distribution) is equal to expected return based on CAPM.
- If security lies below SML then the security is inefficiently priced (overpriced) in the market. Such a security provides actual return which is lower than expected return based on CAPM. Investor should not invest in such securities.

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Notes

- If security lies above SML then also it is inefficiently priced, but it is under-priced in the market. Such security provides an actual return which is higher than expected return based on CAPM.

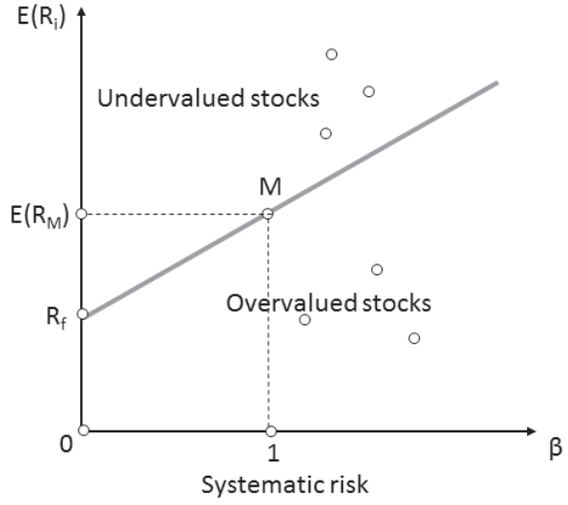

Figure 3.6

Position and Slope of SML

- Security market line is upward sloping line.
- The position of SML depends upon Rf i.e., risk free rate and slope of SML depends upon market risk premium.
- If there is higher Rf then SML will be higher and this SML will be parallel to existing SML with lower Rf and there will be no change in slope
- Difference in slope due to risk premium. The higher the risk premium the higher will be the slope of SML and steeper will be the SML.

EXAMPLE

Question: Following information about two securities P and Q.

Security	P	Q
Actual return %	12	16
B	0.7	1.3

Risk free rate is 5% and expected return on market portfolio is 15%. Do you think that securities A and B are efficiently priced in the market? Do they lie on SML?

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Notes

Solution: Here we need to calculate expected return as per CAPM.

$E(Ri) = Rf + [(E(RM) - Rf] \beta i$

Expected return from $P = 5 + (15 - 5)\ (0.7) = 12\ \%$

Expected return from $Q = 5 + (15 - 5)\ (1.3) = 18\%$

Since security P has same actual return and return as per CAPM. security P is efficiently priced and it will lie on SML.

The actual return from security Q is less than as per CAPM i.e., 18%. Hence security Q is inefficiently priced. It lies below SML. It is overpriced in the market.

3.8 Summary

The chapter focuses on the portfolio management process, which involves creating and managing a collection of investments. Two key considerations in portfolio management are portfolio return and portfolio risk. Portfolio risk can be analyzed in a two-security case, and the minimum variance portfolio is an important concept in risk management. Portfolio selection involves identifying the best combination of investments to achieve a desired return and level of risk. The chapter also introduces the Capital Asset Pricing Model (CAPM), which is a tool for understanding the relationship between risk and return in a portfolio. Overall, the chapter provides a comprehensive overview of the key concepts and considerations involved in portfolio management.

3.9 Answers to In-Text Questions

1. *(b)* Unsystematic risk

2. *(a)* Diversifiable risk

3. *(c)* Both systematic and unsystematic risks

4. *(b)* Risk-free rate and market portfolio

5. *(a)* Risk-adjusted return

6. *(b)* Portfolio Return = Weighted Average of Individual Asset Returns

7. *(c)* Capital Asset Pricing Model

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Notes

8. *(a)* Risk-free rate and security risk premium

9. *(d)* A government bond

10. *(b)* Company-specific risk

11. *(c)* The stock has the same risk as the market

12. *(b)* Expected return decreases

13. *(a)* Market return – Risk-free rate

14. *(a)* Market risk premium

3.10 Self-Assessment Questions

1. What is portfolio?
2. What is portfolio return?
3. What is process of portfolio management?
4. What are the measurements of risk?
5. What is CAPM?
6. What are the theories of portfolio management?

3.11 Reference

- Prof. Rajni. *Personal Financial Planning,* JSR Publishing House LLP.

3.12 Suggested Readings

- Halan, Monika. *Let's Talk Money: You've Worked Hard for It, Now Make It Work for You,* July 2018, Harper Business.
- Madura, J. (2016). *Personal Finance.* Delhi, India: Pearson

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UNIT - III

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LESSON

1

Personal Tax Planning

Dr. Sonia Kangra

Guest Faculty, School of Open Learning,
University of Delhi

STRUCTURE

1.1 Learning Objectives

- Understanding the concept of personal tax planning.
- Learning about surcharge, marginal relief and education cess.
- Learning about Tax evasion, Tax avoidance, Tax planning.
- Understanding the distinction between tax planning and tax avoidance and tax evasion.
- Understanding the objective of tax planning, basic techniques to tax planning, deductions under various sections.

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Notes

1.2 Introduction

Every person whose total income of the previous year exceeds the maximum amount which is not chargeable to income tax, he is assessed and chargeable to income-tax in the assessment year at the rate or rate prescribed by the Finance Act or the Income-tax Act for relevant assessment year. But it is the duty of an individual to save legally from payment of taxes so that an individual can save for him and his dependent to be a good and honourable citizen. On the other hand, the practical concept of taxation law is to realize the revenue by way of text to the maximum. Therefore, the perception of taxpayers and tax collectors are different. The taxpayer puts every effort to maximize revenue and reduce the incidence of tax. On the other hand, the tax collector tries to maximize revenue within the framework of law. It is here that tax planning has assumed importance in the complexities of taxation law. In India, taxation of individuals is primarily based on their residential status in the relevant tax year. The residential status of individuals is determined independently for each tax year and is ascertained on the basis of their physical presence in India during the relevant tax year and past years.

1.2.1 *Bases of Taxation*

- Income earned by every person is chargeable to income-tax provided it exceeds the maximum amount which is not chargeable to tax i.e. it exceeds maximum exemption limit.
- It is charged on the total income of the previous year, but it is taxable in the following assessment year at the rate which is applicable in that assessment year.
- Income tax is charged at two rates i.e. normal rate and special rate. Normal rate can be in the form of slab rate or flat rate fixed by the Finance Act but special rates are given in the Income-tax Act.
- Tax is calculated based on income ascertained in accordance with the provision of Act.
- Total income is calculated based on residential status in India.

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Notes

- Although the income of the previous year is chargeable to tax in the assessment year, the assessee has to pay income tax in the same previous year in which income is earned. It is paid in the form of advance tax and deduction of tax at source (TDS). such tax paid in the previous year (also known as prepaid taxes) shall be deducted in the assessment year.

1.2.2 *Important Concepts*

Person [Section 2(31)]

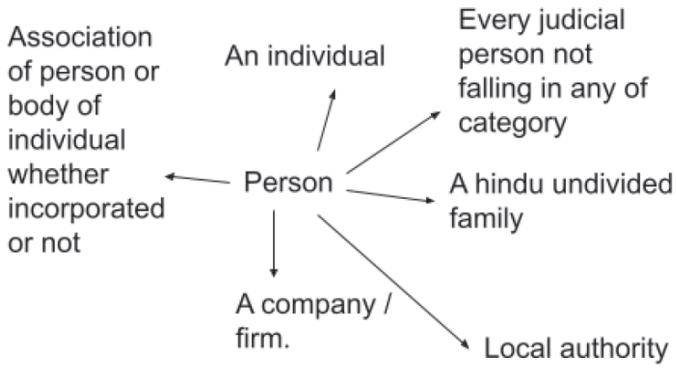

Figure 1.1

Individual: An individual means a natural person i.e. human being (male, female, minor child. However, the income of minors is included in the income of parents. Sometimes a minor is himself liable to pay tax on income earned by him. Since a minor is not competent to contract, his income is taxed through his legal guardian.

A Hindu Undivided Family: This has not been defined under the tax laws. However, as per Hindu law, it means a family which consists of all persons lineally descended from common ancestors, their wives, and daughters.

Firm: A firm, which is defined in the Indian Partnership Act, 1932 and shall include a limited liability partnership as defined in the Limited Liability Partnership Act 2008.

Association of Person: The Income-tax Act does not define association of person (AOP). Its meaning can be derived in ordinary form. Association of person means two or more people who join for a common purpose to

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Notes

earn an income. It need not be on the basis of contract, therefore if two or more persons join hands to carry on a business but do not constitute a partnership, their grouping may be termed as association of person. Any association can't be termed as association of person, it must be association for income producing activity.

Body of Individual (BOI): This means conglomeration of individuals who carry on some activity with an objective of earning income. It consists only of individuals. Companies and firms are not part of the body of individual. If tax is being paid by BOI/AOP, then the individual need not to pay tax.

Artificial Juridical Persons: They are entities which are not natural persons but are separate entities in the eyes of law. Though they may not be sued directly in a court of law, they can be sued through the person managing them. God, idols, and deities are artificial persons. Though they may not be sued directly but they can be legally sued through priests or managing committees of place of worship etc. Similarly, all other artificial persons with a juristic personality, will fall under this category, if they do not fall within any of preceding categories of persons e.g. University of Delhi is an artificial person as it does not fall in any of six categories mentioned above.

Assessment Year (Section 2(9))

Assessment year means the period of 12 months commencing on the first day of April every year. It is, therefore, the period from 1st of April to 31st March for example the assessment year 2020-2021 will commence on 1.4.2020 and end on 31.3.2021. The tax is levied in each assessment year with respect to or on the total income earned by assessee in the previous year.

What is the Difference between Assessment Year and Financial Year?

From an income tax perspective, FY is the year in which you earn an income. AY is the year following the financial year in which you have to evaluate the previous year's income and pay taxes on it. For instance, if your financial year is from 1 April 2020 to 31 March 2021, then it is known as FY 2020-21. The assessment year for the money earned during this period would begin after the financial year ends – that is from

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Notes

1 April 2021 to 31 March 2022. Hence, the assessment year would be AY 2022-22.

Previous Year (Section 3)

According to section 3 previous year means the financial year immediately preceding the assessment year. Financial year starts on 1st April and ends on 31st March.

Important Points

- Income Tax is payable on income earned during the previous year and it is assessed in the immediately succeeding financial year which is called an assessment year. Therefore the income on during the previous year 1.4.2019 to 31.3.2020 will be assessed or charge to take in the assessment year 2020-2021.
- All the accessories are required to follow a uniform previous year that is the financial year 1st April to 31st March as their previous year. Previous year for income tax purpose will be financial year which ends on 31st March although the assessee can close his books of account on any of the Other date example and assessee name maintain books of accounts on calendar year basis but his previous year for the income tax purpose will be financial year not the calendar year.

Illustration 1 ascertains the Previous Year in the Following Cases. Having Assessment Year 2020-2021

1. Dr. Gupta was appointed assistant professor of Daulat Ram College for the first time on 1.9.2019.
2. Dinesh started a cloth business on 27.2.2019
3. Mr. Ram purchased a house on 5.7.2018
4. A received a remuneration of 50,000 on 10.3.2019

Solution: **1.** 1.9.2019 to 31.3.2020

2. 27.2.2019 to 31.3.2020

3. 5.7.2018 to 31.3.2019

4. 10.3.2019 to 31.3.2020

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Notes

1.2.3 *Rate of Income Tax for Current Assessment Year*

Individuals and HUFs can opt for the Existing Tax Regime or the New Tax Regime with lower rate of taxation (u/s 115 BAC of the Income Tax Act). The taxpayer opting for concessional rates in the New Tax Regime will not be allowed certain Exemptions and Deductions (like 80C, 80D, 80TTB, HRA) available in the Existing Tax Regime.

- For individual less than 60 years

Age Group	Existing Tax Regime		New Tax Regime u/s 115 BAC	
<60	Income Tax Slab	Income Tax Rate	Income Tax Slab	Income Tax Rate
	Upto 2,50,000	nil	Upto 2,50,000	nil
	2,51,000 – 5,00,000	5% above 2,50,000	2,51,000 – 5,00,000	5% above 2,50,000
	Rs. 5,00,001 – Rs. 10,00,000	Rs. 12,500 + 20% above Rs. 5,00,000	Rs. 5,00,001 – Rs. 7,50,000	Rs. 12,500 + 10% above Rs. 5,00,000
	Above Rs. 10,00,000	Rs. 1,12,500 + 30% above Rs. 10,00,000	Rs. 7,50,001 – Rs. 10,00,000	Rs. 37,500 + 15% above Rs. 7,50,000
			Rs. 10,00,001 – Rs. 12,50,000	Rs. 75,000 + 20% above Rs. 10,00,000
			Rs. 12,50,001 – Rs. 15,00,000	Rs. 1,25,000 + 25% above Rs. 12,50,000
			Above Rs. 15,00,000	Rs. 1,87,500 + 30% above Rs. 15,00,000

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- For Individual (resident or non-resident), 60 years or more but less than 80 years of age anytime during the previous year:

Age group	Existing Tax Regime		New Tax Regime u/s 115 BAC	
60 +	Income Tax Slab	Income Tax Rate	Income Tax Slab	Income Tax Rate
	Up to Rs. 3,00,000	Nil	Up to Rs. 2,50,000	Nil
	Rs. 3,00,001 – Rs. 5,00,000	5% above Rs. 3,00,000	Rs. 2,50,001 – Rs. 5,00,000	5% above Rs. 2,50,000
	Rs. 5,00,001 – Rs. 10,00,000	Rs. 10,000 + 20% above Rs. 5,00,000	Rs. 5,00,001 – Rs. 7,50,000	Rs. 12,500 + 10% above Rs. 5,00,000
	Above Rs. 10,00,000	Rs. 1,10,000 + 30% above Rs. 10,00,000	Rs. 7,50,001 – Rs. 10,00,000	Rs. 37,500 + 15% above Rs. 7,50,000
			Rs. 10,00,001 – Rs. 12,50,000	Rs. 75,000 + 20% above Rs. 10,00,000
			Rs. 12,50,001 – Rs. 15,00,000	Rs. 1,25,000 + 25% above Rs. 12,50,000
			Above Rs. 15,00,000	Rs. 1,87,500 + 30% above Rs. 15,00,000

For Individual (resident or non-resident) 80 years of age or more anytime during the previous year

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Notes

Age Group	Existing Tax Regime		New Tax Regime u/s 115 BAC	
	Income Tax Slab	Income Tax Rate	Income Tax Slab	Income Tax Rate
	Up to Rs. 5,00,000	Nil	Up to Rs. 2,50,000	Nil
	Rs. 5,00,001 – Rs. 10,00,000	20% above Rs. 5,00,000	Rs. 2,50,001 – Rs. 5,00,000	5% above Rs. 2,50,000
	Above Rs. 10,00,000	Rs. 1,00,000 + 30% above Rs. 10,00,000	Rs. 5,00,001 – Rs. 7,50,000	Rs. 12,500 + 10% above Rs. 5,00,000
			Rs. 7,50,001 – Rs. 10,00,000	Rs. 37,500 + 15% above Rs. 7,50,000
			Rs. 10,00,001 – Rs. 12,50,000	Rs. 75,000 + 20% above Rs. 10,00,000
			Rs. 12,50,001 – Rs. 15,00,000	Rs. 1,25,000 + 25% above Rs. 12,50,000
			Above Rs. 15,00,000	Rs. 1,87,500 + 30% above Rs. 15,00,000

Important points

- The rates of Surcharge and Health and Education cess are same under both the tax regimes
- Rebate u/s 87-A Resident Individual whose Total Income is not more than Rs. 5,00,000 is also eligible for a Rebate of up to 100% of income tax or Rs. 12,500, whichever is less. This Rebate is available in both tax regimes

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1.2.4 *Surcharge, Marginal Relief and Health and Education Cess*

What is the Surcharge?

Surcharge is an additional charge levied for persons earning Income above the specified limits, it is charged on the amount of income tax calculated as per applicable rates

10% – Taxable Income above Rs. 50 lakh – up to Rs. 1 crore

15% – Taxable Income above Rs. 1 crore – up to Rs. 2 crore

25% – Taxable Income above Rs. 2 crore – up to Rs. 5 crore

37% – Taxable Income above Rs. 5 crore

Maximum rate of Surcharge on Income by way of Dividend or Income under the provisions of Sections 111A, 112A and 115AD is 15%

What is Marginal Relief?

Marginal relief is a Relief from Surcharge, provided in cases where the Surcharge payable exceeds the additional income that makes the person liable for Surcharge. The amount payable as Surcharge shall not exceed the amount of income earned exceeding Rs. 50 lakh, Rs. 1 crore, Rs. 2 crore or Rs. 5 crore respectively.

What is Health Cess and education cess?

Health and Education cess @ 4% shall also be paid on the amount of income tax plus Surcharge (if any).

1.2.5 *Tax Rebate u/s Section 87A*

A rebate under section 87A is one of the income tax provisions that help taxpayers reduce their income tax liability. You can claim an income tax rebate under section 87A if your total income does not exceed Rs. 5 lakh in a financial year. Your income tax liability becomes nil after claiming the rebate under section 87A.

Important Points Related to Tax Rebate u/s 87A

- The rebate can be applied to the total tax before adding the health and education cess of 4%.

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- Only resident individuals are eligible to avail rebate under this section.
- Senior citizens above 60 years and below 80 years of age can avail rebate under section 87A.
- Super senior citizens above 80 years of age are not eligible to claim rebate under section 87A.
- The amount of rebate will be lower of limit specified under section 87A or total income tax payable (before cess).

IN-TEXT QUESTIONS

1. Determine the status of following:

(a) Banaras Hindu university.

(b) Snapdeal.

(c) Carat lane.

(d) A and b are legal heirs of c, c died in 2018 and a and b carry on business without entering into partnership.

(e) Sri ram enterprises, a firm consisting of four partners A, B, C, D.

(f) A joint family consisting of P, Mrs. P and their son S.

(g) Municipal corporation of UP.

1.3 Method used to Minimize Tax Liability

The primary objective of tax planning is to save the hard labour of the taxpayer in enjoying the fruits of his income and wealth to the maximum possible extent. Taxpayers try to minimize tax liability. To achieve this goal the following three methods are commonly used by him: Tax evasion, Tax avoidance, Tax planning.

