

Retirement Adviser

NATIONAL INSTITUTE OF SECURITIES MARKETS An Educational Initiative of SEBI

Workbook for NISM-Series-XVII: Retirement Adviser Certification Examination



National Institute of Securities Markets

www.nism.ac.in

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

Workbook Version: May 2022

Published by: National Institute of Securities Markets © National Institute of Securities Markets, 2022 NISM Registered Office 5th floor, NCL Cooperative Society, Plot No. C-6, E-Block, Bandra Kurla Complex, Bandra East, Mumbai, 400051 National Institute of Securities Markets Patalganga Campus Plot IS-1 & IS-2, Patalganga Industrial Area Village Mohopada (Wasambe) Taluka-Khalapur

District Raigad-410222

Website: www.nism.ac.in

All rights reserved. Reproduction of this publication in any form without prior permission of the publishers is strictly prohibited.

Foreword

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

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

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

NISM certification examinations and training programs provide a structured learning plan and career path to students and job aspirants who wish to make a professional career in the securities markets. Till March 2022, NISM has issued more than 15 lakh certificates through its Certification Examinations and CPE Programs.

NISM supports candidates by providing lucid and focused workbooks that assist them in understanding the subject and preparing for NISM Examinations.

Pension Fund Regulatory and Development Authority (PFRDA) has accredited National Institute of Securities Markets (NISM) as the accredited institute for Certification of the Retirement Adviser Certification Examination. NISM has designed this examination workbook to assist candidates appearing for the NISM-Series-XVII: Retirement Adviser Certification Examination. The workbook covers fundamental concepts about retirement planning; retirement planning products, process and strategies; and the National Pension System. The book also discusses special situations in retirement and the regulations pertaining to Retirement Advisers. It will be immensely useful to all those who want to learn about the various aspects of retirement planning.

> Dr. C.K.G Nair Director

Disclaimer

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

The statements/explanations/concepts are of general nature and may not have taken into account the particular objective/ move/ aim/ need/ circumstances of individual user/ reader/ organization/ institute. Thus NISM and SEBI do not assume any responsibility for any wrong move or action taken based on the information available in this publication.

Therefore, before acting on or following the steps suggested on any theme or before following any recommendation given in this publication user/reader should consider/seek professional advice.

The publication contains information, statements, opinions, statistics and materials that have been obtained from sources believed to be reliable and the publishers of this title have made best efforts to avoid any errors. However, publishers of this material offer no guarantees and warranties of any kind to the readers/users of the information contained in this publication.

Since the work and research is still going on in all these knowledge streams, NISM and SEBI do not warrant the totality and absolute accuracy, adequacy or completeness of this information and material and expressly disclaim any liability for errors or omissions in this information and material herein. NISM and SEBI do not accept any legal liability what so ever based on any information contained herein.

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

Acknowledgement

This workbook has been developed jointly by the Certification Team of National Institute of Securities Markets and Ms. Sunita Abraham. NISM gratefully acknowledges the contribution of Pension Fund Regulatory Development Authority (PFRDA) and the Examination Committee for the NISM-Series-XVII: Retirement Adviser Certification Examination consisting of industry participants and PFRDA officials.

About NISM

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

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

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

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

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

About NISM Certifications

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

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

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

About the Workbook

This workbook has been developed to assist candidates in preparing for the National Institute of Securities Markets (NISM) Certification Examination for Retirement Advisers. Retirement Adviser Certification Examination seeks to create a common minimum knowledge benchmark for individuals, proprietors, partners and representatives of a retirement adviser registered under Pension Fund Regulatory and Development Authority (Retirement Adviser) Regulations, 2016.

The book covers all important topics to enhance the quality of retirement advisers. It covers topics related to retirement planning—fundamental concepts; retirement planning products, process and strategies; evaluating fund performance and selection; National Pension System (NPS) and other retirement products. The book also discusses the concept of compliance, operations and service elements in retirement advise.

About the Certification Examination for Retirement Adviser

NISM-Series-XVII: Retirement Adviser Certification Examination seeks to create a common minimum knowledge benchmark for individuals, proprietors, partners and representatives of a retirement adviser registered under PFRDA (Retirement Adviser) Regulations, 2016.

The certification aims to enhance the knowledge level and the quality of services provided by Retirement Advisers.

Examination Objectives

On successful completion of the examination, the candidate should:

- Know about the fundamental concepts in Retirement Planning and the various investment products.
- Learn about the Retirement Planning Process.
- Understand the features and benefits of National Pension System.
- Know the various evaluation tools and fund selection.
- Understand the strategies useful to investors in executing their retirement plan.
- Know the implications of specific situations of retirement planning and the ways to manage them.
- Know about regulatory structure and regulations which govern the activities of the retirement adviser.