1.3.1 *Tax Evasion*

Unscrupulous citizens evade their tax liability by dishonest means. For example: Concealment of income, Inflation of expense to suppress income, Falsification of accounts, Conscious violation of rules. These devices are unethical and must be condemned. The court also does not favor such unethical means. Evasion once proved not only to attract heavy penalties but

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also lead to prosecution. Such an evader of tax is not a good citizen and tax evasion as a means to reduce tax liability cannot be advocated by anyone.

1.3.2 *Tax Avoidance*

Tax avoidance is minimising the incidence of tax by adjusting the affairs in such a manner that although it is within the four corners of taxation law, the advantages are taken by finding out the loopholes in the law. The shortest definition of tax avoidance is that is the art of dodging tax without breaking the law. In the case of tax avoidance, the taxpayer apparently circumvents the law without giving rise to criminal offence, by the use of a scheme, arrangement or devise, often of complex nature but where the main purpose is to defer, reduce or avoid the tax payment under the law.

1.3.3 *Tax Planning*

Tax planning is the arrangement of financial activities in such a way that maximum tax benefits are enjoyed by making use of all beneficial provisions in the tax laws. This is permitted and not frowned upon. Tax planning may be legitimate provided it is within the framework of law. It is the obligation of every citizen to pay taxes honestly without resorting to illegal means.

1.3.3.1 Objectives of Tax Planning

- Reduction of tax liability
- Minimisation of litigation
- Productive investment
- Healthy growth of economy
- Economic stability

Reduction of Tax Liability: One of the supreme objectives of tax planning is the reduction of tax liability of the taxpayer and the resultant saving of the earning for a better enjoyment of the fruits of the hard labour. By proper tax planning, a taxpayer can oblige the administrators of the taxation laws to keep their hands off from his earnings.

Minimisation of Litigation: Where a proper tax planning is resorted to by the taxpayer in conformity with the provision of the taxation laws, the chances of unscrupulous litigation are certainly to be minimised and the taxpayer

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may be saved from hardships and inconvenience caused by unnecessary litigations which more often not even knock the doors of supreme judiciary.

Productive Investment: The planning is a measure of awareness of the tax-payer to the intricacies of the taxation laws and it is the economic consciousness of the income-earner to find out ways and means of productive investment of the earnings which would go a long way to minimise his tax burden.

Healthy Growth of Economy: The saving is the only basement upon which the economic structure of human life is founded. A saving by legally sanctioned devices is a prime factor for the healthy growth of the economy of a nation and its people. An income saved and accumulated in violation of law scours on the nation.

Economic Stability: Under tax planning, taxes are paid without any headache either to the taxpayer or to the tax collector. Avenues of productive investment are largely availed of by the taxpayers. Productive investment increases the economic prosperity of a nation. The planning thereby creates economic stability of the nation and its people by even distribution of economic resources.

1.4 Difference between Tax Planning and Tax Evasion

Tax Planning	Tax Evasion
1. Tax planning is an act within permissible range of the act conducted to achieve social and economic benefits.	Tax evasion is an attempt to avoid tax by misrepresentation of facts and falsification of accounts.
2. Tax planning is a legal right which enables the taxpayer to achieve social and economic objectives.	Tax evasion is a legal offence which may lead to penalty and prosecution.
3. Tax planning accelerates development of the economy of a country by generating funds for investment in desired sectors.	Tax evasion retards the development of the economy of a country by generating black money which works as a parallel economy.
4. Tax planning promotes professionalism and strengthens the economic and political situation of the country.	Tax evasion encourages bribery and weakens the economic and political situation of the country.

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1.5 Difference between Tax Avoidance and Tax Evasion

Tax Avoidance	Tax Evasion
1. Tax avoidance means planning for legal requirements, but it defeats the basic intention of the legislature.	Tax evasion means avoiding tax liability illegally.
2. Tax avoidance takes into account various lacunas of law.	Tax evasion involves use of un-fair means.
3. Tax avoidance is lawful but involves the element of mala fide intention.	Tax evasion is unlawful.
4. Tax avoidance is planning before the actual liability for tax comes into existence.	Tax evasion involves avoidance of payment of tax after the liability of tax has arisen.

IN-TEXT QUESTIONS

2. What is the primary distinction between tax avoidance and tax evasion?

(a) Both are illegal

(b) Tax avoidance is legal, while tax evasion is illegal

(c) Tax evasion is legal, while tax avoidance is illegal

(d) They are interchangeable terms

3. Tax evasion involves:

(a) Minimizing tax liability through legal means

(b) Intentionally evading taxes through illegal means

(c) Planning for future tax obligations

(d) Filing taxes accurately and on time

4. Which of the following is an example of tax evasion?

(a) Claiming legitimate business expenses

(b) Underreporting income to reduce tax liability

(c) Using tax credits to offset taxes owed

(d) Hiring a tax professional for advice

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5. Tax avoidance is often achieved through:

(a) Unethical and illegal practices

(b) Minimizing tax liability within the bounds of the law

(c) Engaging in aggressive tax planning

(d) Falsifying financial statements

6. What is the primary goal of tax planning?

(a) Reducing tax liability through legal means

(b) Concealing income from tax authorities

(c) Avoiding tax audits

(d) Delaying tax payments indefinitely

7. Legal methods employed to minimize tax liability constitute:

(a) Tax evasion

(b) Tax avoidance

(c) Tax fraud

(d) Tax resistance

8. What is the role of a tax professional in tax planning?

(a) Encouraging tax evasion

(b) Advising on legal strategies to minimize tax liability

(c) Falsifying financial records

(d) Facilitating tax fraud

1.6 Tax Management

Tax management refers to the compliance with the statutory provision of law. While tax planning is optional, tax management is mandatory. It includes maintenance of accounts, filing of return, payment of taxes, deduction of tax at source, timely payment of advance tax, etc. Poor tax management may lead to levy of interest, penalty, prosecution etc. In some cases, it may lead to heavy financial loss if proper compliance is not made. For example, if a loss return is not filed in time it will result

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in a financial loss because such loss will not be allowed to be carried forward.

Tax Planning	Tax Management
1. Tax planning a wider term and includes tax management.	Tax management is narrower term and is the first step towards tax planning.
2. Tax planning emphasises on minimisation of tax burden.	Tax management emphasises on compliance of legal formalities for minimisation of tax.
3. Every person may not require tax planning.	Tax management is essential for every person.
4. Tax planning helps in decision making.	Tax management helps in complying with the conditions for effective decision making.
5. Tax planning helps to claim various benefits of tax.	Tax management helps in complying the conditions for claiming tax benefits.
6. Tax planning involves comparison of various alternatives before selecting the best one.	Tax management involves maintenance of accounts in prescribed form, filing of return, payment of tax, etc.
7. Tax planning looks at future benefits.	Tax management relates to the past, present and future.

1.7 Deduction

In computing the total income of assessee, certain deductions are permissible under sections 80C to 80U from gross total income. These deductions are however not allowed from the following incomes although these incomes are part of gross total income.

- Long-term capital gains.
- Short-term capital gain on transfer of equity shares and units of equity-oriented fund through a recognised stock exchange i.e. short-term capital gain covered under section 111A.
- Winning the lottery, races, etc.
- Incomes referred to under section 115A, 115AB, 115ACA, 115AD and 115D.

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Notes

1.7.1 *Difference between Deduction and Exemption*

- Income tax exemptions are provided on particular sources of income and not on the total income. It can also mean that you do not have to pay any tax for income coming from that source. For example, income from agriculture is exempted under tax. In addition, long-term capital gains arising from the sale of a property can be reinvested in a real estate property or specified bonds within a certain time period to get tax exemption. Salaried individuals get house rent allowance (HRA) as a component of their salary. This component can be used to claim tax exemption under certain conditions.
- In contrast, income tax deductions can be claimed on the gross total income. Certain specified investments and expenditure are considered to claim deductions. For example, investment in specified mutual funds, interest repayment of education loan, and premium payment for medical insurance can be considered for deductions. Also, salaried taxpayers can claim a standard deduction of Rs. 40,000 from the gross salary. This standard deduction has been enhanced to Rs. 50,000. This reduces their total taxable income and, in turn, reduces the tax payable.

1.7.2 *Type of Deduction*

Deductions are of two types:

- Deductions on account of certain payments and investments covered under sections 80C to 80GGC.
- Deduction on account of certain incomes which are already included under gross total income covered under sections 80-IA to 80U.

The income arrived at, after claiming the above deductions from gross total income, is known as total income. It may also be called taxable income. Note: These deductions will not be available to a taxpayer opting for the New Tax Regime u/s 115 BAC, except for deduction u/s 80CCD (2) which will be applicable for New Tax Regime as well.

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1.7.3 *Basic Rules of Deduction [Section 80A/80AB/80AC]*

1. **Deduction cannot Exceed Gross Total Income [Section 80A (2)]:** The aggregate amount of deduction under section 80C to 80U shall not in any case exceed the gross total income (exclusive of long term capital gains, short term capital gain covered under section 111A, winnings of lotteries, crossword puzzles, etc and income referred to in sections 115A to 115AD and 115D of the assessee. Therefore, the total income after deduction will either be positive or nil. It cannot be negative due to deductions. If the gross total income is negative or nil, no deduction can be permitted under this chapter.
2. **Deduction not allowed to Members if allowed to AOP/BOI [Section 80(3)]:** If deduction is allowed under the above section to the AOP/BOI then the deduction for same payment/income will not be allowed to the members of AOP/BOI.
3. **Deduction Allowed Only When it is claimed by Assessee [Section 80 A(5)]:** Where the assessee fails to make a claim in his return of income for any deduction under section 10AA or section 80-IA to 80RRB no deduction shall be allowed to him thereunder.
4. **Assessee Duty to Place Relevant Material:** If an assessee approached a statutory approaches a statutory authority for obtaining a concession under the taxing statute, he should in fairness place all material before the said authority and be also in a position to satisfy the said authority that he was entitled to obtain the concession.
5. **Benefits of certain deduction not to be allowed in cases where return is not filed within the specified time limit [section 80AC]:** Where in computing the total income of an assessee of any previous year relevant to the assessment year commencing on or after 1.4.2018 any deduction in respect of certain incomes (sections 80-IA to 80RRB), then such deduction shall not be allowed to him unless he furnishes a return of his income for such assessment year on or before the due date specified under section 139(1).

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Notes

1.7.4 *Deduction in Respect of 80C to 80GGC*

Deduction in respect of life insurance premium, deferred annuity, contribution to provident fund, subscription to certain equity shares or debentures, etc. [Section 80C]

- Which assessees allowed deduction u/s 80C: This deduction is allowed only to the following assessee from their gross total income computed as per provision of the act:
  1. An individual or
  2. A Hindu undivided family
- Deduction on account of the following saving cannot exceed Rs. 1,50,000: the assessee shall be entitled to a deduction of whole of the amount paid or deposited in the previous year, being the aggregate of sum referred to below as does not exceed Rs. 1,50,000.

Deduction in Respect of Contribution to Certain Pension Funds [Section 80CCC]

Condition for claiming deduction under this section:

- Deduction is permissible to only individuals under this section.
- It is allowed in respect of any amount paid or deposited in the previous year by such individual to effect or keep in force a contract for any annuity plan of life insurance corporation of India or any other insurer for receiving pension from the fund set up by LIC or any other insurer referred to in section 10(23AAB)
- Amount is payable out of income chargeable to tax.

  Quantum of deduction allowed: The whole of amount paid or deposited (excluding interest or bonus accrued or credited to the assessee's account if any) or 1,50,000, whichever is less

Note

- If deduction is allowed under section 80CCC, deduction u/s 80C will not be available in respect of the payment made towards the annuity plan.
- The deduction is allowed to non-resident individuals also.

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Deduction of an Employee's/Assessee's Contribution [Section 80CCD(1)]:
The deduction under this section is allowed to:

- An assessee who is an individual and employed by the central government on or after 1-1-2004 or by any other employer (the date with other employer is not relevant) or
- Any other assessee being an individual.
    - The deduction is allowed on account of:
    - Any amount not exceeding 10% of salary of the previous year paid or deposited by the employee in his account under the notified pension scheme,
    - Any amount contributed by any other assessee being an individual to such pension scheme not exceeding 20% of his gross total income in the previous year.
    - The Atal Pension Yojana (APY) has since been notified for purpose of section 80CCD(1).
- Deduction of 50,000 under section 80CCD (1B): The employee or the individual referred to in section 80CCD(1), shall be allowed a deduction in computation of his total income,[whether or not any deduction is allowed under section 80CCD(1) to the extent of:
    - The whole amount paid or deposited in the previous year, or
    - 50,000

      Whichever is less.

      However, no deduction under section 80CCD(1B) shall be allowed in respect of the amount on which a deduction has been claimed and allowed under section 80CCD(1).
    - Deduction of employer's contribution [section 80CCD(2)]: Any amount contributed by the employer (i.e. central government or any other employer) to such pension scheme shall be allowed as deduction for an amount not exceeding 14% of salary in case of central government employee and 10% of the salary in case of any other employee in the previous year.

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Limit on Deductions Under Section 80C, 80CCC and 80CCD [Section 80 CCE]

The aggregate amount of deduction under section 80C, section 80CCC and section 80CCD(1) [excluding employer's contribution to pension scheme or contribution made by the assessee under section 80CCB(1B)] shall not in any case exceed 1,50,000.

Deduction in Respect of Medical Insurance Premia [Section 80D]

- Deduction is permitted under this section to individual or HUF
- Deduction is allowed for the following purpose-
- In case of an individual: It is allowed for-
  - The amount paid to effect or to keep in force an insurance on the health of assessee or his family or his parent or parents, or
  - Any contribution made to the central government health scheme, or such other scheme as may be notified by the central government in this behalf
  - Any payment made on account of preventive health check-up of assessee or his family or check up of the parent of the assessee

  Family means spouse and dependent children of the assessee
- **In Case of HUF:** It is allowed for the amount paid to effect or to keep in force an insurance on the health of any member of that Hindu undivided family.
- **In Case of Senior Citizens:** Deduction on account of medical expenditure incurred (instead of sum paid to effect any insurance of the health).

Quantum of Deduction

1. Where the assessee is an individual: the deduction allowed shall be the aggregate of the following, namely:

A. The whole of the amount paid to effect or to keep in force an insurance on the health of the assessee or his spouse and dependent children or

B. Any contribution made to central government health scheme (CGHS)

As does not exceed in aggregate 25000 and

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- The whole of the amount paid to effect or to keep in force an insurance on the health of the parent or parents (whether dependent or not) of the assessee as does not exceed Rs. 25,000.

  However preventive health checkup assesse, his family or his parent or parents, the maximum amount allowed shall be limited to Rs. 5,000 and this 5,000 shall be within the ceiling of above 25,000.

  Moreover, in the case of senior citizens there is an additional deduction of 25,000. In other words, the deduction shall be 50,000 instead of 25,000.

Deduction in Respect of Maintenance including Medical Treatment of a Dependent who is a Person with Disability [Section 80DD]

Deduction is allowed only to individual and HUF for the expenses incurred on medical treatment and maintenance of handicapped dependant relative and the amount of deduction shall be Rs. 75,000 for normal disability or 12,50,000 for severe disability.

Consequences if the Dependent being a Person with Disability pre Decreases/ Die before, the Individual or the Member of the HUF [Section 80 DD(3)]

If the dependent being a person with disability predeceases the individual or the member of the HUF in whose name money has been deposited, an amount equal to the amount paid or deposited under the scheme shall be deemed to be the income of the assessee of the previous year in which such amount is received by assessee and shall accordingly be chargeable to tax as the income of that previous year.

Deduction in Respect of Medical Treatment, etc. [Section 80DDB]

Condition for claiming deduction under this section:

1. Deduction is available to person who is resident in India (either an individual or HUF)
2. Deduction is allowed in respect of any expenditure actually incurred for the medical treatment of the following persons for such disease or ailment as may be specified in rules made in this behalf by the board.

   In case of individual – for himself or a dependent

   In case of HUF – for any member of the HUF
3. No deduction under this section shall be allowed unless the assessee obtains the prescription for such treatment from a neurologist, an

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oncologist, a haematologist, an immunologist, or such other specialist, as may be prescribed.

Quantum of Deduction: Actual amount paid or Rs. 40,000 whichever is less. However in case of senior citizens the maximum deduction allowed shall be Rs. 1,00,000 instead of Rs. 40,000. In other words, the actual expenditure incurred or Rs. 1,00,000 whichever is less.

Further any amount received under any insurance from the insurer or reimbursed by an employer for the medical treatment of a person, the amount so received shall be reduced from the deduction allowable under this section.

Deduction for Interest Paid on Loan taken for Pursuing Higher Education [Section 80E]

Deduction under this section can be claimed only by individual for loan interest for a period starting from the year in which assessee starts paying interest.

Deduction in Respect of Interest on Loan taken for Residential House Property [Section 80EE]

An individual shall be allowed deduction for any loan taken by an individual from any financial institution for acquisition of residential property subject to the following condition being satisfied:

- The loan has been sanctioned by the financial institution during the period beginning on 1/4/2016 and ending on 31/3/2017.
- The amount of loan sanctioned for acquisition of the residential house property does not exceed Rs. 35,00,000.
- The value of residential house property does not exceed 50,00,000.
- The assessee does not own any residential house property on the date of sanction of loan.
- Where deduction under this section is allowed for any interest, deduction shall not be allowed for such interest under any provision of this act for the same or any other sanction of loan.

Deduction in Respect of Donation to Certain Funds, Charitable Institution, etc [Deduction in Respect of Rent Paid [Section 80GG]

- Deduction is available only to individual.

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Condition for claiming deduction under this section:

1. Excess of rent paid over 10% of 'adjusted total income'
2. 25% of adjusted total income.
3. Rs 5,000 per month.

Deduction in Respect of Certain Donation for Scientific Research or Rural Development [Section 80GGA]

- Deduction is available to all assessees except those having income from business and profession.

Quantum of Deduction

100% of the sum paid to the above institution.

Deduction in Respect of Contribution given by Companies to Political Parties [Section 80GGB]

Any sum contributed by an Indian company in the previous year to any political party or an electoral trust shall be allowed as deduction while computing its total income.

Deduction in Respect of Contribution given by Any Person to Political Parties [Section 80GC]

Any amount of contribution made in previous year to a political party or an electoral trust by an assessee being any person, exempt local authority and every artificial judicial person wholly or partly funded by the government shall be allowed as deduction while computing the total income of such person.

Note: No deduction shall be allowed in this section in respect of any sum contributed by the way of cash.

Deduction in Respect of Royalty Income etc., of Authors of Certain Books Other than Textbooks [Section 80QQB]

- The deduction is available to individuals who is resident in India and is also the author of the book.
- The income must be either:
  - On account of any lump sum consideration for the assignment or grant of any of his interest in the copyright of such book, or

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- Of royalty or copyright fees (whether receivable in lump sum or otherwise) Quantum of deduction: 100% of such income or 3,00,000 whichever is less.

under the terms and conditions of licence settled by the controller under that act.

Deduction in Respect of Interest on Deposits in Savings Accounts to the Maximum Extent of Rs. 10,000 [Section 80TTA]

Deduction under this section is available to those individual and HUF for the interest incurred on savings account. The deduction shall be allowed for interest amount or Rs. 10,000 whichever is less.

Deduction in Respect of Interest on Deposits in Case of Senior Citizen [Section 80 TTB]

Resident senior citizen whose GTI includes interest on deposit with bank, cooperative bank or post office.

Deduction is available for the interest amount or 50000 whichever is less.

Deduction in Case of a Person with Disability [Section 80U]

Deduction under section 80u can be claimed by handicapped assessee. However, the flat deduction is available for this purpose amounting to Rs. 75,000 for normal disability and 1,25,000 for severe disability.

1.8 Summary

This chapter provides a detailed and descriptive overview of various aspects of taxation. It begins by explaining the bases of taxation, which serve as the foundation for levying taxes. The chapter also covers important concepts, such as the rate of income tax, which is determined by an individual's income level, and surcharges, which are additional taxes imposed on certain types of income. The chapter goes on to explore tax rebate under section 87A, which is a reduction in tax liability for individuals whose income falls within a certain range. The chapter also delves into various methods that can be used to minimize tax liability. Tax evasion, which involves illegal means to avoid paying taxes, is contrasted with tax avoidance, which involves the use of legal means to reduce tax liability. Tax planning, which involves

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careful and strategic financial planning to minimize tax liability, is also discussed in detail.

The chapter also covers deductions, which are a reduction in taxable income, and explains the difference between deductions and exemptions. Readers will also learn about the different types of deductions, such as those related to education, health, and insurance. Finally, the chapter provides detailed information on deductions in respect of 80C to 80GGC, which are deductions related to investments in various financial instruments. Overall, this chapter provides a comprehensive and descriptive overview of taxation, including its various components and methods that can be used to manage tax liability.

1.9 Answers to In-Text Questions

1. *(a)* Artificial judicial person

(b) A company

(c) A company

(d) A body of individual

(e) A firm

(f) A Hindu undivided family

(g) A local authority

2. *(b)* Tax avoidance is legal, while tax evasion is illegal

3. *(b)* Intentionally evading taxes through illegal means

4. *(b)* Underreporting income to reduce tax liability

5. *(b)* Minimizing tax liability within the bounds of the law

6. *(a)* Reducing tax liability through legal means

7. *(b)* Tax avoidance

8. *(b)* Advising on legal strategies to minimize tax liability

1.10 Self-Assessment Questions

1. What are the methods to minimize tax liability?
2. What is the difference between tax planning and tax evasion?
3. Briefly explain the difference between deductions and exemptions.

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4. What is the objective of tax planning?
5. What is personal tax planning?

1.11 Reference

- Prof. Rajni. *Personal Financial Planning,* JSR Publishing House LLP

1.12 Suggested Readings

- Halan, Monika. *Let's Talk Money: You've Worked Hard for It, Now Make It Work for You,* July 2018, Harper Business.
- Madura, J. (2016). *Personal Finance.* Delhi, India: Pearson.

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UNIT - IV

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LESSON

1

Insurance Service

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STRUCTURE

1.1 Learning Objectives

- Developing a basic understanding of the insurance sector.
- Understanding the working and functioning of the Insurance Sector.
- Explaining the principles, and provisions that govern the Life as well as General Insurance Contracts.
- Comparing the various types of life insurance policies available in the market.

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1.2 Introduction

When we are young, healthy, have diverse sources of income, and are living our best life possible, we generally don't think much about our uncertain future. The future, by its nature, is always uncertain. Man, being a social animal and risk-averse, always tries to mitigate the risk. Therefore, it becomes necessary for every individual to safeguard his/her future, regardless of how much money they make, how well their business is going, or how robust and healthy they are today. Sharing risk through economic cooperation is one of the most popular ways to reduce the risk that results from unknown future events, and this practice eventually gave rise to the idea of 'insurance'.

Insurance does not prevent the occurrence of uncertain events; however, it reduces the risk through the collective bearing of risk by a large number of people. Thus, it may be defined as a scheme of covering large risks of a few people among a large number of people by spreading the risks in exchange for a small, fixed amount, which is termed as *Premium*. The basic premise of 'collective bearing of risks' rests upon individuals exposed to similar risks pertaining to similar assets contributing to a common pool of funds to mitigate the individual risk by paying a small, fixed amount at regular intervals, to compensate the affected party/parties among themselves out of the common pool.

1.3 Concept of Insurance

In legal sense, an insurance may be defined as a contract (in a form of policy) between two parties- the insurance company (called Insurer), and an individual (called Insured), wherein the insurer promises to indemnify for financial losses, on the occurrence of particular event, due to insured in return for the premiums paid at regular intervals. The 'insurer' and 'insured' are also known as 'assurer' and 'assured' respectively.

In a nutshell, insurance is a risk transfer mechanism in which an individual transfers his or her risk to an insurance company in exchange for financial protection against unforeseen events. And the amount paid for this arrangement is known as the premium. There is insurance available

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for a wide range of risks, from your life to the mobile phones you use. Finally, it is critical to safeguard what is "important" to you.

The idea of insurance operates under the principle of "risk pooling." One must pay recurring payments (also known as premiums) toward the cost of the insurance when an individual purchases a specific type of insurance policy from an insurance provider for a predetermined time with a predetermined level of coverage. Similar to this, an insurance company will collect premiums from all of its customers (also known as insured) and combine the funds to pay for losses caused by an insured on the occurrence of specified event(s). If the covered event occurs and one files a claim, the insurance company will use a pool of premiums paid by policyholders to cover his/her losses. As mentioned earlier, an insurance policy is offered by the insurer for a pre-determined period of time. Therefore, some insurance will not pay back, any compensation or the premiums paid during the policy periods, if the policyholder never suffers from the loss during the policy period. To overcome this problem, insurers have introduced various kinds of insurance products which also involve savings elements into it.

EXAMPLE

Ram bought a car for Rs. 20 lakhs. He purchased car insurance—third-party insurance plus comprehensive insurance with the add-on of roadside assistance and zero depreciation. Along with that, he bought health, medical, and term insurance to safeguard his future from any unforeseen emergencies. While another car buyer named Sanjay bought a new sedan and purchased car insurance - a third-party policy because it is compulsory, he thinks purchasing any other insurance policy is a waste of money. A few months later, due to some unforeseen circumstances, Ram and Sanjay met with an accident. Ram got a claim for his car damage, and the health and medical insurance companies took care of his hospitalization bills. Whereas Sanjay has to pay for almost everything from his pocket because he only has a third-party insurance policy that only covers injuries of third parties due to accidents. There are many people like Sanjay who think investment in insurance is a waste. It is crucial to have some/specific insurance products in life.

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Insurance is the most effective risk management tool, allowing individuals and businesses to be protected from financial risks arising from a variety of contingencies. The emotional and psychological losses can never be replaced, but the financial losses can be reimbursed by insurance. Though there are some uncertainties in life that cannot be avoided, insurance can help you transfer the financial risk associated with them. There are numerous kinds of insurance products available in the market such as **life insurance,** health insurance, accident insurance, term insurance, retirement plan, vehicle insurance, property insurance, etc. However, these different products may be classified into two categories:

- Life insurance products
- General insurance products

Life insurance covers individuals against the risk of death. There are many different types of life insurance policies, including term, endowment, whole, money-back, and unit-linked investment plans. Numerous life insurance plans combine protection with savings, making them excellent tools for long-term savings. Whereas General insurance policies provide coverage for monetary losses caused by events other than death. General insurance policies are available in a variety of forms and cover a wide range of risks, including health, vehicle, marine, liability, travel, and commercial risks.

The main goal of any insurance policy is to provide protection and relieve the 'insured' from a substantial financial burden on the happening of future events, which may be certain or uncertain.

IN-TEXT QUESTIONS

1. Insurance helps to:

(a) Prevent the occurrence of adverse events.

(b) Mitigate the financial impact of adverse events.

(c) Neutralize all repercussions of unfavourable conditions.

(d) Maintain the productiveness of assets.

2. A social Device that reduces or eliminates the risk of loss of life and property is _____.

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3. The duration of an insurance policy's coverage is known as the

(a) Policy term

(b) Policy loan

(c) Policy mode

(d) None

1.4 Principles of Insurance

The concept of insurance is risk distribution among a group of people. Hence, cooperation becomes the basic principle of insurance. To ensure the proper functioning of an insurance contract, both the insurer (Insurance Company) and the insured (policyholder) must adhere to the seven insurance principles listed below:

1.4.1 *Principle of 'Ubberima Fides or Principle of Utmost Good Faith*

This principle states that both parties in an insurance contract must act in good faith toward each other, which means they must provide clear and concise information about the contract's terms and conditions. In other words, the insured must provide all the relevant information about the subject matter, whereas the insurer must provide precise contract details. This principle signifies full disclosure or maximum truth to each party from each other. The absence of this principle makes the insurance contract voidable.

This principle is applicable in both types of insurance i.e., Life insurance as well as General Insurance.

EXAMPLE

Mr. X took a health insurance policy. At the time of taking insurance, he (insured) concealed the fact of his smoking habit and failed to disclose this fact to the insurer. Later, he got cancer. In such a situation, the Insurance company will not be liable to indemnify to Mr. X on the ground of concealed material fact.

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1.4.2 *Principle of Proximate Cause*

The doctrine of proximate cause is based on the cause-and-effect principle, which states that once the effect has been proven and the cause has been traced, it is not necessary to go any further, i.e., cause of the cause. In other words, the nearest and primary cause of the loss, or the proximate cause, should be taken into account when determining the claim for a loss.

Though it is a vital factor in all types of insurance, this principle is not used in Life insurance.

EXAMPLE

A surveyor surveying a factory damaged in a fire concluded after a thorough investigation that the fire was caused by negligence as well as defective design and that both of these causes played a role in the damage. The insurance policy covered negligence, but not defective design, so the claim was denied.

1.4.3 *Principle of Insurable Interest*

According to this principle, the insured person must have an insurable interest in the subject matter (life or property). The term "insurable interest" refers to a subject that, if a specific event occurs, significantly alters the insured's position; but, if the specific event does not occur, the insured stays in the same position. An individual cannot buy a life insurance policy for a person on whom he/she has no insurable interest. However, in case of spouses, no proof of insurable interest is required.

It is worth to note that in order to claim the insurance amount, the insured must be the owner of the subject matter both at the time of contracting and at the time of the accident.

EXAMPLE

An owner of a bookstore sells his/her book in cartons, has an insurable interest in the cartons because he is generating revenue from it. However, if he sells the cartons only, he will no longer have an insurable interest in the things available in the cartons.

Mr. X takes a life insurance policy for his neighbour. In this case, Mr. X will not get any claim from the insurer, on the death of his neighbour as he has no insurable interest.

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1.4.4 *Principle of Subrogation*

This principle states that, following the settlement of claims for losses incurred on the insured subject matter, the insurer has the authority to act in place of the policyholder. In essence, the insurer, or firm, receives ownership rights to the insured property. This principle gives the insurer the right to recover any loss payments paid to the insured from a negligent third party, and thus, prevents the insured from collecting twice for the loss.

EXAMPLE

If the goods kept in the factory of the insured gets destroyed by fire, due to negligence of the electric company (third party). The insurance company (insurer) will compensate to the insured for the losses caused by the fire and may also sue the electric company to recover the amount of loss paid to the insured.

1.4.5 *Principle of Indemnity*

According to this principle, the insured will only be completely compensated for their actual losses. Consequently, the insured is not entitled to make a profit from the loss suffered. The indemnification principle's goal is to put the insured back in the same financial situation he was in prior to the loss happening. For general insurance, the principle of indemnification is rigidly followed, whereas it is not relevant to life insurance contracts.

EXAMPLE

Mr. X took vehicle insurance for his car. A few months later, he met with an accident that caused him Rs. 14,500 as repairing charges. He claims indemnification for Rs. 15,000 (14,500 for repairing plus 500 for transportation cost). The insurance company (insurer) will indemnify only Rs. 14,500 as the loss caused due to accident is that much only.

1.4.6 *Principle of Contribution*

When an insured person purchases multiple insurance policies covering the same risk, the contribution principle is in effect. In other words, if a person has insurance from multiple companies, each insurer will share the

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loss according to the quantity of their individual coverage. One insurance company has the right to contact other insurance companies to request a comparable amount if it has made the full payment.

EXAMPLE

A property worth Rs. 5 lakhs is insured for Rs. 3 lakhs with Company A and Rs. 1 lakh with Company B. In the event of property damage worth 3 lakhs, the owner can claim the full amount from Company A but not from Company B. Company A can now claim the proportional amount reimbursed from Company B.

1.4.7 *Principle of Loss Minimization*

According to this principle, the insurer is obligated as an owner to take the necessary steps to minimize the loss to the insured property. The principle forbids the owner from being irresponsible or negligent simply because the subject matter is insured.

EXAMPLE

If a fire breaks out in your factory, you must take reasonable measures to put it out. You can't just sit back and let the fire destroy the factory because you know the insurance company will cover it.

IN-TEXT QUESTIONS

4. The main cause of loss or damage is _____

(a) Proximate cause *(b)* Indirect Loss

(c) Consequential loss *(d)* All of these

5. Insurance works on the principle of:

(a) Sharing of losses *(b)* Probabilities

(c) Large numbers *(d)* Randomness

6. The _____principle of insurance stipulates that the insured must have an insurable interest in the life or property insured.

7. The principle of _____ makes sure that an insured person doesn't make profit by purchasing multiple insurance from more than one company.

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8. In insurance, the..... principle means utmost truthfulness.

(a) Subrogation *(b)* Causa Proxima

(c) Insurable interest *(d)* Uberrima fides

1.5 Life Insurance

Let's take an Example: Rajeev is a young dynamic boy and works in a construction company. His work requires him to travel different Countries/cities to inspect various construction sites. Among them most of the buildings are under construction and hence these sites can be dangerous. The nature of his work exposes him to several risks and uncertainties. Rajeev is a solo earner of his family and has a wife and two children to feed on. So, Rajeev decided to secure his future. He realized that he needs to keep his family protected in case anything happened to him. Therefore, he decided to opt for life insurance policy to secure him against uncertainty of life. He visited to an insurance company and found out that there are various types of life insurance. And finally entered into a contract after choosing a right type of life insurance he wanted. The contract will ensure that insurance company will protect Rajeev by paying a sum of money in case of any unexpected event in his life. In exchange for insurance, Rajeev will make payments to insurance company. Such payment knows as Premium. The payment can be made in one go or in regular instalments. In this case, Rajeev is taking life insurance and known as assured and the company is known as the insurer.

Insurance policies provide protection against the various types of uncertainties that can occur in the life of an individual. There are various types of insurance in the market due to the presence of a large number of insurance companies. One of them is Life Insurance. Life insurance is a contract between an insurance policyholder and an insurance company (Insurer). It is a contract in which the insurer guarantees to pay a specific amount of money to the beneficiary (nominee) in exchange for a premium, upon the death of an insured person or at the end of a specified maturity period.

Our need for life insurance stems from our desire to protect our family. If you care about the needs of your family, you will surely consider

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insurance. Due to the Collapse of the prevalent joint family system, where generations coexisted in harmony and had sense of financial stability due to more earning members, insurance is now more vital than ever. The nuclear family has emerged as a result of the changing times. Therefore, you must also set aside some of your income for the future as well. This is a place, where insurance can assist us.

Fewer earning members, stress, pollution, increasing competitiveness, greater aspirations, etc., are some of the reasons why insurance has gained prominence and where it plays a significant role. Insurance gives both income and the sense of security. Buying insurance relieves an individual of an unnecessary financial stress. The individual is satisfied by the idea that he has a safety net.

From the starting of your life until the time you retire, insurance can meet all of your needs. It also helps your child to get quality education. Given the future uncertainty, insurance is a must. Event like Accidents, diseases, among other occurrences, can be tremendously devastating. Insurance helps to cover the costs of these unavoidable events.

In addition, retirement is the phase at which every individual has nearly completed his duties and looks forward to resting and can be painful if not properly planned. Have we considered the rising cost of living and taxes? Under such conditions, will our investment yield favourable returns? Will it provide for our family after we're gone? Surely, an insurance policy will cover these and much more. Nowadays, insurance is a requirement. It gives regular income as well as additional bonus. Life insurance has come a long way since its inception as a risk-covering medium for short periods of time.

Example: Amit is 42 years old and worked in the multinational company. His wife Nisha, who is a housewife, watches after their children. They reside in a rented apartment, whose monthly rent is 15,000 rupees. Amit has taken out a loan of Rs. 2 lakhs. His average monthly income is 40,000 rupees. Amit dies in a tragic automobile accident.

What are the financial consequences of his death for his family? There may be various implications for his family's finances. Some of these include:

- Monthly Income would cease.
- His spouse and children may require financial aid from other relatives.

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- His wife might not have enough money to repay the Rs. 2 lakhs loan.
- The family may be forced to relocate to a cheaper residence.
- His widow may have to work to pay for their bills.
- His children's schooling may suffer.

This example highlights the impact of an immature and uninsured death of primary earner might have on a family. If Amit had bought life insurance, his family would not have endured such troubles in the event of his untimely demise. A simple life insurance policy may have supplied Amit's family with a lump sum that could have been invested to replace all or a portion of his income.

Categories of Life Insurance Plans

- **Pure Protection:** A Pure Protection plan is designed to secure one's family's future by providing a lump sum amount, in his/her absence. Example of pure protection includes term insurance plan.
- **Protection Cum Savings:** A Protection and Saving plan is a financial tool that helps individuals to plan his/her long-term goals like purchasing a home, funding their children's education, and more while offering the benefits of a Life Cover. Money back policy, retirement plan and unit linked insurance plan are few examples of protection cum saving plan.