Assessment Structure

The examination consists of 100 multiple choice questions of one mark each. There is negative marking of 25 percent of the marks assigned to a question. The examination should be completed in 2 hours. The passing score for the examination is 60 marks.

How to register and take the examination

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

Important

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

Table of Contents

Contents

CHAPTER 1: FUNDAMENTAL CONCEPTS IN RETIREMENT PLANNING	10
1.1 Need for Retirement Planning	10
1.2 Basic financial concepts associated with retirement planning	15
1.3 Features of the retirement goal	22
1.4 Advantages and importance of starting retirement savings early	24
1.5 Risk of Underestimating Retirement Goals	25
1.6 Emotional Aspects of Retirement	26
CHAPTER 2: FINANCIAL MARKETS AND INVESTMENT PRODUCTS	28
2.1 Need for Making Investments to Reach Retirement Goals	28
2.2 Difference between Savings and Investments	28
2.3 Asset Class and Sub-Asset Classes	
2.4 Features of Different Asset Classes	32
2.5 Asset Class Returns	
2.6 Common Risks in Investments	
2.7 Matching Investor Needs to Asset Class Features	40
2.8 Impact of Macro-Economic Factors on Asset Classes	40
2.9 Asset Allocation	42
2.10 Financial System and Investment Products	43
CHAPTER 3: RETIREMENT PLANNING	60
3.1 Evaluate Client's Current Situation	60
3.2 Learn the Process of Setting the Retirement Goal	63
3.3 Investing for Accumulation	
3.4 Planning for the Distribution Stage in Retirement	80
3.5 Risks in Distribution Stage	85
3.6 Monitor and Update the Retirement Plan	87
3.7 Behavioural Bias in Decision Making	88
CHAPTER 4: RETIREMENT PLANNING PRODUCTS: NATIONAL PENSION SYSTEM	91
4.1 National Pension System	
4.2 Working of NPS	154
4.3 Subscribing to the NPS	165
4.4 Investing in the NPS	167
4.5 Tax aspects of subscribing to the NPS	184
CHAPTER 5: EVALUATING FUND PERFORMANCE AND FUND SELECTION	

5.1 Return on Investment	. 189
5.2 Different types of return calculations	. 191
5.3 Measures of risk in an investment	. 193
5.4 Benchmarks	. 195
5.5 Performance Evaluation	. 195
5.6 Matching Investor's Retirement Needs to Product	. 150
CHAPTER 6: OTHER INVESTMENT PRODUCTS	. 157
6.1 Mandatory Retirement Benefit Schemes	. 157
6.2 Voluntary Retirement Products	. 159
CHAPTER 7: RETIREMENT PLANNING STRATEGIES	. 183
7.1 Bridging Shortfall in Retirement Corpus	. 183
7.2 Periodic Investments	. 185
7.3 Retirement Income from Multiple Sources	. 189
7.4 Bucket Strategy	. 192
7.5 Tax Advantages in Different Stages of Retirement	. 194
7.6 Automating Investments	. 197
CHAPTER 8: SPECIAL SITUATIONS IN RETIREMENT	. 201
8.1 Debt Obligations in Retirement	. 201
8.2 Documents for Effective Retirement Planning	. 210
CHAPTER 9: REGULATIONS AND REGULATORS	. 215
9.1 Indian Regulatory System	. 215
9.2 Role of Pension Fund Regulatory and Development Authority (PFRDA)	. 220
9.3 Role of Regulators	. 221
9.4 Regulations for Retirement Advisers	. 226
9.5 Ethics beyond Regulations	. 272
9.6 Subscriber Grievance Redressal Mechanism	. 273

CHAPTER 1: FUNDAMENTAL CONCEPTS IN RETIREMENT PLANNING

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Need for retirement planning
- Basic financial concepts associated with retirement planning
- Features of retirement goals
- Advantages and importance of starting early retirement savings
- Risk of underestimating retirement goals
- Emotional aspects of retirement

1.1 Need for Retirement Planning

Retirement is the stage in life of a person that is marked by an abundance of time to pursue all those hobbies and dreams for which they had no time in their working years. It is also the time in life when the comfort of knowing that there will be a regular income from employment is not there, even though the living and leisure expenses have to still be met. The income that is available in the retirement stage primarily depends on the corpus that has been created out of the income earned in the working years. The income in working years have to be thus apportioned to meeting current living expenses as well as to create a corpus for future living expenses.

The need for an independent retirement income has evolved with changes in social structures. Earlier, joint families were the norm, where the older generation was taken care of by the younger family members. Higher mobility in pursuit of employment and opportunities gave rise to nuclear families, and the need for the older generation to be self-reliant. There is now an expectation and even preference for independence in both the retired as well as the younger generation, and this has meant that retired people no longer depend on the family to take care of their needs and there is a need for an independent source of retirement income.