HISTORY OF INDIAN LIFE INSURANCE

The history of insurance in India can be divided into two sections that is before and after 1912. Prior to 1912, India lacked insurance regulation legislation whereas later includes the part when Life Insurance Companies Act and the Provident Fund Act were passed.

1818: Life Insurance in its contemporary form came into India. Oriental Life Insurance Company was founded by Europeans in Calcutta as the first life insurance company in India. The Bombay Mutual Life Assurance Society was founded in 1870. This was the first life insurance firm in India.

The Life Insurance Companies Act was enacted in 1912. This act of 1912 mandated that actuaries certify the premium rate tables and periodic valuation of insurance firms (one who calculates the premium). However, this Act discriminated against foreign and Indian

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enterprises in a number of ways and gave priority to foreign firms, putting Indian firms at a disadvantage.

The Insurance Act was passed in 1938. It was the first law to regulate both Life and Non-Life Insurance. It was intended to provide rigorous state supervision over the insurance industry.

In 1944, the pressure for the nationalization of the life insurance sector accelerated and later it was sent to legislative assembly for amendments. After a numerous effort, nationalization was finally accomplished in 1956.

On January 19, 1956, the life insurance industry in India was nationalized. 245 Indian and foreign insurance companies and provident organizations were nationalized by the central government.

The Life Insurance Corporation Act was passed by the Indian Parliament on June 19, 1956, with a capital contribution of Rs. 5 crores from the Government of India., The Life Insurance Corporation of India was established on September 1, 1956.

1.5.1 *Key Characteristics of Life Insurance*

- Life insurance is a legally binding contract that pays a death benefit to the policy owner (nominee) when the insured dies.
- For a life insurance policy to remain in force, the policyholder must pay a single premium upfront or pay regular premiums over the policy term.
- When the insured dies, the policy's named beneficiaries will receive the policy's life cover.
- Term life insurance policies expire after a certain number of years. Permanent life insurance policies remain active until the insured dies, or stops paying premiums, or surrenders the policy.
- A life insurance policy is only as good as the financial strength of the company that issues it. State guaranty funds may pay claims if the issuer can't.

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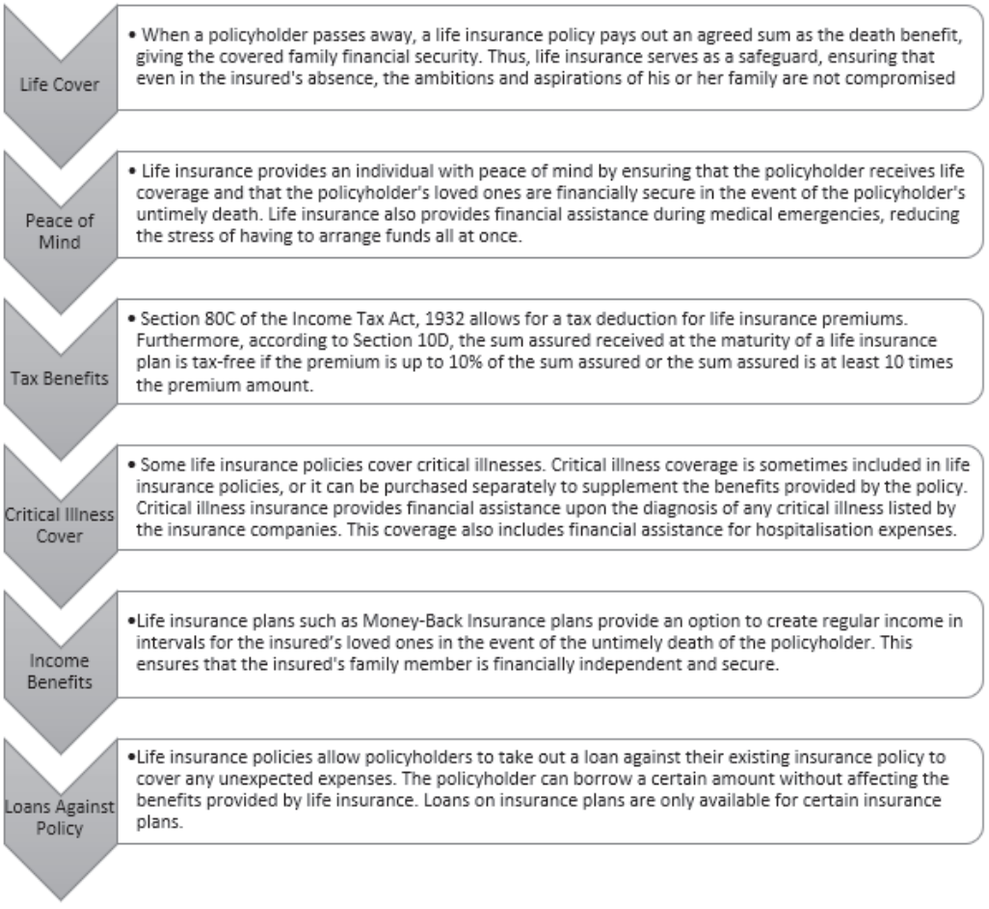
1.5.2 *Pros of Life Insurance*



1.5.3 *Principles of Life Insurance*

In India, we follow four basic principles of life insurance.

- **Insurable Interest:** This principle has been put in place to protect insurance policies against any kind of misuse. It refers to the level of interest that the potential policyholder is estimated to have in the insurance policy. This interest could be in the form of a personal relationship, family bond, etc. Based on this interest level, the insurance company approves or rejects the individual's application for a policy.

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- **Minimal Risk:** Any company that provides life insurance is taking on some level of risk, since they would need to pay the assured sum at some point of time. Therefore, the company would prefer to keep the level of risk as low as possible. To ensure this, the insurer might check the applicant's medical status, smoking habits, etc. In addition, they might expect the policyholder to take good care of their health.
- **Good Faith:** As mentioned earlier, a life insurance policy is essentially a contract between the insurer and the policyholder. This contract is entered into on good faith that both parties are providing accurate relevant information, without hiding anything. If any information is withheld, it could lead to serious consequences. For instance, if the insurance provider discovers that the policyholder had a pre-existing heart condition but did not divulge the fact at the time of policy purchase, they could reject the claim made by the beneficiary, following the demise of the policyholder.
- **Law of Large Numbers:** This is a key principle of life insurance, which is based on a statistical theorem that states that with larger numbers, fluctuations tend to average out. This essentially means that since life insurance is a long-term investment, the losses and gains will average out over time, minimizing the risks for the policyholder

1.5.4 *Disadvantages of Life Insurance*

Life Insurance Disadvantages Include

- **Life Insurance has a High Cost for Older Persons:** Age increases life insurance premiums. Age increases risk, therefore, premiums do too. So, get life insurance early to avoid exorbitant premiums. Insurance firms may have refused to cover elderly persons with illnesses.
- **Calculating Returns is Difficult:** Life insurance returns are complex and hard to forecast. Life insurance returns are based solely on market performance. Unlike PPF and other fixed deposit plans, life insurance is hard to quantify.
- **Policies:** There are several life insurance firms in India. Your needs determine the appropriate life insurance plan. Different insurance

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policies have different characteristics, which can confuse customers. Some policies are easy, some aren't. Choosing life insurance might be difficult.

- Insurance firms may not pay benefits even after the policy matures, and they have resisted paying the sum promised or death benefit to the policyholder or nominee. They'd cite hidden fees or stipulations to reduce pay-outs. So, carefully read the policy and choose a provider with a good pay-out rate. Before signing a contract, discuss the pros and cons of life insurance with our agents.
- Any market-available financial product has exclusions and hidden terms. You must find the proper clauses and life insurance policy. Most insurance don't cover suicide in the first year, and virtually all exclude drug overdose or criminal activity.

1.6 Comparison of Policies Offered by Various Life Insurance Companies

There is a bundle of life insurance plans available in the market. Choosing the right type of life insurance policy is one of the most important requirements for a comfortable, hassle-free life. It purely depends on which one suits your need and requirement basis the benefits accrued or attached to a plan. There are different types of life insurance policies in India on offer to prospective policyholders.

- **Term Life Insurance or Term Plan:** Term life insurance provides a death benefit to the beneficiary only if the insured dies during the policy term. The insurance coverage terminates with no further benefit and there is no longer a basis for a pay-out or death claim if the policyholder survives to the end of the policy term. Term life insurance is the most popular type of life insurance and is widely considered to be the simplest and purest form of life insurance. The most distinctive feature of a term insurance plan is the high amount of coverage offered at extremely nominal premium rates. It is thus cheaper than other types of life insurance policies.

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- **Whole Life Insurance Plan:** The Whole Life Plan is often known as a straight or regular life. As long as the premiums are paid, it remains for the duration of the insured person's lifespan. If the insured passes away, the nominee will get the aforementioned sum. The policyholder has the right to cancel or borrow against the policy at any moment. This policy's maturity period is one hundred years. The policy will turn into a matured endowment if the insured lives past the maturity age. The death benefit under this plan is tax free.
- **Unit Linked Insurance Plan (ULIP):** Unit Linked Insurance Plan or ULIP is a type of life insurance product that offers dual benefits of investment and life insurance. Among the different types of life insurance policies available, ULIPs enjoy a high amount of popularity owing to their versatile nature. A portion of the premiums paid towards ULIPs is directed towards ensuring insurance coverage, while the rest of the premium is invested into a bouquet of investment instruments, which can include market-backed equity funds, debt funds and other securities. ULIPs are extremely flexible instruments since investors can easily switch or redirect their premiums between the different funds available. ULIPs are also touted as having an edge over other market instruments in terms of tax-saving benefits, since their proceeds are exempted from LTCG (Long Term Capital Gains).
- **Endowment Policy:** Endowment Policy is a type of life insurance policy that acts as, both, an instrument for insurance and saving. Endowment plans aim to provide maturity benefits to the life insured, in the form of a lump sum payment at the end of the policy tenure, even if a claim hasn't been made. Endowment plan is the most suitable type of life insurance for people looking to get maximum coverage alongside having a sizable savings component. They help the policyholder inculcate the habit of savings, even while providing financial security to their family.
- **Money Back Policy:** Being one of the best types of life insurance policies, a money-back policy offers policyholders a percentage of the total sum assured at periodic intervals in the form of

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Survival Benefits. Once the policy reaches maturity, the remaining amount of the Sum Assured is handed over to the policyholder. However, if the policyholder dies during the policy term, their dependents are given the entire Sum Assured without any deductions.

- **Retirement Plan:** A retirement plan is a type of life insurance that focuses on providing you financial stability and security post your retirement. After you retire, you lose your regular income from employment. Investing in retirement plans can help you create a stable regular income stream. If you continue to invest until retirement, the plan will help you take care of your expenses after retirement. A retirement plan requires you to invest a certain part of your income regularly during your working life. At the time you retire, the amount that you create over the years will be converted into a regular income stream. Retirement plans also involve death benefits. Thus, if the policyholder passes away during the course of the policy, their beneficiaries will be provided with an assured sum.

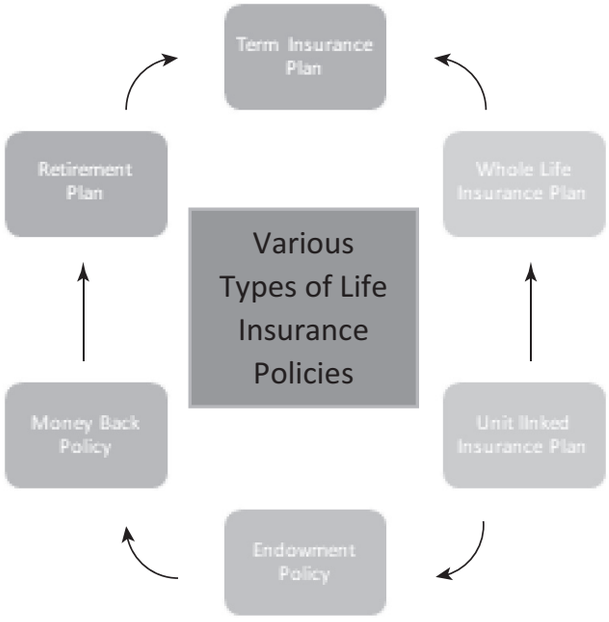

Figure 1.1: Various types of Life insurance Policies in India

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Table 1.1: Comparison of Policies offered by Various Life Insurance Companies

Parameter	Term Plan	Whole Life Insurance Plan	Unit Linked Insurance Plan	Endowment Policy	Money Back Policy	Retirement Plan
Description	Provide risk cover against any type of eventuality	Offer protection for life till age of 100 years	Provide benefit of investment across multiple assets class with protection for life	Ensure combined benefit of life insurance and saving	Provide periodic payments and full sum assured in case of a death of policyholder	Help to create retirement corpus to cover post-retirement costs
Term of Policy	5 to 85 years	Till 100 years	10 to 20 years	5 to 35 years	5 to 25 years	Entire Life
Death Benefit	Life Cover	Life Cover	Sum Assured	Sum Assured	Sum Assured	Regular Earning until survival
Suitability	Family Financial Security to family at reasonable cost	To Secure Family fortune	Stress free planning with assured return on the investment	High yield portfolio investment with life insurance	Periodic income and life coverage	Enables safe and secure retirement with steady income

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IN-TEXT QUESTIONS

9. Which insurance policy offers both insurance and investment under a single integrated plan?

(a) Endowment Plan *(b)* Money Back Policy

(c) Unit Linked Insurance Plan *(d)* Term Insurance Plan

10. A person whose risk is covered by insurance is known as the

(a) Insured *(b)* Merchandiser

(c) Marketer *(d)* Agents

11. A nomination can be made only in favour of-

(a) Parents *(c)* Spouse and children

(b) Spouse *(d)* Any Individual

12. The major goal of life insurance is:

(a) Long-term investment *(c)* tax benefits from savings

(b) Short-term investment *(d)* None of them

1.7 Term Insurance

Term insurance offers a coverage for a fixed period of time. If the insured dies during the policy's term, the death benefit is paid to the nominee. Term plans protect your family in case of death or uncertainty. It gives a certain level of coverage for a specific time. Since the amount of premium is low, it allows you to insure a substantial amount. Therefore, an appropriate financial security can be provided to family without accumulating a huge wealth. The plan delivers an exceptional coverage which is not offered by any other investment plan. This coverage protects against premature death and financial consequences.

EXAMPLE

Ajay is a 30-year-old, wishes to provide for his family in the unlikely event of his sudden death. He purchases a term insurance of Rs. 50,00,000 for 10-year with monthly premium of Rs. 1000. The policy will pay 50,00,000 to Ajay's beneficiary if he dies within the 10-year term. If he dies after reaching the age of 40, when the policy has

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expired, his beneficiary will receive no benefit. If he renews the policy, the premiums will be higher than they were initially because now it will be based on his current age of 40 instead of 30.

If Ajay is diagnosed with a Critical illness during the original policy term, he will be not eligible to renew the policy.

1.7.1 *Types of Term Insurance*

Several types of term life insurance exist. The best choice will depend on the person's circumstances.

- **Level-Premium or Level-Term Policy:** These policies provide coverage for ten to thirty years. The amount of premium and death benefit are both fixed. Due to the fact that actuaries must account for the rising cost of insurance over the policy's duration, the premium is higher than that of annually renewable term life insurance.
- **The Yearly Renewable Term Policy (YRT):** Annually renewable term (YRT) policies have no set duration and can be renewed annually without requiring proof of insurability. The insured's premiums increase from year to year as they grow. There is no defined period, but as the insured matures, the premiums may become prohibitively expensive.
- **The Policy of Decreasing Terms:** Under this scheme, the death benefit of these plans decreases annually according to a predetermined schedule. The policyholder pays a fixed, level premium throughout the policy's duration.

1.8 Endowment Policy

Endowments combine investment, insurance, and tax savings. This scheme provides you with guaranteed return and stable income after retirement. This policy is an all-rounder because it also provides life insurance. It helps you reach all your financial goals. The benefit of an endowment plan enables the customer to safeguard their family

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from unforeseen occurrences. Unlike term insurance, endowment policies provide maturity rewards if the covered person outlives the policy period.

1.8.1 *Types of Endowment Policy*

- **Full-Endowments:** This plan also called with-profit endowment plans. Under these plans, the customer will get a sum assured on the maturity. If any unusual event occurs during this time, the insurance will pay the amount to the nominee. As this policy offers some extra benefit, therefore the amount paid at the maturity is often larger than the sum assured. It also helps youth to build wealth over time.
- **Unit-Linked Endowment Plan:** This plan is suitable for the people who are risk-takers and want big returns. Fixed-term plan premiums are used to buy investment fund units. Market performance determines fund ROI (Return on Investment). It also covers life insurance.
- **Non-Profit Endowment:** This policy pays a lump sum at maturity or to your nominee in a catastrophic (uncertain) event, whichever comes first. The compensation amount is fixed and static. This policy doesn't offer any bonuses. Therefore, these plans offer pure financial safety net to your family while you're abroad.
- **Unitized With-Profit Endowment Plans:** It combines ULIPs' earning potential with guaranteed returns to protect your money from market volatility. The capital market determines project profits. However, these plans reduce market downturns by ensuring a maturity payout. The payback is assured despite market volatility. Therefore, this product ensures a risk-free, high-return investment.
- **Low-cost Endowment:** This plan demands lower premium which allows the policyholder to save for future payments. The insurance guarantees the payment of sum assured to your nominee in case of emergency. Annual Bonuses improve your retirement benefits. The purpose is to build up a fund in a certain time and be effectively use for loan repayments or some other specific goals.

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IN-TEXT QUESTIONS

13. _____ was the first Indian Insurance Company

(a) Bombay Mutual Assurance Society Ltd.

(b) Bombay Insurance Society Ltd.

(c) Insurance Regulatory Development Authority

(d) General Insurance Corporation

14. The .....company was the first insurance company to be set up in India to help the widows of the European community.

(a) Life Insurance Corporation of India.

(b) Oriental Life Insurance Company

(c) National Insurance Company

(d) Bajaj Insurance

15. Compared to the premium for a Whole Life plan, the premium for an Endowment plan will be _____ for the same age

(a) More *(b)* The same

(c) Less *(d)* Double

1.9 Summary

- Insurance is an agreement between two parties—the person being insured and the company providing the insurance. The insurer agrees to help the insured with losses. In contrast, the insured pays the insurer a premium in return for the guarantee.
- The foundational principles upon which the insurer-insured contract rests are as follows: Utmost Good Faith, Proximate Cause, Insurable Interest, Indemnity, Subrogation, Contribution and Loss Minimization
- Life insurance provides financial support to dependents following the insured's death. When the insured dies, the policy pays the recipient a "death benefit." People buy life insurance for many reasons: to replace lost income, to fund business or partnership buyouts in the event of death, to fund retirement plans, to indemnify a loan in the

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event of premature death, to pay for college, to provide dependency income for the family, and to protect future insurability.

- Life insurance can be classified as follows:
  - *(a)* Term insurance: Gives life coverage for a certain period.
  - *(b)* Whole life insurance offers lifetime coverage.
  - *(c)* Endowment policy: Part of premiums go toward the death benefit; rest is invested by insurer.
  - *(d)* Money-back policy: An insured receives a percentage of the sum assured in intervals throughout the term a policy as a survival benefit.
  - *(e)* Pension plans blend insurance and investing. A percentage of the premiums goes into the insured's retirement corpus, which is paid as a lump sum or monthly payment.
  - *(f)* ULIPS - Unit Linked Insurance Plans is Like an endowment plan, where part of premiums goes toward the death benefit and rest invested in mutual fund.
- Benefits of Life insurance includes family protection, Tax saving, long term investment and peace of mind. Similarly, Life insurance can be quite costly, which is one of its greatest drawbacks. The cost of life insurance depends on factors such as age, health, and lifestyle.

1.10 Answers to In-Text Questions

1. *(b)* Mitigate the financial impact of adverse events.

2. *(c)*

3. *(a)* Policy term

4. *(a)* Proximate cause

5. *(a)* Sharing of losses

6. Principle of Insurable Interest

7. Principle of Contribution

8. *(d)* Uberrima fides

9. *(c)* Unit Linked Insurance Plan

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10. *(a)* Insured

11. *(d)* Any Individual

12. *(d)* None of them

13. *(a)* Bombay Mutual Assurance Society Ltd.

14. *(b)* Oriental Life Insurance Company

15. *(a)* More

1.11 Self-Assessment Questions

1. Define Insurance and its Importance.
2. Explain briefly the principles of insurance with suitable examples.
3. What are the different types of life insurance policies that are available in India?
4. Explain the benefits that life insurance policies offer.
5. State the principles of Life insurance.
6. Distinguish Between Term Insurance and Endowment Policy.

1.12 References

- Insurance Regulatory Development Act 1999. (https://www.irdai.gov.in)
- https://nios.ac.in/media/documents/VocInsServices/m2--f2.pdf
- https://www.insuranceinstituteofindia.com/AgentExam/iii/eBookLinks
- Insurance Act 1938. (https://legislative.gov.in/sites/default/files/A1938-04.pdf)

1.13 Suggested Readings

- Gupta P. K. (2005). Insurance and Risk Management. New Delhi, Himalaya Publishing House.
- Indian Institute of Banking and Finance (IIBF). (2015). Insurance Products. New Delhi, Taxmann.

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Notes

- Khan, M. A. (1983). Theory and Practice of Insurance. India, Educational Publication House.
- Khubchandani, B. S. (2000). Practice & Law of Banking. New Delhi, Macmillan.
- Periasami, P. (2019). Principles & Practice of Insurance. New Delhi, Himalaya.
- Mann T. S. (2000). Law and Practice of Life Insurance in India. New Delhi, Deep and Deep Publication.
- Mishra M. N. (2008). Insurance principles and, New Delhi, Sultan Chand & Co. Publishing House.
- Tripathy, Pal. (2005). Insurance: Theory & Practice, New Delhi, Prentice-Hall of India Pvt. Ltd.
- Mishra M. N. Life Insurance, Administration and Management, Sultan Chand & Co., New Delhi.
- Gupta C.B. Business Organization and Management, 2005, Sultan Chand & Co., New Delhi.
- Gupta P. K. 'Insurance and Risk Management', 2005, Himalaya Publishing House, New Delhi.
- Ray R. M. (1999). Life Insurance in India. New Delhi, Indian Institute of Public Administration.

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LESSON

2

Health, Property and Liability Insurance

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STRUCTURE

2.1 Learning Objectives

- Developing a basic understanding of various kinds of life insurance as well as general insurance.
- Understanding the relevant factors of health insurance, property insurance and liability insurance on one hand and life insurance on the other.

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2.2 Introduction

Daily, we hear about accidents and misfortunes. Some of them are:

- People fall ill suddenly.
- Motor cars are stolen, and individuals die or are hurt in car accidents.
- House and belongings are destroyed by fire.
- Large-scale deaths and property damage from cyclones and tsunamis.

Life is full of Uncertainties. Protecting oneself, one's family, and society against unpredictable events has been a concern for millennia. Fortunately, there is something called "Insurance." It enables us to minimize the financial consequences of various risks and to financially protect ourselves. Despite the notion that an incident such as a death or a fire can lead a devastating economic blow to someone, when we consider the society as a whole, in any given year, only a handful of individuals would suffer in such manner. If a little contribution is gathered from each member of the community and pooled to create a common fund, the pooled sum can be used to compensate the few people who have suffered the loss.

Thus, insurance is a financial instrument designed to lessen the financial impact of unforeseen disasters and provide financial security. Everyone who wants to protect himself from financial distress should think of buying the insurance. There is insurance available for a variety of items, ranging from art to pets, and one should get insurance based on their requirements and priorities.

2.3 Health Insurance

2.3.1 *Meaning*

No one anticipates becoming ill or injured, but a major disease can strike at any time. The expense of treating the disease might place a significant burden on your savings. This means that you may have to choose between providing your child with an excellent education and making your mortgage payments. Today, the expense of medical care is steadily increasing.

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For example, a few cancer-related drugs cost around 50,000 rupees per bottle. Depending on their weight, patients typically require 17 to 19 bottles each year for therapy. The medication alone costs between Rs. 18 and Rs. 20 lakhs. With the addition of hospitalisation bills, medical consultation fees, chemotherapy expenditures, etc., your total expenses could surpass Rs. 25 lakhs. These costs, which are already quite high, increase annually. Most thoughtful people have taken measures to safe-guard their health as soon as possible. Health insurance is a living benefit that provides funds in times of urgent need.

In this light, let's understand, what is Health Insurance?

Health insurance is a type of insurance coverage that allows an insured to receive reimbursement for medical and surgical expenses. Health insurance is an agreement in which an insurance company agrees to guarantee compensation for medical expenses if the insured becomes ill or is injured in an accident that requires hospitalisation. In general, insurance companies have agreements with leading hospitals to provide cashless treatment to their customers. If the insurance company has no affiliation with the hospital, they reimburse the insured's expenses. The government also encourages health insurance by providing a tax break.

With the rising cost of health care and medical bills that the average person cannot afford, this type of insurance has a growing market. It is estimated that a family spends 10% of their monthly income on health care. In India, where there is no public social insurance, individuals must care for themselves as well as their families. A prolonged illness or disability can devastate the family budget. Despite the fact that health insurance is an important social security financial product, it is unfortunate that in India, health insurance policies are predominantly purchased by families and individuals who can afford to pay their medical bills. However, the Indian government is making every effort to get individuals to purchase health insurance, and specialized insurance companies are promoted which are exclusively dealing in health insurance. Life insurance companies are also permitted to issue health insurance policies. A health insurance policy covers medical expenses incurred as a result of an accident, illness, or injury. Individuals can obtain such a policy in exchange for monthly or annual premium payments for a set period of time. During this time, if an insured is in an accident or is diagnosed with a serious illness, the

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insurance provider will cover the costs of treatment. Insured can also enjoy several add-on benefits, extended with health insurance policies, which are discussed in detail in the following sections.

2.3.2 *Need for Health Insurance*

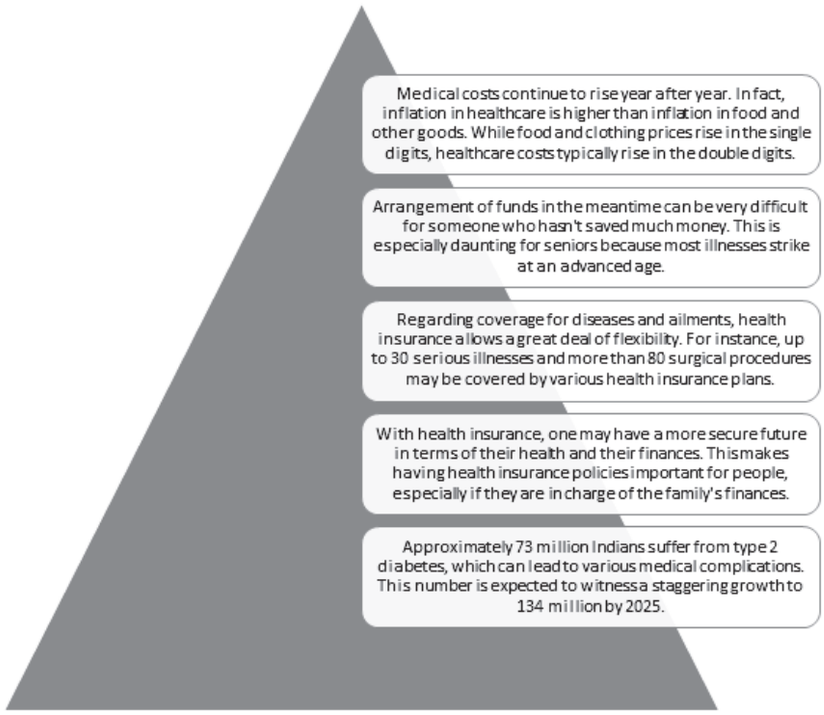

Figure 2.1: Need for Health Insurance

2.3.3 *Benefits of Health Insurance Plans*

- **Hospitalization Expenses:** Any illness that necessitates immediate hospitalization is covered by most health insurance plans. However, claims are only accepted if the illness hasn't already been identified when the insurance plan wasn't used.
- **Pre and Post Hospitalization Charges:** A health insurance plan may pay for pre-hospitalization costs such as diagnostic costs, physician fees, etc. The majority of insurance carriers also pay for post-release expenses including prescription drugs, regular check-ups, injections,

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etc. It is possible to recover compensation cash in the form of a lump sum or by generating the requisite bills.

- **Lifetime Renewability:** The insurance providers of health insurance policies are required by the Insurance Regulatory and Development Authority of India (IRDA) to provide lifetime renewability benefits to the policyholders. It enables you to renew your health insurance plan without any upper age limit restrictions. Parents and senior adults will benefit the most from this feature because they can renew their insurance without getting stressed to seek additional health insurance coverage as they get older.
- **Cashless Treatment:** Every health insurance provider develops a network of hospitals where the insured can make cashless claims. This simplifies the entire process of receiving emergency medical care. Individuals are not required to pay for any of the covered treatments at a network hospital.
- **No Claim Bonus:** Insured people receive discounts, or a bigger amount insured (at no additional cost) in the following years for each year without a claim, which can help lower their yearly premium payments or extend their sum insured coverage.
- **No Room Rent Capping:** Room rent of hospital rooms is covered under such health insurance policy, allowing insured individuals to recover with comfort. Total amount disbursed in such cases are specified by an insurance company beforehand.
- **Medical Check-up:** Options for health examinations are also provided by insurance policies. Some insurers may also provide free health assessments depending on insured's prior No Claim Bonuses.
- **Tax Benefit:** Section 80D of the Income Tax Act allows for the tax deduction of health insurance premium payments. You can deduct up to INR 25,000 per year from your taxable income for an insurance policy covering you, your spouse, your children, and your parents under the age of 60 years. You could claim an additional INR 50,000 deduction if you also acquired a policy for a parent over the age of 60 years.
- **Transportation Charges:** Any ambulance expenses incurred during a medical emergency are covered by a standard health insurance

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policy. This is a significant benefit because premium hospitals frequently charge exorbitant transportation fees.

2.3.4 *Comparison of Policies Offered by Various Health Insurance Companies*

In India, there are seven different types of health insurance plans to meet the various needs of people. These are explained further below:

- **Individual Health Insurance:** Individual health insurance plans have a single policyholder who receives all of the coverage benefits available. Individual health insurance plans typically cover insureds' medical expenses based on the sum insured chosen and the premium paid. Some of the benefits provided by these plans include in-patient hospitalisation expenses, pre-hospitalization and post-hospitalization expenses, day-care expenses, and domestic hospitalisation expenses. It typically comes with no upper age limit for policy renewal, implying that the plan provides the insured with lifetime renewability benefits. There are no limits to the number of claims that can be made during the term of an individual health insurance policy.
- **Family Floater Health Insurance:** A family floater health insurance plan covers the entire family for a floater sum insured. Family floaters are advantageous because they make it easier for an individual to manage his or her health insurance by covering himself or herself as well as family members. This insurance plan offers an affordable option when one has to include his/her parents in the policy as compared to a separate senior citizen health insurance policy for their parents.
- **Senior Citizen Health Insurance:** Senior citizen health insurance plans are designed to meet the insurance needs of people aged 60 to 75. It is advisable to obtain a senior citizen health insurance policy because most individual or family floater health insurance plans do not cover people over the age of 65 and only allow renewals. Some of the coverage benefits of senior citizen health insurance plans include day-care expenses, cashless hospitalisation, domiciliary hospitalisation expenses, coverage for pre-existing diseases, and coverage for specific diseases.

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- **Women-Specific Health Insurance Plans:** Women-specific health insurance plans are specifically designed to meet the insurance needs of women of various ages. These plans protect women from healthcare costs during pregnancy, retirement, coverage for new-born babies, coverage for child education, and so on. Furthermore, after a certain age, they cover women for specific diseases to which they are predisposed. These plans have low premiums and generally provide the insured with lifetime renewability benefits.
- **Critical Illness Insurance Plans:** Plans for critical illness insurance cover a variety of life-threatening conditions, including heart attack, stroke, paralysis, cancer, renal failure, etc. When a critical disease is initially diagnosed, these plans offer a lump payment that the insured person may use both inside and outside of India. The insured may even use this money to pay off any outstanding bills, such as those for a child's education, or in any other manner permitted by the requirements. Given the high cost of critical illness treatments, it is advised to be protected by such insurance.
- **Disease-Specific Health Plans:** People looking for comprehensive coverage for a specific disease, such as cancer, diabetes, or heart disease, may be interested in disease-specific health insurance plans. This plan is also available to those who have a corporate health insurance plan or any other regular health insurance plan, as these plans may not always provide adequate coverage for specific diseases. Disease-specific health insurance plans waive the waiting period, which is otherwise required if you are covered under a standard health insurance plan. The plan, however, is best suited for people who have a family history of a specific disease, such as hypertension or diabetes.
- **Top-Up Health Insurance:** A top-up health insurance plan enables the insured to enhance the sum insured under their base policy to make up the difference in case hospital costs are higher than the plan's limits. When a single hospitalisation occurs during the term of the base health insurance policy and the amount of the claim exceeds the deductible and the total insured, the top-up health insurance policy kicks in. These plans handle each claim independently.

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Table 2.1: Comparison of Policies offered by various Health Insurance Companies

Health Policy	Description
Family Floater Health Plan	Cover all family member (you, your spouse, children and parents) in a single policy.
Critical Illness Health Plan	Provide financial coverage to insured in case he/she diagnosed with listed critical illness.
Top up Health Plan	Provide Extra Coverage in case your existing plan is not sufficient to cover the medical bills.
Senior Citizen Health plan	Provide quality healthcare treatment such as domiciliary hospitalization and psychiatric care to the people above the age of 60 years.
Individuals' health Plan	Provide coverage only to an individual. It covers expenses like hospitalization for injuries, illness, Surgery Cost, room rent, day-care etc.
Personal Accident Assurance	Cover the medical expenses that occur due to an accident while providing coverage for partial disability, permanent disability and accidental death.

IN-TEXT QUESTIONS

1. Which of the following terms matches closest with 'Family Floater'?

(a) Health insurance *(c)* Property insurance

(b) Accidental injury *(d)* Consequential loss

2. Health Insurance coming under .....Insurance

3. A health insurance should be _____?

(a) Affordable *(b)* Continuous

(c) Universal *(d)* All of those

4. _____ is a form of health insurance against loss by accidental bodily injury.

(a) Property insurance *(b)* Marine insurance

(c) Personal insurance *(d)* Accident insurance

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5. _____ is a plan that is tailor made for families.

(a) Floater Health Insurance Policy

(b) Group health insurance

(c) Unit-linked

(d) Health insurance

2.4 Property Insurance

2.4.1 *Meaning*

The Property insurance policy protects the physical goods and equipment of a business or home against losses caused by theft, fire, and other perils. It could be an all-risk policy that protects against all of the risks specified in the policy document. Property insurance is a package policy that provides a variety of coverages under a single policy. They may also cover personal liabilities in some cases.

Further, property insurance coverage also covers the risk of all damage caused by fire, theft, wind, smoke, lightning, etc., but it excludes damage caused by water owing to flooding, water seepage, tsunamis, cyclones, etc. Some property insurance policies also don't cover losses caused by terrorism, earthquakes, and other war-related events.

2.4.2 *Cost Covered under the Property Insurance*

There are three types of property insurance coverage which are explained below:

- **Replacement Cost:** The expense of repairing or replacing property that is of equal or greater value is covered by replacement cost. Instead of using the cash value of the assets, the coverage is based on replacement cost values.
- **Actual Cash Value:** It signifies the payment of replacement cost *minus* depreciation to the insured. For instance, if a property that is five years old is destroyed, the insured will receive the value of the five-year-old property rather than the new one.