The expenses after retirement may not be identical to those prior to retirement. The expenses will also see significant changes through the retirement years. The heads of expenses may typically remain the same in the working years and after retirement. For example, the retiree will bear expenses on housing, transportation, food and leisure activities, among others, just as in their working years. However, the proportion of available income assigned to each of these heads are likely to be different in the retirement years. Immediately after retirement, one is likely to see a reduction in the expenses that are related to employment such as transportation costs and expenses related to personal needs such as clothing and grooming. Over time, costs related to leisure and health becomes a big part of the retiree's expenses.

The corpus that is required to be created and the income that is required in retirement depends upon the expected expenses which in turn depend upon factors such as the quality of life expected to be led after retirement, health considerations and life expectancy, among others. Some of these factors are choices that each individual makes. For example, some people choose a life style in retirement that is less expensive than what it was before retirement. Others may have plans for travel or to pursue other interests that need to be funded in retirement. Some of the other circumstances in retirement, such as health and life expectancy, are beyond the control of the individual. A workable retirement plan helps create the retirement corpus efficiently, after taking the expenses and income needs and all related factors into consideration, and is thus an essential part of a financial plan. On retirement, this corpus is used to generate the income to meet the expenses.

1.1.1 Transition from Defined Benefit to Defined Contribution

The retirement corpus has to be built over the working life of the individual from his earnings. A portion of the income earned in the working years is set aside for accumulating the corpus that will generate the income required to meet expenses in retirement. In some cases, the employer may also make a contribution to the corpus, such as, in the case of contribution made by the central and state governments to the employees' National Pension System (NPS) account. In most cases, the corpus is built out of the savings of the individual. In some cases, as in the case of government employees and employees of companies covered under the Employees Provident Fund Act, it is mandatory to make a contribution to the retirement account, and there may also be a minimum contribution specified. For persons in the unorganized sector not covered under a mandatory retirement provision, such as self-employed people, retirement saving is a voluntary exercise.

Some retirement benefit schemes, such as the Central Civil Services Pension and the Public Sector Bank Pension, provided a defined pension to those covered under it. Such schemes were called Defined benefit schemes. The benefits received from other retirement schemes, such as the Employees Provident Fund, depend upon the contributions made to the scheme through the working life of the employee and the returns earned on the corpus. Retirement benefit schemes are broadly categorized as Defined Benefit (DB) schemes and Defined Contribution (DC) schemes.

Employers provided Defined Benefit (DB) retirement plans earlier. In a defined benefit plan, the pension amount or value of retirement benefit is known beforehand. In other words, the formula based on which the pension amount would be calculated is known. The pension is typically calculated as a percentage of the final salary. It is paid out of a corpus that is created from contributions made by the employee, employer or both towards the corpus, which is invested to generate returns. The individual is assured of the pension amount as defined, irrespective of the returns that is generated by the pension fund. There are a number of unknown variables to be managed by the provider of the pension in a DB scheme. The high increase in salary over the years, the mortality factors which will determine the years for which pension will have to be paid, the investment returns over the long term period, will all impact

and determine the contributions that will have to be made by the pension provider to meet their obligations. The biggest risk a DB plan runs is that it could become 'under-funded' or unable to make the defined payments. This may happen if the contributions are not adequate and the portfolio in which the contributions are invested does not generate the returns required to create the corpus that is adequate to buy the annuities to make the defined pension payments over the retirement period. The downward trend in interest rates and the high price of annuities have affected the viability of DB schemes.¹

Apart from the financial reasons that have contributed to the unviability of DB schemes, the change in attitude of employees and employers have also contributed to the decline in the DB schemes. Young employees are unwilling to trade-off lower current remuneration for defined pension in the retirement period which they see to be in the distant future. With greater employment opportunities, mobility between employers is high and the employees no longer like to limit their options to further their career for the promise of defined benefits in retirement. They see this as risky too, given the instances of failure of companies. Employers are understandably disenchanted with the high costs of maintaining a DB scheme. Given these circumstances, retirement schemes have been moving to the DC platform.

New pension products are Defined Contribution (DC) plans which are more flexible. In a defined contribution plan, the pension amount is not known beforehand. In a DC plan, a defined amount is contributed by employee, employer or both, towards a pension fund over a period of time. The final corpus of the pension fund determines the retirement benefit, which can be taken in a lump sum or as an annuity bought from the funds received, or a combination of the two.