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2.4.3 *Types of Property Insurance*

Property insurance compensates the property owner financially in the event that his or her property and its contents are damaged. Depending on the type of property and risks covered, property insurance policies can be classified into various categories. Here are some common types of property insurance available in India:

- **Homeowner's Insurance:** In India, this is the most common and widely purchased type of property insurance. As the name implies, homeowner's insurance protects the owner's property from financial losses caused due to expected perils. In fact, many lenders have made homeowner's insurance mandatory for those seeking to finance their house.
- **Renter's Insurance:** Similar coverage is offered by renter's or tenant's insurance and homeowner's insurance. However, this specific sort of property insurance is only intended to protect the tenant's personal items kept inside the rented home. It could consist of things like clothing, jewellery, furniture, electronic devices, etc. Some policies also cover additional liabilities a tenant may incur towards his/her landlord.
- **Fire Insurance:** One of the most frequent accidents that can seriously harm a property's contents and surroundings is an accidental fire. A unique kind of property insurance called fire insurance offers protection against such inevitable fires and related risks including explosion, implosion, lightning, impact damage, etc. Both residential and commercial properties can get a fire insurance policy.
- **Commercial Property Insurance:** This kind of fire insurance is also highly popular in India. Commercial properties like offices, warehouses, retail stores, eateries, and factories are covered by this sort of property insurance. It is prudent for business owners to obtain commercial property insurance to protect their operating capital in the event that their commercial property and its contents are compromised.
- **Natural Disaster Insurance:** A standard property insurance policy may or may not cover natural disasters. However, perils such as

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earthquakes, hurricanes, storms, floods, cyclones, etc. have the potential to completely destroy a property, resulting in huge financial losses for the owner. A special type of property insurance, known as natural disaster insurance, secures a property against such perils.

IN-TEXT QUESTIONS

6. Property Insurance may not include _____

(a) Burglary *(b)* Fidelity

(c) Insolvency *(d)* Sickness

7. Risk is the chance of _____

(a) Peril *(b)* Accident

(c) Loss *(d)* Event

8. The person who seeks protection against a risk and to whom the insurance policy is issued is known as _____

(a) Insurer *(b)* Customer

(c) Insured *(d)* Creditor

9. When a particular property is insured with two insurers it is called _____.

(a) Property insurance *(b)* Double insurance

(c) Single insurance *(d)* Particular insurance

2.5 Liability Insurance

Liability insurance covers the insured's legal liability arising out of property damage or bodily injury to others; legal defence costs are also paid. Liability insurance is also called casualty insurance. In practice, non-life insurers typically use the term casualty insurance (rather than liability insurance) to describe the various coverages and operating results. Casualty insurance is a broad field of insurance that covers whatever is not covered by fire, marine, and life insurance; casualty lines include auto, liability, burglary and theft, workers compensation, and health insurance. Although there is some overlap, the various coverages can be grouped into two major categories—personal lines and commercial lines.

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1. **Personal Lines:** Personal lines refer to coverages that insure the real estate and personal property of individuals and families or provide them with protection against legal liability. Major personal lines include the following:

   - Private passenger auto insurance protects the insured against legal liability arising out of auto accidents that cause property damage or bodily injury to others. Auto insurance also includes physical damage insurance on a covered auto for damage or loss resulting from a collision, theft, or other perils. Medical expense coverage and uninsured motorist coverage are also available.
   - Homeowners insurance is a package policy that provides property insurance and personal liability insurance in one policy. There are a number of homeowners policies available that cover the dwelling, other structures, and personal property against loss or damage from numerous perils, including fire, lightning, windstorm, or tornado. The policies also include theft coverage and personal liability insurance. A homeowner's policy is an example of a multiple-line policy, which refers to state legislation that allows insurers to write property and casualty lines in one policy.
   - Personal umbrella liability insurance provides protection against a catastrophic lawsuit or judgement. Coverage applies on an excess basis after any underlying insurance coverages are exhausted. Policy limits typically range from $1 million to $10 million.

     Indirect losses can also be covered, including the loss of business income, rents, and extra expenses.
   - Commercial multiple-peril insurance is a package policy, which can be written to include property insurance, general liability insurance, business income insurance, equipment breakdown insurance, and crime insurance.
   - General liability insurance covers the legal liability of business firms and other organisations that arise out of property damage or bodily injury to others. Legal liability can arise out of the

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ownership of business property, sale or distribution of products, and manufacturing or contracting operations. However, general liability insurance does not include products liability insurance, which is a separate line.

- Products liability insurance covers the legal liability of manufacturers, wholesalers, and retailers to persons who are injured or incur property damage from defective products.
- Workers compensation insurance covers workers for a job-related accident or disease. The insurance pays for medical bills, disability income benefits, rehabilitation benefits, and death benefits to the dependents of an employee whose death is job-related.
- Commercial auto insurance covers the legal liability of business firms arising out of the ownership or operation of business vehicles. It also includes physical damage insurance on covered business vehicles for damage or loss resulting from a collision, theft, or other perils.
- Ocean marine insurance covers ocean-going vessels and their cargo from loss or damage because of perils of the sea; contracts are also written to cover the legal liability of shippers and owners.
- Professional liability insurance provides protection against malpractice lawsuits or lawsuits that result from a substantial error or omission. Professional liability insurance covers the professional acts or omissions of physicians, surgeons, attorneys, accountants, and other professionals. For example, medical Malpractice insurance covers physicians and other health-care providers for liability claims arising out of harm or injury to patients.
- Directors and Officers (D & O) liability insurance provides financial protection for the directors and officers and the corporation if the directors and officers are sued for mismanagement of the company's affairs.
- Other coverages include aircraft insurance, which provides physical damage insurance on covered aircraft and liability

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coverage for legal liability arising out of the ownership or operation of aircraft. Credit insurance covers manufacturers and wholesalers against loss because an account receivable is uncollectible. Financial guarantee insurance guarantees the payment of principal and interest on debt instruments issued by the insured. Private mortgage insurance (PMI) guarantees the mortgage lender for a loss up to certain limits for a property foreclosure if the borrower defaults on the mortgage.

2.6 Summary

This lesson discusses the salient features of a broad canvas of topics related to insurance. Health insurance is a type of insurance coverage in which an insurance company agrees to guarantee compensation for medical expenses if the insured becomes ill or is injured in an accident that requires hospitalization. Property insurance protects physical goods and equipment of a business or home against losses caused by theft, fire, and other perils. This chapter provides brief review of all kinds of insurance which should be covered in insurance planning by an individual.

2.7 Answers to In-Text Questions

1. *(a)* Health insurance

2. Personal

3. *(d)* All of those

4. *(d)* Accident insurance

5. *(a)* Floater Health Insurance Policy

6. *(d)* Sickness

7. *(c)* Loss

8. *(c)* Insured

9. *(b)* Double insurance

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2.8 Self-Assessment Questions

1. Compare the Various types of health insurance plan available in India.
2. What are the need and benefit of health insurance plan?
3. What is liability insurance?
4. What are the types of property insurance?
5. Mention the cost covered under the Property Insurance.

2.9 References

- Insurance Regulatory Development Act 1999. (https://www.irdai.gov.in)
- https://nios.ac.in/media/documents/VocInsServices/m2--f2.pdf
- https://www.insuranceinstituteofindia.com/AgentExam/iii/eBookLinks
- Insurance Act 1938. (https://legislative.gov.in/sites/default/files/A1938-04.pdf)

2.10 Suggested Readings

- Gupta P. K. (2005). Insurance and Risk Management. New Delhi, Himalaya Publishing House.
- Indian Institute of Banking & Finance (IIBF). (2015). Insurance Products. New Delhi, Taxman
- Khan, M. A. (1983). Theory and Practice of Insurance. India, Educational Publication House.
- Khubchandani, B. S. (2000). Practice & Law of Banking. New Delhi, Macmillan.
- Periasami, P. (2019). Principles & Practice of Insurance. New Delhi, Himalaya.
- Mishra M. N. (2008). Insurance principles and, New Delhi, Sultan Chand & Co. Publishing House.
- Tripathy, Pal. (2005). Insurance: Theory & Practice, New Delhi, Prentice-Hall of India Pvt. Ltd.

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UNIT - V

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LESSON

1

Retirement Planning

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STRUCTURE

1.1 Learning Objectives

- Understanding why there is need for Retirement Planning, Retirement Planning Goal, Processes.
- Understanding Indian outlook to Retirement Planning and their hurdles/roadblock.
- Understanding Golden rule for Retirement Planning, and myths about Retirement Planning.

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1.2 Introduction

You have successfully gone through the various stages of life, overcome many hurdles, seen many ups and downs, your career life and so on but it is time now to enter a new phase of your life that is retirement. Retirement means end of work life not life. Like changing from a hectic pace of life to one more relaxing, scenic and pleasurable. It's just another phase of life to enjoy and explore. Retirement is a state of mind as well as a financial issue.

During our work life most of us get regular income in the form of salary, so we have our expenditures accordingly. By the time we reach retirement we are used to or adapt ourselves to spending patterns which we do during our work life. During retirement or before than during our life we need to plan what we will do with our retirement savings or how we will be going to finance our retirement needs. This chapter tries to answer these questions.

Everyone wants to lead a comfortable retirement; however, it won't happen without retirement planning. So, it is important to be financially prepared by the time you reach your retirement so that you can enjoy it. Retirement planning means setting aside some money or assets for the purpose of deriving some income for old age. This includes setting your retirement goals, estimating the amount of money you will need, and investing to grow your retirement savings.

1.2.1 *Goals of Retirement Planning (Why is Retirement Planning Required?)*

Financial Independence: You don't want to be dependent on anyone in case of any financial emergency or medical expense. With the right retirement plan you can Prepare your emergency plan or fund to meet unexpected future events.

Beat Inflation: In India the price of consumer goods grew 6.2% in 2020 according to consumer price index Inflation data. This affects your standard of living, So what you could buy for 2000 today would cost more in the near future by planning for retirement you can invest

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your money and your money will grow and this will help you to beat inflation.

To Fulfil Retirement Goal: Every retirement is a new lease of life. It is a point in life where you want to fulfil various goals of life like travelling to new places, picking up new hobbies or even starting your own venture. You may also have a commitment to fulfil like sending your children abroad for higher studies. With the right retirement plan you can achieve these goals.

To Leave a Legacy: You have worked so hard to build a life of comfort for your family. You want this comfort to last for years even in your absence. When you plan for your little retirement, you also want to leave some money for your family after your death.

To Maintain a Standard of Living: You want your current lifestyle to be continued even after retirement. Free these expenses are covered by your monthly income. After retirement you can plan to get regular income to cover these expenses.

To be Prepared for a Longer Life: You need to save Lots more to finance your post retirement expenses as the life expectancy today is higher. By planning today you can make arrangements to finance the long post-retirement period expenses. Remember your aim is to make a decision that will best realize your financial goals, Based on your current financial position. Here the role of financial planner for retirement planning comes into picture.

1.2.2 *Role of Retirement Planners*

Some times the biggest role of financial professional is to help client to think clearly and rationally about his or her own retirement. One of the best tools for this is to create a formal Financial pan, which is a document that details current investment assumptions about Investment plans, Investment growth rates, the rate of inflation and the desired retirement date. A financial plan will encompass all these ideas and help the client to achieve his or her retirement goals. A financial professional May also help client to rationalize various housing options. The role of financial planner will evolve over time. No two retirees have the same scenario.

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1.3 Retirement Planning Process

It's incredibly easy to avoid thinking about retirement. This brings us back to the principle that nothing happens without a plan. Saving isn't a natural event - it must be planned. Unfortunately, planning isn't natural either. Although an elaborate, complicated plan might be ideal, you might be better off with a modest, uncomplicated retirement plan. Once the plan becomes part of your financial routine, you can modify and expand it. But a retirement plan can't be postponed, the longer you put it off, the more difficult the accomplishing goal becomes.

The below figure depicts the seven steps of the retirement planning process.

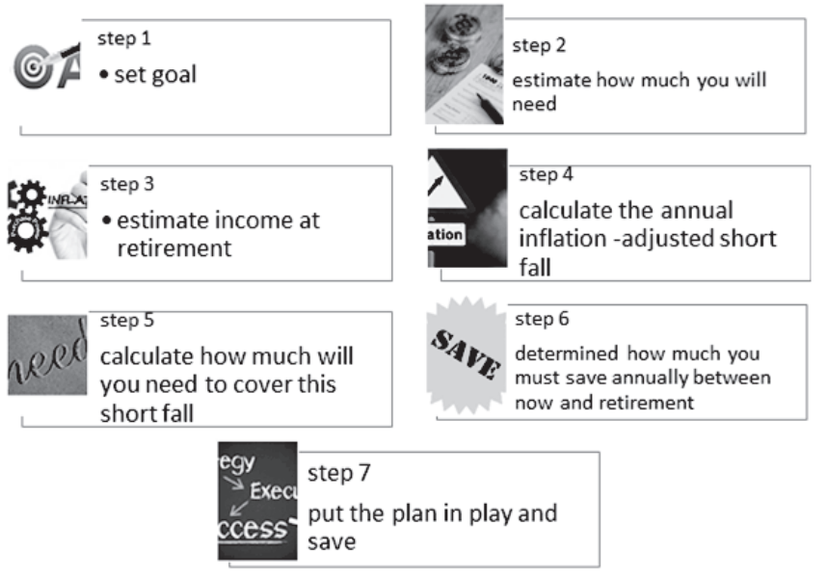

Figure 1.1

Step 1: Set Goals

The first step in planning for your retirement is figuring out just what you want to do when you retire. Naturally you want to be able to support yourself and pay any medical bills but that could not cost a little or it could cost a whole lot. Therefore, you need to start by asking yourself a basic question: How costly a Lifestyle do you want to lead? Do you want to live like a king or more economically, perhaps like a minor Duke or normal man? Do you currently have any medical conditions that you know are going to be costly later in life?

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Once you have answered these questions, you can set your first goal as being able to support yourself and pay your medical expenses. Then it's time to think about other Goals. Do you want to stay in your current house, or will you want to move to another? Do you want to live in a retirement community or your own residence? Do you want to travel? Do you want money set aside for your family? It may be hard to sit down and consider everything you might want to do when you retire, but you'll need to be as exhaustive as possible when setting your goals.

The goals should be measurable and time bound. In case of retirement you need to figure out when you exactly want to retire. The typical age for retirement is 65, but more and more people are putting off retirement until 70 or even later.

The time frame for achieving your goal is more important than you might think for example if you want to retire at 60, you'll need to save up lot of money to be able to pay for lengthy retirement. If you really love your job and don't want to retire until you're 70, you won't need to save as much because your period of retirement will likely to be shorter and you'll be giving extra 10 years to prepare for it.

Step 2: Estimate how much you will need

Once You have your retirement goals in place it's time to start thinking about how to achieve them. The second step of retirement planning helps you turn your goal into $ by estimating how much money you will need.

Of course estimates aren't always accurate or reliable But it is the best we can do. If you are smart you can make some pretty good educated guesses just start with your current living expenses.

Begin with your current living expenses because you need to use the amount it currently takes to support yourself as the starting point to project how much it's going to cost to support yourself in retirement. Because elderly people have usually paid off their house and consume less than younger people, most financial planners estimate that supporting yourself in retirement will cost only 70 to 80% of what it caused before retirement.

When you first begin to make a financial plan, you calculate what it causes to support yourself when you calculate your personal income statement. Let's say the number you came up with was 50000 dollars

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well, your basic retirement living expenses would then be somewhere around 40,000 dollar (50,000 dollar × 0.8)

Of course, this $40,000 is just the tip of the Iceberg. Remember, you have other goals that are going to cost money you will need to estimate in today's dollars – how much each goal is going to cost you annually adding up the estimated cost of achieving all your goals including the basic amount for your Living expenses, will give you in today's dollar the income amount you will lead each year to fund your retirement.

However, you are not done yet. Don't forget the government. Yes, you need to factor in the effect of Taxes

Step 3: Estimate Income at Retirement

As you have probably guessed, once you know how much income you are going to need when you retire, the next logical step is to figure out just how much income you are going to have. First, estimate your social security benefits. Social security benefits available in India are discussed in this chapter later.

A comprehensive retirement plan cannot be prepared unless the retirement planner has detailed and precise information about the client's financial health like his current income and asset source. In fact due diligence in the retirement planning process requires a financial planner to put every effort into obtaining accurate and true financial information the planner should be aware of client who is reluctant to provide such information.

Step 4: Calculate the Annual Inflation-Adjusted Short Fall

Now it's time to compare the amount from Step 2 and Step 3. For most people, there is a big difference between the retirement income they need and retirement income they have.

Step 5: Calculate how much you will need to Cover this Shortfall

Buy now, you know how much of the projected annual shortfall you have in your retirement funding. That is, you know how much additional money you need to come up with each year to support yourself in retirement. The question then becomes this: How much must you have

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saved by the retirement fund this annual shortfall? In determining how much you need to cover the shortfall, you will want to take into consideration but you can on your investment, keeping in mind that each year you will want a bit more in the way of retirement funds to counter the effect of inflation.

Step 6: Determine how much you must Save Annually between Now and Retirement

Now you know the total amount you need to save by the time you retire, but don't panic - you are not about to put it all away at once. Instead, you need to put money away little by little, year by year. Let's figure out how much to put away each year. Once you know how much you need to save, determining how much you need to save annually is pretty easy. If you did like a bit of help in determining just what you need to save for retirement there are several excellent online retirement planning websites.

Step 7: Put the Plan in Play and Save

OK, you have finally figured out exactly how much you need to save each year to achieve your retirement goals. Now all you need to do is start saving. This last step should be the easiest right? Wrong. It's actually one of the hardest. There are countless ways to save for retirement. In order to choose the one that is best, you have to know what's available out there.

1.3.1 *How much Retirement Income will I need?*

An easy rule of thumb is that you'll need to replace 70 to 90 percent of your pre-retirement income. If you're making Rs. 20,000 a month (before taxes), you might need Rs. 15,000 to Rs. 18,000 a month in retirement income to enjoy the same standard of living you had before retirement.

The following example illustrates the amount needed as retirement corpus to ensure a steady flow of monthly income.

Calculation of retirement corpus:

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Retirement age	60
Current age	58
Life expectancy	83
Years after retirement	23
Current annual expense	1.8 lakhs
Annual return on investment	12%
Inflation	5%
Inflation Adjusted Return	7%
Total retirement corpus	Rs 15 lakhs

1.3.2 *How to Prepare for Retirement?*

1. It's never too late to start. It's only too late if you don't start at all.
2. Deposit everything you can into your retirement plans and personal savings.
3. Reduce expenses and funnel the savings into your kitty.
4. Aim for higher returns and tax savings. Don't invest in anything you are not comfortable with.
5. Refine your goals. You may have to live a less expensive lifestyle in retirement.
6. Sell assets that are not producing income or growth and invest in income-producing assets.

1.3.3 *How Much should I Invest to Create a Retirement Fund?*

Let's suppose Ram at the age of 30 with monthly expenses of Rs. 10,000 wants to retire at the age of 60 (Life expectancy of 75). What is the corpus he requires for his retirement assuming that he will require 80% of his present expenses? And how much should he save every month to build his retirement corpus?

To find the corpus and monthly investment, first of all we have to find how much he will be spending every month at the age of his retirement, because his current expenses in money value are going to increase in future because of Inflation.

Step 1: Value of his expenses at the time of retirement with 5% Inflation.

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No. of year after which you will retire	5.	10	15	20	25	30
Amount for expenses you need every month at the time of Retirement	(12,762.82)	(16,288.95)	(20,789.28)	(26,532.98)	(33,863.55)	(43,219.42)
Amount for expenses you need every month at the time of Retirement (80% of the requirement)	(10,210.82)	(13,031.16)	(16,631.43)	(21,226.38)	(27,090.84)	(34,575.54)

Note:- Growth in current expenses after 30 years due to inflation.

Step 2: How much corpus he requires at his retirement to get continuous flow of cash for his monthly expense requirement?

Assumption: Return on Corpus or investment is 7%

No. of years of retirement	For expenses of Rs. 10,210.25	For expenses of Rs. 13,031.16	For expenses of Rs. 16,631.43	For expenses of Rs. 21,226.38	For expenses of Rs. 27,090.84	For expenses of Rs. 34,575.54
5	585,130.95	746,791.84	953,116.66	1,216,445.22	1,552,526.61 1	1,981,461.08
10	1,117,707.64	1,426,509.65	1,820,627.96	2,323,633.90	2,965,611.10	3,784,954.77
15	1,602,450.28	2,045,177.75	2,610,222.66	3,331,379.05	4,251,777.66	5,426,465.43
20	2,043,655.17	2,608,279.41	3,328,898.92	4,428,612.31	5,422,425.66	6,920,541.77

Ram will retire at the age of 60 years and his life expectancy is 75 years that makes his expenses requirement for 15 years (75 years – 60 years).

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From the above table we can make out that for 15 years, his required corpus is Rs. 54,26,465

Step 3: Ram would like to open an SIP where he will invest money every month which grows at 10% annualised over 30 years to build his retirement corpus. How much Ram should invest every month for the corpus?

For the calculation purpose we are finding out the corpus for Rs. 10 lakhs and after getting the corpus we will multiply it by the required amount:

No. of years

Interest	5	10	15	20	25	30
6%	(14,321.72)	(6,125.04)	(3,468.51)	(2,194.69)	(1,471.50)	(1,021.18)
8%	(13,621.38)	(5,516.23)	(2,943.09)	(1,746.24)	(1,093.09)	(705.41)
10%	(12,958.11)	(4,963.82)	(2,489.91)	(1,381.24)	(804.40)	(480.93)
12%	(12,329.91)	(4,463.57)	(2,101.14)	(1,087.13)	(587.47)	(324.57)
15%	(11,449.24)	(3,802.02)	(1,622.41)	(753.54)	(362.77)	(177.56)

With the above table we can make out that he has to invest Rs. 480/ month of Rs. 10 lakhs. Therefore, for Rs. 54 lakhs, he has to invest Rs. 2,592 every month = (54/10) × 480 = Rs. 2,592.

1.3.4 *Retirement Planning for Women*

In the world of retirement planning women are regrettably overlooked. Women are less likely to be covered by employer-sponsored plans. According to institute of women policy research, women's average pay is 76.5% of men's average pay low pay means low ability to save for retirement. There is also a difference in gender-based life expectancy that impacts retirement planning.

Life expectancy is higher: As compared to men, women have higher life expectancy. Therefore, if a woman is fully dependent on her husband and is not financially sound, then she may have to suffer financially if her husband dies. So, whether you are single or married, the number of years after retirement is very crucial. Thus, you must ensure that you have sufficient funds that can carry you through your golden days. The discrepancy may reverse, given enough time, but for now it is more likely that male client will die before their female spouse. Women are also more likely to take time off work to be a caregiver to ageing parents.

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This going to impact their retirement savings potential. Female clients are more risk averse investors than their male counterparts. It is very common for a husband to have a higher risk tolerance score than his wife.

Less number of women are working – It has been seen that women leave their jobs or opt for lesser-paying jobs in order to take care of their children and families. As compared to other countries, women doing this in India is higher. By properly planning for your post-retirement life, you could ensure some degree of financial stability during your retirement days. If due to some reason, you are quitting your job early, then make sure the money you have accumulated is used by you wisely. You can invest that money in buying a retirement plan.

Women also tend to have lower levels of literacy. This is also an advantage! Because of this lower level of general understanding, women are more open to investment advice from a financial professional. Most men think they can handle it. This brings their own ideas and philosophies to investment strategy process but female clients are more open to learn and process new information.

1.4 India Outlook to Retirement Planning and Their Hurdle/Roadblock

Despite growing inflation, retirement planning is still not among the top priorities for most Indians. While Indians invest in various schemes and policies during their job life, only 24 per cent have even thought of savings for their retired life, revealed a recent study by Max Life Insurance, India Retirement Index Study. It was conducted among the age group of 35-65 years, across 28 different cities in India in November 2021. Financial planners stress on the importance of retirement planning as that is a stage when your income sources dry up to a large extent. Moreover, with rising life expectancy, there are more years to provide for after retirement.

The study finds that India's Retirement Index Study (IRIS) stands at 44, with looming concerns over health and financial preparedness and high emotional preparedness as India banks on support from family or society. IRIS denotes the degree to which Indians feel prepared for the retired life on a scale of 0 to 100.

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IN-TEXT QUESTIONS

1. What is a primary goal of retirement planning?

(a) Maximizing current income

(b) Minimizing tax liability

(c) Accumulating sufficient funds for a comfortable retirement

(d) Investing in high-risk assets

2. Retirement planning aims to provide:

(a) Short-term financial goals

(b) Financial security during the retirement years

(c) Immediate returns on investments

(d) Minimal savings for the future

3. Which of the following is a key objective of retirement planning?

(a) Generating income during the working years

(b) Avoiding all financial risks

(c) Maintaining a desired lifestyle post-retirement

(d) Focusing on short-term financial gains

4. The process of estimating future retirement expenses involves:

(a) Ignoring inflation

(b) Calculating current expenses and adjusting for inflation

(c) Reducing all expenses to minimize financial risks

(d) Postponing the calculation until retirement

5. Diversification in retirement planning refers to:

(a) Relying on a single investment

(b) Spreading investments across various assets

(c) Avoiding all investment risks

(d) Liquidating all assets at retirement

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6. Regularly reviewing and updating the retirement plan is essential to:

(a) Ignoring changes in financial markets

(b) Adapting to evolving financial goals and circumstances

(c) Sticking to the initial plan without adjustments

(d) Avoiding any investment changes

7. What is the purpose of establishing an emergency fund as part of retirement planning?

(a) To maximize returns

(b) To cover unexpected expenses and avoid tapping into retirement savings

(c) To fund luxury purchases during retirement

(d) To rely on government assistance in case of emergencies

1.5 Purpose of Saving for Retirement

Of those who do invest for retirement, more than 60 per cent invest in retirement planning specifically to manage their health and medical expenses in their sunset years. While 63 per cent of the people find it critical to save for medical emergencies during their retirement life almost 47 per cent of Indians invest for retirement to ensure there is 'no need to depend on others for financial needs', with 38 percent investing with the aim to 'maintain a lifestyle during retirement.'

1.6 Barriers for Retirement Planning

The majority of the respondents believe in starting retirement planning from an early working age; 80 percent of older age group respondents regret not starting earlier. But 23 percent of them have not even thought about retirement planning. One of the major reasons that refrain people to save or invest for their retirement is a psychological setup that compels Indians to believe that family will take care during their old age. While 45 per cent of the Indians believe that they will get support

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from their children during retired life, more than 35 per cent believe that they have enough family wealth or other sources to cope up in the retired life.

Financial preparedness for retirement is low in most of the cities. Although health has been recognized as the most critical aspect in retired life, the majority of the respondents did not go for a health check-up in the last three years. The tendency to neglect health is highest among people in the age group of 41-45 years (more than 50 per cent in this age group have not gone for a check-up in the last three years).

1.7 Golden Rules for Retirement Planning in India

1. **Start Early and Retire Peacefully:** For example, if you start saving for retirement at age 25, so that if you wish to retire by 60, you have an investment horizon of 35 years. If at the age of 25, you start investing Rs. 1,000 per month at the rate of 6% compounding then the maturity amount will be Rs. 13,80,290. Alternatively, if you commence the same investment at the age of 35, then the maturity value at the age of 60 will be Rs. 6,79,580. With a 10-year lag, the retirement savings at 60 years is more than halved.
2. **Plan Wisely:** Set aside some money for medical expenditure and emergency needs after retirement. Allocate your resources towards necessary ends like children's education and marriage that you will incur in the course of time.
3. **Track and Review your Plan:** The financial plan has to be reviewed at regular intervals to make sure whether the target meets the objectives. Also, understand and get comfortable with the risks, costs and liquidity of your investments.
4. **Don't Dip into your Retirement Savings:** Don't touch this pool of savings pre-retirement. If you spend money from your retirement kitty to fulfil your present needs, you will lose out big in the long run. The corpus for your retirement will be much lower.

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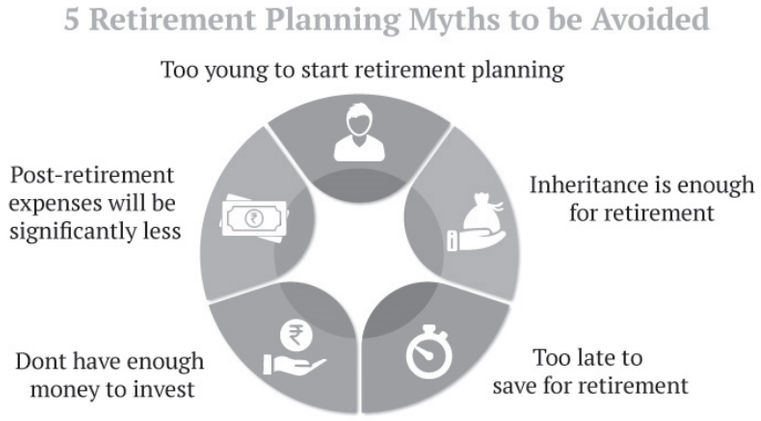
1.8 Myths about Retirement Planning



- **Too Young to Start Saving for Retirement:** It is never too early to start planning for retirement. If you start early, your wealth will grow much faster due to the power of compounding. Moreover, you can start with small investments each year and still build a sizable corpus by the time you retire. A large corpus helps you live off the returns rather than eat into the core principle.
- **Too Late to Save For Retirement:** Better late than never! Even if you realized the need to save at the age of 45, a systematic plan could help you build a good retirement kitty. Look for the best pension plan in India that initially allocates a large portion of your money into equity. In the years closer to retirement, the fund will move most of your money to safer debt instruments.
- **Don't Have Enough to Invest:** If you have just started working, you may feel that your salary is just about sufficient to meet your expenses. It is tempting to procrastinate financial planning for retirement savings, but this can be risky. Even small savings started early grows into a large fund over the years. You can keep increasing the proportion saved as you progress through your career. You can explore guaranteed return plans that look at protecting life, generating an income stream, giving away loyalty additions, and financially supporting the family till the end of the policy period.

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- **Your Inheritance is Enough to Cover the Expenses:** Inheritance may or may not suffice depending on the type and size of the asset. Liquid assets are generally easier to utilise when needed. If you inherit real estate such as land, you may have to either sell it off or reverse mortgage it to avail a cash flow. Both cases depend on the location and demand for such a place. A house may generate some rent provided it is in a place where there is a demand for rented houses. While selling off property, any existing loans will also have to be cleared. The market value of all such assets must be ascertained first.
- **Post Retirement, your Expenses will Decrease Significantly:** The cost-of-living increases year on year. If your money does not grow faster than the rate of inflation, you will not be able to maintain the same lifestyle in the future even with the current level of expenses. Healthcare becomes an important factor in old age and the costs associated must be factored in. People also require more helping hands in old age which will cost money.

1.9 Summary

Retirement planning is a crucial aspect of financial planning that ensures financial stability during the post-retirement phase. In this chapter, we discussed the need for retirement planning, the role of a retirement planner, retirement planning goals, and the retirement planning process. We also examined various factors that affect retirement planning, such as determining the required retirement income, preparing for retirement, retirement planning for women, common roadblocks in the retirement planning process, and the Indian outlook to retirement planning and their hurdles/roadblocks. We emphasized the importance of starting early, maximizing savings, and minimizing debts while preparing for retirement. We also highlighted the unique challenges faced by women in retirement planning, such as longer life expectancy and career gaps. We discussed common roadblocks that hinder the retirement planning process, such as lack of knowledge, procrastination, and unexpected life events.

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Furthermore, we examined the Indian perspective on retirement planning, such as the low awareness, inadequate pension benefits, and lack of retirement planning products. Finally, we discussed the golden rule for retirement planning, which is to start early, save regularly, and invest wisely. We also addressed some common myths about retirement planning, such as assuming that Social Security benefits will be sufficient, relying on inheritance, and underestimating life expectancy. Overall, this chapter provides a comprehensive overview of retirement planning and emphasizes the importance of proper planning to achieve financial stability in the post-retirement phase.

1.10 Answers to In-Text Questions

1. *(c)* Accumulating sufficient funds for a comfortable retirement

2. *(b)* Financial security during the retirement years

3. *(c)* Maintaining a desired lifestyle post-retirement

4. *(b)* Calculating current expenses and adjusting for inflation

5. *(b)* Spreading investments across various assets

6. *(b)* Adapting to evolving financial goals and circumstances

7. *(b)* To cover unexpected expenses and avoid tapping into retirement savings

1.11 Self-Assessment Questions

1. Briefly explain about the goals of retirement planning.
2. Discuss the Indian outlook to retirement planning.
3. What are the myths about retirement planning?
4. What are the barriers for retirement planning?

1.12 Reference

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Notes

1.13 Suggested Readings

- Halan, Monika. *Let's Talk Money: You've Worked Hard for It, Now Make It Work for You,* July 2018, Harper Business.
- Madura, J. (2016). *Personal Finance.* Delhi, India: Pearson.

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LESSON

2

Retirement-Pension Plan and Reverse Mortgage

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STRUCTURE

2.1 Learning Objectives

- Understanding Retirement and Pension Plan and what is Pension Plan.
- Understanding how the Pension plan works.
- Learning about the types of Pension Plan in India, Atal Pension Yojana and Reverse Mortgage.

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2.2 Introduction

Retirement and pension plans are financial instruments that can shape your hard-earned income into savings for your post-retirement life. It comes in various forms to cater to a multitude of savings and investment goals, enabling a financially stable retired life.

2.2.1 *Retirement Plans-Funded Pensions*

For those who aren't going to receive pension, some type of retirement plan is necessary. But it should be noted that even those who are covered by pension can also participate in additional retirement plans. For example, many people with pensions also contribute to IRA. A retirement plan can be employer-sponsored, set up for the self employed or for the small-business employees, or set up directly by the individual.

- **Employer Sponsored Retirement Plans:** Many times your employer will already have a retirement plan in place in which your employer or your employer and you contribute directly to your retirement plan.
- **Defined Contribution Plans:** Under a defined contribution plan, your employer alone or you and your employer together contribute directly to an individual account that is set aside specifically for you. In effect, a defined contribution plan can be thought of as a personal savings account for retirement. Instead, what you eventually receive depends on how well your retirement account performs. Many defined contribution plans allow you to choose how your account is invested. In recent years the popularity of such programs has skyrocketed because they involve no risk for employers. The employee job involves doing a bit of book keeping and making a financial contribution, since employers don't really care what you eventually receive, their responsibility ends with their contribution. In effect, defined contribution plans pass responsibility for retirement from employer to employee, they also pass the risk because they aren't insured and the payments aren't guaranteed. Defined contribution plans generate one of several forms including

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profit sharing plans. Money purchase than thrift and saving plans, employee stock ownership plan.

- **Profit Sharing Plans:** Under a profit-sharing plan, employer contribution can vary from year to year depending on the firm's performance. Although many firms set a minimum and maximum contribution for example between 2 and 12% of each employee salary annually not all firms do. Our contribution is not necessary talented under this type of plan. If the form has a poor year, it may pass on making a contribution to the plan.
- **Money Purchase Plans:** Under a money purchase plan, the employer contributes a set percentage of employees salary to their retirement plan annually. For the employer, such a plan offers less flexibility because contributions are required, regardless of how well the form does. For the employee, this plan is preferable to a profit sharing plan because of the guaranteed contribution.
- **Thrift and Saving Plans:** Under thrift and savings plans, the employer matches a percentage of employees' contribution to their retirement accounts.
- **Employee Stock Ownership Plans:** Under an employee stock ownership plan (ESOP). The company's contribution is made in the form of company stock, of all the retirement plans, this is the riskiest because your return at retirement depends on how well the company does. If the company goes bankrupt, you might lose not only your job but also all your retirement benefits. Of course, if the company stock prices soar, You could do extremely well. However, an ESOP Doesn't allow for the degree of diversification that you need with your retirement savings. In short, an ESOP isn't something you can safely rely on.

2.3 Pension Plan

Pension schemes offer both investment and insurance cover. By investing regularly in your pension plan, you'll accumulate a large sum over time. This will ensure steady retirement income. The PPF is a popular retirement plan in India. Early retirement contributions produce a funds to have financially stable golden future. Compounding can help a retirement

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plan beat inflation. Example: Priyanka is 32 years and has an expected life of 80 years. She earns Rs. 50,000 and wants to retire at age of 60. She wants Rs. 30,000/month in retirement. How much should she invest to reach her goals by age 60? Priyanka needs Rs. 4.05 crores to earn Rs. 30,000. Assume 12% return till age 60 and 5% thereafter, with 6% inflation. She must invest Rs. 14,820 each month for 28 years to have a secure retirement.