Since the pension depends upon the returns made on the investment, the contributing individual usually gets some say in the way the amount is invested. This is done by providing multiple options in the way the funds may be invested – like equity focused (high risk, high returns), debt focused (low risk, low returns) or anything in-between (medium risk, medium returns). The decision on allocation of funds to various options and periodic re-allocation is usually taken by the contributing individual. The retirement corpus of the individual depends on both the contributions made and the returns generated through their investment. There is transparency in the way the corpus is growing and allows for course corrections at different stages in the accumulation stage. The DC schemes are simpler to move from one employer to another. The National Pension System (NPS) applicable for central government employees who joined service on or after January 1, 2004 is a defined contribution pension plan. It has a corporate model too that has been adopted by companies to provide retirement benefits to their employees.

In the DC model, the risk of inadequacy of the retirement corpus to provide a pension through

¹ An annuity is an insurance contract which guarantees a regular income according to the terms of the contract, in return for a lump sum purchase price.

the life of the individual moves from the employer to the employee. The individual assumes both the longevity risk (risk of outliving retirement assets) and the investment risk (risk of uncertainty in the returns from investments). These risks can be managed by doing a periodic review of the corpus accumulated so far and make appropriate changes to the contributions made to the corpus and the type of investments held. This will help mitigate the impact of changes in factors such as health that affect longevity, or, the performance of the investments in which the corpus is invested.

1.1.2 Need to apportion current income between current and future expenses

Individuals have to apportion their available income in their working years to meeting current expenses and to saving for their goals, including retirement. A financial plan will help identify the goals and quantify the amount required to meet the goals. Once this is done, the savings available from the current income after meeting current expenses is apportioned to the goals. In the initial working years of the individual the income and savings may be inadequate to provide for all the goals. It becomes important to prioritize goals based on their importance and urgency. Successfully meeting future goals will therefore depend upon the adequacy of the current available income to meet current expenses and save enough to accumulate the corpus required for future goals. If the income is seen as inadequate to meet the claims of current and future needs, then it becomes imperative to cut back on current expenses as far as possible to accumulate the funds for important future goals like retirement that cannot be met through loans. Even if the available income is adequate to meet current and future needs, discipline is required to develop the habit to save, invest and build the corpus required. Where the savings are mandatory, such as the contribution to the provident fund by government employees, there is some discipline to savings and contribution to the corpus happens right from the beginning of working years. Whether these savings are adequate or not will depend upon each individual's retirement requirements and can be augmented by additional savings through the working life.

1.1.3 Importance of Budgeting

As mentioned earlier, the income or earnings in the working years is used to meet current expenses first, and a part is saved and invested to create a corpus that will generate income for the retirement years. Adequacy of income to meet current and future needs is not uniform across individuals and the different stages in life. People with a higher income relative to their expenses have the capacity to save more than others whose income may be just enough to meet their current expenses, leaving very little for savings. Similarly, in the initial working years income is just about enough to meet expenses leaving very little for saving for the future. Expenses and needs rise faster than the income for much of the early and middle earning years leaving very little for saving. Overtime as expenses stabilize, savings increase. However, leaving savings for later in life when income is high enough may lead to many goals, including retirement, being underfunded. It is important to start early and build the funds required over time out of savings so that the risk of the accumulated funds being inadequate to meet the goals is reduced. Budgeting is one way to inculcate the discipline to save for goals. In the early

years when income is tight, a budget is a useful tool to help live within the available income and generate savings for goals. In the later years, even when the income is adequate, a budget helps in increasing savings with a focus on the goals.

Budgeting involves listing in detail the income and expenses of a household. The idea is to be able to contain the expenses within the income available and determine the savings possible. The process of listing and itemizing the income and expenses gives clarity to an individual's financial situation. There are mandatory expenses, such as taxes and loan repayments that have to be first met out of available income. Then there are essential living expenses related to housing, food, education and transportation that have to be met. These are categories of expenses which cannot be avoided but the individual can cut back and economize depending upon income available and savings goals. For example, finding housing in a less expensive locality and using public transport are ways to reduce expenses in this category. Discretionary expenses, related to entertainment and recreation, are the last category of expenses. This is the category that can be cut back significantly to generate savings when income is limited. A budget helps identify wasteful expenditure that can be eliminated or reduced to accommodate saving for goals. Changes to income and expenses over time are reflected in the budget as they happen. Listing them and knowing where the money is being spent allows better control on savings and calibrating it to meet the desired goals.

A budget helps in prioritizing expenses and goals, given the expected income. It gives clarity on what financial goals are realistically achievable given the available income and level of savings. It helps direct scarce funds to goals that are important. The income, and savings made from it, are accordingly assigned to current expenses and future goals which are a priority. Financial goals such as retirement that cannot be given up or avoided have to be funded **fist** and get a priority claim on available savings. It is important for a budget to be realistic about current income and expenses, and therefore on possible savings. Overestimating income or underestimating expenses are both dangerous for goals. In both scenarios savings are likely to be lower than what was expected and will result in goals being underfunded.

1.1.4 Increasing Life Expectancy

The average period that a person is expected to live, based on birth and death statistics, is the life expectancy of the population in a country. The life expectancy at birth in India has gone up from 63.8 years in 2003 to 69.66 years in 2019 (Source: World Bank), and the trend is upward. Better diet, health care facilities and lifestyles have contributed to this. While increased life expectancy is a positive parameter for evaluating any population, it brings with it the risk of longevity for retirement planning and the need to manage it.

Longevity risk is the risk that an individual will outlive their retirement assets, necessitating actions such as reducing the standard of living or seeking an alternate income to ensure that the retirement corpus of the individual will not be drained before the end of life. Increased life expectancy adds to the financial commitment required to meet the retirement goal

without making compromises that were not intended. Defined benefit retirement plans protected the subscriber from the longevity risk. But in a defined contribution plan this risk is assumed by the subscriber. Income generating sources in retirement must take the increased life expectancies into consideration. For example, a deferred annuity purchased at say age 65 and the income to be paid only from age 85 for life, will take care of the risk of longevity.

1.2 Basic financial concepts associated with retirement planning

1.2.1 Inflation and Time value of money

Saving for a financial goal requires estimating the amount required to fund the goal at the time when it has to be met. For example, in the case of retirement, the expenses in retirement and the sum of money required to meet it needs to first be determined before the value of the retirement goal can be calculated. While estimating the cost of meeting expenses in the future, it is important to remember the impact of time value of money. Time value of money is the idea that the point in time when a sum of money will be received or paid that determines its value. The value of a sum of money, say Rs.100, is different at different points on the time line. Receiving Rs.100 today or one year later is not the same because the money in hand today has the potential to earn returns and grow to a higher value one year hence. If the rate of return is taken at 8 percent, then the Rs.100 in hand today will be equivalent to Rs.108 after one year.

Similarly, the Rs.100 received one year later will also not have the same purchasing power as Rs.100 in hand today. The purchasing power of money refers to the value of a sum of money expressed in terms of the goods and services that can be acquired with it. Inflation, or the rise in prices of goods and services over time, will reduce the quantum of goods and services that can be bought with the same amount of money at different points in time. In other words, inflation reduces the purchasing power of money. If inflation is taken to be at 6 percent per annum, then the same quantum of goods and services which costs Rs.100 today will cost Rs.106 a year from now.

Box 1.1 illustrates the concept of time value of money.

Box 1.1: Number Crunching: The concept of time value of money

Case: 1

Mr. X needs Rs.20,000 per month today to meet the costs of living for his family. If there is no change in expenses, will Mr. X be able to meet his family's cost of living with Rs.20,000 per month 5 years hence? Assume inflation is at 5 percent.

Mr. X will need Rs.25,525 per month to meet the same expenses 5 years hence. This is because the cost of meeting the expenses has gone up each year due to inflation at the rate of 5 percent per annum. The table below shows how the cost of living expenses go up from one year to the next as a result of the effect of inflation on costs.

	Current (A)	Year 1 (B)	Year 2 (C)	Year 3 (D)	Year 4 (E)	Year 5 (F)
Expenses/Month(Rs.)	20,000	21000	22050	23153	24310	25526
Inflation (percent)	5	5	5	5	5	5
Formula		A x (1+5	B x (1+5	C x (1+5	D x (1+5	E x (1+5
		percent)	percent)	percent)	percent)	percent)

Case: 2

If Mr. X intends to provide today for his family's living expense five years hence, will he have to put aside Rs.25,526 today?

No. The sum required to be set aside today will be lower because this money can be invested and earn returns over 5 years to grow to Rs.25,526. For example, if X were to invest in a 5 year bank FD that gave a post-tax return of 8 percent, then to accumulate a sum of Rs.25,526 five years hence he has to invest only Rs.17,372/- today.

The present value (PV) of the Rs. 25,526 required 5 years hence can be calculated using the formula PV= FV /(1+r)^n, where 'PV' is the present value of the money invested, 'r' is the rate of return at which the money is invested and 'n' is the period for which the investment was made and FV is the future value of the invested amount. Substituting the information from the example in the equation we get:

PV= 25526/ (1+8 percent)^5= 17372

This calculation can also be done using the PV function in MS Excel. The inputs required are Rate (8 percent), Nper(5) and FV (25526). The output will be -Rs.17372. The negative sign indicates the outflow as funds are invested.