2.3.1 *Types of Pension Plan*

- **National Pension Scheme (NPS)**: The Indian government created NPS to help retired people. Some of its features are as follows: Suppose, an Individual invests in this scheme till the age of 60 years. Minimum amount of investment required is Rs. 1,000 per month. Your money will be placed in debt and equity funds based on your preference. Your returns depend on your selected funds. When you retire, you can withdraw 60% of your funds. You must use the remaining 40% to buy an annuity—a retirement plan offering periodic income.
- **Public Provident Fund (PPF):** The PPF is a 15-year long-term investment scheme. Therefore, the effect of compounding is tremendous, particularly toward the conclusion of the term. You can invest up to 1.5 lakh annually in your PPF account. You can either pay in full or in twelve instalments spread out over the course of the financial year. Your PPF investments are eligible for tax deductions* under section 80C of the 1961 Income-tax Act (ITA). The government determines the quarterly PPF interest rate based on the income from government securities. The funds are not market-linked.
- **Employee Provident Fund (EPF)**: EPF is a government-sponsored savings vehicle for salaried workers. Both you and your employer must make equal contributions to your EPF account. Each month, your share is deducted from your salary. The Employees' Provident Fund Organization (EPFO) determines the rate of interest on investments. At retirement, you receive the total amount of your and your employer's contributions plus accumulated interest.

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- **Annuity Plans with Insurance Coverage:** These plans give lifelong protection and a steady income. If a tragedy event occurs while the plan is active, your family member receives a lump sum payment; however, there are other plans that do not provide financial protection. Two types of Annuity Plans exist:

  1. **Deferred Annuity:** It is a contract with an insurance company that helps you develop a fund for retirement. You have the option of making a single premium payment or paying payments on a recurring basis during the policy's term. This scheme allows you to invest in accordance with your financial resources. Your pension begins at the conclusion of the policy period. If your retirement date is many years away, this plan is appropriate for you.
  2. **Immediate Annuity:** It is a contract between a person and an insurance company in which the person pays a lump sum and receives a lifelong income that is guaranteed and begins almost immediately.

2.3.2 *Benefits of Pension Plan*

- **Guaranteed Pension/Income:** Depending on how you invest, you can get a fixed and consistent income after retirement (delayed plan) or immediately after investing (immediate plan). This ensures financial stability at retirement.
- **Tax Efficiency:** Certain pension plans are exempt from income tax under Section 80C. If you intend to invest in a pension plan, Chapter VI-A of the Income-tax Act of 1961 provides significant tax relief. For instance, Section 80CCD permits tax deductions for the Atal Pension Yojana (APY) and the National Pension Scheme (NPS).
- **Liquidity:** Retirement plans lead to limited liquidity. However, some plans allow withdrawals even during the accumulation phase. This will eliminate the need to rely on bank loans or other sources to meet financial needs during times of emergency.
- **Death Benefit:** Pension plans also provide a death benefit for the financial security of your family in your absence. The nominee will get the sum assured or death benefit in case of your untimely demise.

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- **Flexible Premium Payment Terms:** With retirement and pension plans, you also get the flexibility to choose the premium payment term. You can select your premium payment term depending upon your financial goal.

2.4 Atal Pension Yojana

- The Government of India is concerned about the old age income security of the working poor and is focused on encouraging and enabling them to save for their retirement. To address the longevity risks among the workers in unorganized sector and to encourage the workers in unorganized sector to voluntarily save for their retirement.
- The GoI has therefore announced a new scheme called Atal Pension Yojana (APY) in the 2015-16 budget. The APY is focused on all citizens in the unorganized sector.
- The scheme is administered by the Pension Fund Regulatory and Development Authority (PFRDA) through NPS architecture.

2.4.1 *Highlights of Atal Pension Yojana*

- Under the APY, there is guaranteed minimum monthly pension for the subscribers ranging between Rs. 1000 and Rs. 5000 per month.
- The benefit of a minimum pension would be guaranteed by the GoI.
- GoI will also co-contribute 50% of the subscriber's contribution or Rs. 1000 per annum, whichever is lower. Government co-contribution is available for those who are not covered by any Statutory Social Security Schemes and is not income taxpayer.
- GoI will co-contribute to each eligible subscriber, for a period of 5 years who joins the scheme between the period 1st June, 2015 to 31st December, 2015. The benefit of five years of government Co-contribution under APY would not exceed 5 years for all subscribers including migrated Swavalamban beneficiaries.
- All bank account holders may join APY.

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2.4.2 *Eligibility*

- APY is available to all citizens of India aged between 18 and 40 years.
- Aadhaar will be the primary KYC. Aadhaar and mobile numbers are recommended to be obtained from subscribers for the ease of operation of the scheme. If not available at the time of registration, Aadhaar details may also be submitted at a later stage.

IN-TEXT QUESTIONS

1. What is a common psychological barrier to retirement planning?

(a) Lack of financial knowledge

(b) Procrastination

(c) High healthcare costs

(d) Market volatility

2. Which of the following is an external barrier to retirement planning?

(a) Inadequate savings

(b) Longevity risk

(c) Employer-sponsored retirement plans

(d) Economic instability

3. Why might individuals face challenges in estimating their retirement expenses?

(a) Availability of online retirement calculators

(b) Inflation and changing lifestyle needs

(c) Stable economic conditions

(d) Predictable healthcare costs

4. What impact can inadequate financial literacy have on retirement planning?

(a) Improved decision-making

(b) Increased savings

(c) Poor financial choices and planning

(d) Guaranteed retirement income

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5. Which factor contributes to the challenge of balancing short-term and long-term financial goals?

(a) Regular income increases

(b) Stable job market

(c) Low inflation rates

(d) Fluctuating living expenses

2.5 Reverse Mortgage

If you purchase your home with the assistance of loan, Lender evaluates your income and loaned you funds based on your ability to repay the loan. This loan is known as a standard or forward mortgage. In exchange for the loan, you granted the lender a security i.e. your home, to protect the lender in the event you did not repay the loan. Over time, you paid down and maybe even paid off the loan. As you paid down your loan balance, you built up equity in your home. Equity is the difference between the market value of your home and the amount you still owe on your loan. When you pay off your home loan, your equity equals 100 percent of the value of your home; you are said to own your home "free and clear" and you are entitled to the entire sales price minus closing costs when the home is sold.

A reverse mortgage allows homeowners aged 62 and over to convert some of their home equity into cash without selling or moving out. Homeowners with a reverse mortgage remain living in their homes, retain ownership of their home, and receive tax-free cash disbursements. A reverse mortgage does not need to be repaid until the borrower dies, sells the home, or moves permanently out of the home. Over time, the reverse mortgage loan balance grows and your equity declines. That is why reverse mortgages are also known as home equity conversion loans; your built-up equity is converted into usable cash without having to sell your home.

2.5.1 *Features of Reverse Mortgage*

1. The loan is available to senior citizens owning a house.

2. It is a tailored product to monetize the locked up equity in the asset

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3. There is no upper age limit for availing this product.
4. There are two parties involved in it. One is the borrower i.e. the senior citizen and other is the lender i.e., Bank/HFC.
5. There is no income requirement of any kind which is usually inseparable from any other type of loan.
6. It does not involve losing ownership of the house. One can stay in house and it enables regular inflow of funds.
7. Cash flows can be arranged at periodic intervals. It can be in the form of lump sum or multiple payments like annuity etc. The borrower can use this amount for any purpose except speculation.
8. The quantum of loan and interest rate depends on several factors like age, valuation of the property, structure of asset, maintenance of the property. Revaluation of the property has to be taken once in every 5 years as a result the loan amount will be adjusted considering above-mentioned factors. The loan amount is directly correlated with age.
9. The interest rate on the product will be determined by the banks and HFCs based on the risk perception and loan pricing policy.
10. The amount received through a reverse mortgage is not considered as income as it is not taxable.
11. Loan is not required to be serviced i.e. there is no payment requirement on a continuing basis as required in other loans, repayment is due on the occurrence of an event or at the end of the term, i.e. 15 years.
12. The lender will recover the loan along with the accumulated interest by selling the house after the death of the borrower or lapse of time period for which loan has been taken. Any excess amount will be remitted back to the borrower or his heirs.
13. Before resorting to sale of house, preference will be given to the owners or his heirs to repay the amount along with interest and get the mortgaged released (Brar, 2011)

2.5.2 *Eligibility Requirements*

Reverse mortgages are far easier to qualify for than other types of loans. No one expects you to repay a reverse mortgage while you are living in your home, so you do not need steady income, perfect credit, or cash

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for a down payment. Remember, these loans were created to help older people convert their home equity into needed cash without requiring them to make monthly mortgage payments they could not afford. There are a few basic eligibility requirements:

- You must be age 62 or older.
- You must own a qualifying property.
- You must live in that property as a primary residence.

2.5.3 *Eligibility Condition in India*

- Should be Senior Citizen of India above 60 years of age.
- Married couples will be eligible as joint borrowers for financial assistance. In such a case, the age criteria for the couple would be at the discretion of the primary lending institutions, subject to at least one of them being above 60 years of age and the other not below 55 years of age.
- Should be the owner of a self-acquired, self occupied residential property (house or flat) located in India, with clear title indicating the prospective borrower's ownership of the property.
- The residential property should be free from any encumbrances.
- The residual life of the property should be at least 20 years.
- The maximum loan disbursement tenure should not exceed 20 years.
- The prospective borrowers should use that residential property as permanent primary residence. Permanent primary residence refers to the self acquired, self occupied residential property where a person spends majority of his time. Factors that may be relevant in this regard include the address used for general correspondence, utility bills, bank statements, tax return, bank accounts and banking relations etc. However, all facts and circumstances may be considered for the purpose of determining that the residential property is the permanent primary residence of the borrower.
- The interest rate (including the periodic rest) to be charged on the reverse mortgage loan to be extended to the borrower(s) may be fixed by primary lending institutions in the usual manner based on risk perception, the loan pricing policy etc. and specified to the prospective

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borrowers. Fixed and floating rate of interest may be offered by the primary lending institutions subject to disclosure of the terms and conditions in a transparent manner, upfront to the borrower.

2.5.4 *Eligible Use of Reverse Mortgage Fund in Indian Context*

The loan amount can be used for the following purposes:

- Upgradation, renovation and extension of residential property.
- For uses associated with home improvement, maintenance/insurance of residential property.
- Medical, emergency expenditure for maintenance of family.
- For supplementing pension/other income Meeting any other genuine need.
- The reverse mortgage loan shall be secured by way of mortgage of residential property, in a suitable form, in favour of primary lending institutions.
- Commercial property will not be eligible for reverse mortgage loan.
- RML (reverse mortgage loans) are to be extended by PLI (primary lending institutions) viz. Scheduled Banks and Housing Finance Companies (HFCs) registered with NHB or any other class of institutions as may be notified by Government of India.
- Use of reverse mortgage loan for speculative, trading and business purposes shall not be permitted.

2.5.5 *Valuation of Residential Property*

The residential property should comply with the local residential land-use and building bye-laws stipulated by local authorities, with duly approved layout and building plans. The primary lending institutions shall determine the Market Value of the residential property through their external approved valuer(s). In-house professional valuers may also be used subject to adequate disclosure of the methodology. The valuation of the residential property is required to be done at such frequency and intervals as decided by the primary lending institutions, which in any case shall be at least once every five years. The methodology of the

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revaluation process and the frequency/schedule of such revaluations shall be clearly specified to the borrowers upfront. Primary lending institutions are advised not to reckon expected future increase in property value in determining the amount of reverse mortgage loan.

2.6 Summary

This chapter provides an overview of retirement planning and pension plans. It covers various aspects of pension plans, including types, benefits, and eligibility criteria. The chapter also introduces the Atal Pension Yojana, a government-backed scheme aimed at encouraging people to save for their retirement. The chapter begins by explaining what a pension plan is and its importance in retirement planning. It highlights the different types of pension plans, such as defined benefit plans, defined contribution plans, and hybrid plans. The chapter also outlines the benefits of pension plans, including tax benefits and guaranteed income. The Atal Pension Yojana is a government-backed pension scheme aimed at encouraging people to save for their retirement. The chapter provides an overview of the scheme and its key features, such as its low contribution rates and guaranteed pension benefits. It also outlines the eligibility criteria for the scheme.

The chapter also explains how reverse mortgage works as a means of retirement planning. It highlights the features of reverse mortgage, including the ability to unlock the equity in one's home and receive regular payments. The chapter also outlines the eligibility requirements and conditions in India, as well as the eligible uses of reverse mortgage funds. Finally, the chapter explains how the valuation of residential property is done for reverse mortgage purposes.

2.7 Answers to In-Text Questions

1. *(b)* Procrastination

2. *(d)* Economic instability

3. *(b)* Inflation and changing lifestyle needs

4. *(c)* Poor financial choices and planning

5. *(d)* Fluctuating living expenses

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2.8 Self-Assessment Questions

1. Briefly explain about the types of pension plans.
2. Discuss the benefit of pension plans.
3. What is the eligibility of Atal Pension Yojana?
4. What is reverse mortgage and eligible use of this fund in Indian context?

2.9 Reference

- Prof. Rajni. *Personal Financial Planning,* JSR Publishing House LLP

2.10 Suggested Readings

- Halan, Monika. *Let's Talk Money: You've Worked Hard for It, Now Make It Work for You,* July 2018, Harper Business.
- Madura, J. (2016). *Personal Finance.* Delhi, India: Pearson.

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Glossary

Brand Equity: The value premium that a company realizes from a product with a recognizable and admired name when compared to a generic equivalent.

Comparative Advantage: Economic theory suggesting that countries excel in producing goods where they have lower opportunity costs compared to other nations.

Comparative Advantage: The ability of an individual or group to carry out a particular economic activity more efficiently than another activity.

Competitive Advantage: The attribute that allows an organization to outperform its competitors. It can be achieved through superior quality, cost leadership, innovation, customer service, or brand strength.

Cross-Cultural Competence: The ability to understand, communicate with, and effectively interact with people across cultures.

Cross-Cultural Management: The practice of managing work teams in ways that consider the differences in cultures, practices, and preferences of consumers in a global or international business context.

Cultural Adaptability: The ability to quickly, comfortably, and effectively work within different cultural settings and with people from different cultural backgrounds.

Cultural Intelligence: The capability to relate and work effectively across cultures. It's crucial for global businesses to understand and adapt to the cultural norms and practices of different regions.

Digital Economy: An economy that is based on digital computing technologies, increasingly significant in international trade and business models.

Digitalization: The use of digital technologies to change a business model and provide new revenue and value-producing opportunities.

Eclectic Paradigm: A framework combining various theories to explain how firms can gain competitive advantage through internationalization.

E-commerce: Buying and selling of goods or services using the internet.

Economic Integration: The unification of economic policies between different states through the partial or full abolition of tariff and non-tariff restrictions on trade.

Economies of Scale: The cost advantage achieved by companies when production becomes efficient, as costs can be spread over a larger number of goods.

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Ethics in Business: Moral principles and values that govern the actions and decisions in a business environment, especially significant in cross-cultural and international contexts.

Ethics: Moral principles that govern a person's or group's behavior in conducting activities.

EU (European Union): A political and economic union of 27 European countries that are located primarily in Europe.

Exporting: Selling domestic goods or services to foreign countries.

Franchising: The practice of the right to use a firm's business model and brand for a prescribed period of time.

Global Competencies: A set of skills, knowledge, and attitudes essential for effective and respectful interaction in different international and intercultural contexts.

Global Mindset: The ability to appreciate and adapt to different cultural contexts and business practices, essential for success in global business environments.

Global Strategy: A plan developed by a company to target and manage business operations across multiple countries and regions, aiming for global efficiency and competitiveness.

Global Talent Management: Strategic human resource planning to attract, develop, retain, and utilize employees with the required skills globally.

Globalization: The process by which businesses or other organizations develop international influence or start operating on an international scale.

Globalization: The process of interaction and integration among people, companies, and governments worldwide.

Globalization: The process of interaction and integration among people, companies, and governments worldwide.

Human Resource Strategies: Plans and processes implemented by an organization's HR department to maximize employee performance and align with the company's strategic goals, especially in a global context.

Importing: Buying goods or services from foreign producers.

International Business: Commercial transactions that occur across national borders.

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International Business: The exchange of goods, services, technology, capital, and/or knowledge across national borders.

International Expansion: The process of a business extending its operations and market presence beyond its home country.

International Joint Ventures: Business arrangements where two or more parties from different countries agree to pool their resources for accomplishing specific tasks or projects.

Joint Venture: A business arrangement where two or more parties agree to pool their resources for the purpose of accomplishing a specific task, often used as a strategy to enter new markets.

Joint Venture: A business entity created by two or more parties, sharing ownership, returns, and risks.

Joint Venture: A commercial enterprise undertaken jointly by two or more parties that otherwise retain their distinct identities.

Licensing: A business arrangement where a company permits another to use its intellectual property.

Macroeconomics: The branch of economics dealing with the performance, structure, behavior, and decision-making of an economy as a whole.

Market Penetration: The strategy of entering and effectively competing in a new or existing market. It often involves adapting products or services to meet local preferences or regulations.

Microeconomics: The study of individuals, households, and firms' behavior in decision making and allocation of resources.

Multicultural Teams: Work groups made up of members with diverse cultural, ethnic, and organizational backgrounds, often found in global companies.

Multinational Enterprise (MNE): A corporation that owns or controls production of goods or services in one or more countries other than its home country.

NAFTA (North American Free Trade Agreement): A treaty entered into by the United States, Canada, and Mexico; it went into effect on January 1, 1994.

Outsourcing: The practice of hiring third parties to perform services or produce goods, which are typically done in-house. In a global context, this often involves moving operations to countries with lower labor costs.

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Protectionism: The theory or practice of shielding a country's domestic industries from foreign competition by taxing imports.

Strategic Alliance: A cooperative agreement between business entities to pursue a set of agreed-upon objectives while remaining independent.

Strategic Alliance: An agreement between entities to pursue a set of agreed-upon objectives while remaining independent.

Supply Chain Agility: The ability of a company to rapidly adapt its supply chain operations to unforeseen changes in the market or disruptions, ensuring efficiency and customer satisfaction.

Supply Chain Management: The management of the flow of goods and services and includes all processes that transform raw materials into final products.

Sustainability: Business practices and strategies that meet the needs of the present without compromising the ability of future generations to meet their needs.

Sustainability: Business practices that meet current needs without compromising future generations' ability to meet theirs.

Trade Barriers: Government-imposed restraints on the flow of international goods or services.

Trade Barriers: Government-imposed restrictions on international trade, including tariffs, quotas, and import bans, which can impact global competitive strategies.

Training and Development: Educational activities within an organization aimed at enhancing the skills and knowledge of employees, particularly important in preparing staff for international roles.

Transaction Cost Theory: A theory explaining the concept of managing transaction costs efficiently in business operations, especially in the context of international trade.

Wholly-Owned Subsidiary: A company whose common stock is 100% owned by another company, the parent company.

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