In planning for long term goals, like retirement, an understanding of time value of money is essential to make the right saving and investment decisions. The following are the areas where the time value of money will impact the calculations of the retirement corpus:

- 1. The cost of expenses expected in retirement have to be adjusted for inflation. The cost for the same level of expenses will be higher in retirement relative to the current cost because of inflation, and a higher sum of money will be required to meet the expenses in retirement.
- 2. The potential for the money saved to be invested to earn returns and compound over time has to be considered. The final corpus will comprise not of the savings alone but also the returns earned on the savings by investing it. This has to be considered while determining the savings required to create the corpus required to generate retirement income. The returns that are likely to be earned will significantly reduce the contribution or savings required for creating the corpus. The effect of compounding on returns is explained in the next section.
- 3. Longer the time to retirement, higher will be the impact of time value of money: both positive (ability to earn compounded returns on investment) and negative (impact of inflation).

1.2.2 Real Rate of Return vs. Nominal Rate of Return

The return on an investment is usually expressed as a nominal rate. When the nominal rate is adjusted for the effects of inflation, it is known as the real rate of return. Calculation of the real rate of return on investments enables investors to understand the actual purchasing power of their investment values. Consider the following example.

A bond pays 10% interest per annum. The inflation rate for that year is 5%. What is the real return?

Nominal rate of return= 10%

Inflation rate= 5%

Real rate of return = 10% - 5% = 5% (This is an approximate value. We will see more precise way to calculate the real rate of return in the next section).

The nominal return is always a positive rate, because investors have to be paid a positive rate to invest their money. But the real rate can be negative or positive. If inflation rate is higher than nominal rate of return, then that results in a negative real return. A negative real return implies that the return earned has been wiped out by rising prices. In financial advisory practice, we use this reality is a more nuanced way to help investors deal with the risks of earning a high nominal, but a low real return.

We use the principle of time value of money to understand the effective real rate of return. An investment earns a nominal rate of return, that is the rate at which money is being compounded. However, if inflation reduces the value of those investment cash flows, the value of those returns is discounted by the rate of inflation. Therefore, the real rate of return or effective rate of return on an investment is: = ((1+nominal rate) / (1+inflation rate)) - 1

In the above example, the effective real rate is

= (1.10/1.05)-1

= 4.76%

This computation of real rate of return has several applications in insurance and retirement planning. While planning for retirement, advisers do not focus on a corpus that can generate a fixed income after retirement. They instead take into account the fact that inflation is a reality even post retirement, and estimate the effective real rate of return.

1.2.3 Effect of compounding on returns

Compounding or compound interest is the effect of the interest earned on an investment earning interest on account of re-investment. If the interest earned is not withdrawn but allowed to remain in the investment, then the return for the next period will be earned not only on the principal but also on the interest that was reinvested. Overtime, the contribution of compound interest to the accumulated value of the investment will be far more than the investment made.

Box 1.2 below depicts how a contribution of Rs.1000 made each month grows to a value of aboutRs.1.5 crores over a period of 35 years, assuming a 15 percent return. Notice how a delay of just 5 years in starting saving (from age 25 to age 30) more than halves the returns earned from Rs. 1.42 crore to Rs.65 lakhs. The contribution made over 35 years is just Rs.4,20,000 out of a total final corpus value of Rs. 146,77,180.





The future value (FV) of the corpus created out of monthly contributions can be calculated using the FV function in MS Excel. The data required are:

Rate: The annual rate of interest divided by the number of instalments in which the contributions are made during the year. In the above example, the contribution is made monthly and the rate of return is 15 percent. Therefore, the input for 'Rate' is 15 percent/12.

Nper: This is the number of instalments over the entire contribution period. In the above example, a monthly contribution is made over 35 years. Therefore, the input for 'Nper' is 35 x 12=420

PMT: This is periodic contribution. In the above example, the input is 100. A negative sign '-' is prefixed to this amount to indicate the cash outflow on investment.

Type: This is the timing of the investment. Input required is 1 if the investment is made at the beginning of the term, or 0 if it is made at the end of the term

Putting in all the data required in the function will give the future value of the contributions made, earning a return of 15 percent per annum.

For compounding to work, the investment must be given adequate time to earn returns, these returns have to be reinvested, and the cumulative amount to earn returns over many cycles. It is important therefore to start saving and investing as early as possible and reinvest the returns instead of withdrawing and consuming it. The effects of compounding will depend upon the period for which the investment was held, the rate of return earned and the frequency of compounding. The longer the holding period, higher the rate of return earned and more frequent the compounding the greater will be the effect of compounding on the final investment value.

Box 1.3: Number Crunching: The factors that impact compounding effect

X intends to invest Rs.5000 per month from age 30 to age 60 in an investment that is expected to earn 12 percent per annum

(All calculations can be done using the FV function in MS Excel)

The final value of the corpus will be Rs.174,74,820 (Rate=12 percent/12, Nper=360 (30 x 12), Pmt=-5000, Type=0)

Instead of investing Rs.5000 per month, X invests Rs.60,000 per annum over 30 years

The final value of the corpus will be Rs.144,79,961 (Rate=12 percent, Nper=30, Pmt=-60000, Type=0)

More frequent the compounding, higher will be the final value

X begins investing only at age 35 instead of age 30

The final value of the corpus will be Rs.93,94,233 (Rate=12 percent/12, Nper=300 (25 x 12), Pmt=-5000, Type=0)

Longer the period of compounding, higher will be the value

X begins investing at age 30. But instead of the expected 12 percent, the investment earns only 10 percent per annum

The final value of the corpus will be Rs.113,02439 (Rate=10 percent/12, Nper=360 (30 x 12), Pmt=-5000 , Type=0)

Higher the rate of return, higher will be the final value

Time works in favour of and against the individual saving for long term goals. It works in favour since it allows a sum of money saved today to be invested to earn returns, compound and grow. It works against a saving plan because with time the impact of inflation will reduce the value of the money saved today because inflation will push up the cost of expenses for which the savings are being made. To preserve the value of money and increase its value the return that is being earned on investments must be equal, if not more, than the rate of inflation. This is the real rate of return.

The real rate of return (RR) may be calculated as Nominal Rate of Return (NR)- Inflation Rate (IR), i.e. RR= NR-IR. A more accurate formula for calculating RR is as under

(1+NR) = (1+RR) x (1+IR)

Simplifying: ((1+NR)/(1+IR))=(1+RR)

((1+NR)/ (1+IR))-1= RR

1.2.4 Market-linked Returns versus Fixed Returns

The savings made for goals are invested to earn returns in various types of financial instruments. The returns from the investments may be in the form of periodic returns such as interest and dividend, gains in the value of the investment (capital gains) at the time of maturity or sale, or a combination of both periodic income and capital gains.

Some investments, such as fixed deposits with the banks, offer guaranteed or **fixed returns** during the tenure of the deposit. The rate of interest payable on these deposits is typically known at the time of making the investment. There is no appreciation in the value of the original investment made and the interest income is the only source of return from the investment.

Some other bonds and deposits may offer interest income that is not fixed at the time of issue but varies with changes in market interest rates. For example, the interest on small savings schemes such as the National Savings Certificates, Post office time deposits and others, are periodically reset (every quarter) to reflect the current market rates. The rate determined applies till the next revision or reset. The interest income goes up when interest rates in the markets rise, and declines when rates comes down.

Some investments, like bonds issued by the government or public companies, and listed on the stock markets, provide fixed periodic income as well as the possibility of a gain or loss in capital invested from a change in the price of the of the bonds on the stock markets. If there are gains in the capital value, then it adds to the interest income earned and the total return goes up. However, if there is a fall in capital values, then the loss eats into the interest income earned and the total return comes down.

Investments in stocks and shares may provide periodic dividend income. However, there is no certainty on the rate of dividend. The dividend will depend upon the performance and profitability of the business, and the decision of the board of directors on making a dividend payout to the shareholders. Stocks are typically listed on a stock exchange and may see an appreciation in its value over time to reflect the business' prospects. However, there may also be a loss in its value in response to poor business conditions. In other words, the returns from such investments are linked to the performance of the business. If the right stocks are selected then there is a possibility of high returns, primarily from the appreciation in prices.

Fixed and guaranteed return has the advantage of predictability. However, the guarantee comes with the risk of lower returns. The real returns from the investment, i.e. the returns after adjusting it for inflation, may be very low and even negative in periods when inflation is high. For example, if the return from an investment is 7 percent and inflation is at 6 percent then the real return from the investment is 1 percent (7 percent-6 percent). The interest rates remain the same through the tenor of the instrument even if market interest rates were to go up or if the profitability of the issuer were to increase. The low returns from such

investments can affect the ability to accumulate the funds to meet goals. Since the returns on the investments are low the principal contributed has to go up to make up the amount required for a goal.

Returns from investments with variable returns are linked to the performance of the issuer of the instrument, which is reflected in the market value of the investment. There is no certainty to the returns that can be earned. The returns from such investments are estimated based on the historic returns and expectations of future performance. Since the gains or loss in values form a significant part of the total returns from such investments, the returns are likely to be volatile. Some investments, such as equity, see greater volatility in returns in the short term because the price of the shares on the stock markets where it is listed will show gains or losses with every change in expectation on performance. The dividends and market values of shares increase with improved performance of the issuing companies and vice versa. These investments are seen as riskier because of the volatility in returns and the possibility of a depreciation in the value invested. However, with an adequately long holding period, and portfolio construction with proper selection and diversification, it is possible to benefit from the higher returns with lower risk from volatility. The higher returns over the long- term help offset the effect of inflation on the real returns from the investment. Investments with market-linked returns need to be monitored for risks to earnings and performance. It is important to be able to identify signs of possible underperformance and switch the funds to other investments, to reduce the risk of losing the capital invested.

1.3 Features of the retirement goal

The retirement goal is the primary goal for people who need to provide for the years when they are no longer earning an income from employment but still have to meet their expenses. Unlike most other goals which can be funded through loans, retirement has to be funded out of the resources that are created from one's income in earning years. This feature of the retirement goal describes why it has to be given the highest priority in allocating savings. The savings have to be invested to create assets till retirement. These assets may be financial assets such as investments in debt and equity oriented instruments, and physical assets such as real estate and gold. On retirement, these assets are used to generate the streams of income that are necessary to meet expenses.

The retirement goal is inherently a long-term goal. Typically, retirement would be seen around 25 years to 30 years after the start of employment or earning a living. And the period in retirement may be anywhere between 20 to 25 years, given the improvement in life expectancy over the years. Saving for the goal of funding expenses in retirement cannot be done over a few years since the corpus required is large. Starting early and saving regularly is important for such a large goal. Individuals covered under a retirement benefit or plan will see some regular retirement savings happen from the beginning of the earning period. This alone may not be adequate to fund the retirement life that the individual expects to lead and

may require additional savings to be allocated to retirement. Individuals who are not covered under a mandatory retirement plan need to voluntarily start saving early for retirement to benefit from the long saving and investment period.

The early start to saving for retirement will benefit from compounding over the long investment period (see Box: 1.4). The allocation that needs to be made from savings will be lower when the period available for accumulation is long. This is because the compounded returns will contribute to a large portion of the retirement corpus. The long investment period available for saving for retirement also allows taking exposure to investments like equity that are seen as risky because of the volatility exhibited in the short-term returns, but over the long term are capable of generating higher returns. The higher rate of return also means that the contribution of returns earned to the corpus will be higher, and this reduces the amount that has to be allocated to retirement from savings available.

Box 1.4: Number Crunching: Start investing early

Consider the case of "X" who targets accumulating a corpus of Rupees One crore for retirement 30 years hence. Assume a return of 8 percent.

If X starts saving and investing immediately the monthly savings required is Rs. 6700/-. However, if he delays saving and investing by just 5 years, the monthly savings required goes up to Rs.10,500.

Instead of 8 percent if the savings were invested to earn 10 percent then the monthly savings required to reach a corpus of Rupees one crore in 30 years is just Rs.4400 as against Rs.6700.

To understand the power of compounding consider the case of X who invests Rs.5000 per month for 10 years from age 25 to 35 years at the rate of 8 percent and then stops investing any more. X leaves the investment untouched for further 25 years till he is 60. The corpus will be worth Rs. 62,65,000.

Compare this to Y who starts investing 10 years later at the age of 35 and invests Rs.5000 per month for 25 years till he is 60 at the rate of 8 percent. The corpus will be worth Rs. 47,55,000. X's corpus is worth more than Y's corpus even though he contributed for just 10 years because of the compounding effect of money with time. Y's corpus did not grow as much even though he invested for 25 years because the money did not have as much time to compound and grow.

The long goal period for saving for retirement is a factor that should be used to the individual's advantage by starting early, investing in higher return products and thereby reducing the principal contribution that has to be made to the corpus.

The retirement goal is the largest in an individual's financial life relative to other goals. With better health and increasing life spans, the period in retirement has increased. The corpus that has to be created to generate the income has to be large to provide income for the longer retirement period. It is not possible to create the corpus in the last few working years. It can only be built over time and allowing the investments made to compound and grow. As mentioned earlier, retirement cannot be funded by other sources such as loans or borrowing. It has to come out of own funds only and therefore needs to be prioritized over other goals that have the option of being funded with debt.

1.4 Advantages and importance of starting retirement savings early

It is easy to postpone saving for retirement because it is far away in the future and there are more pressing financial demands that have to be met. The intention is to catch up on retirement savings later when there is scope for saving more. But when retirement saving is started late, the amount of contribution that has to be made to reach the required amount is much higher. In other words, the same corpus will cost more. Consider the example below: **Example 1: Delayed Start to Retirement Saving**

	Х	Y
Age (Years)	25	35
Retirement Age (Years)	60	60
Years to Retirement (Years)	35	25
Corpus Required (Rupees)	1 crore	1 crore
Expected Return (Percent)	8	8
Monthly Contribution (Rupees)	4359	10515

Starting 10 years later means Y needs to save more than double of what X has to save to reach the same figure for retirement. This is because Y's investment loses out on the benefits of compounding. As the period available to accumulate funds comes down, the ability to invest in riskier assets to earn better returns also comes down. The corpus then loses the advantage of higher returns and this would mean that the contribution that the individual has to make to the corpus goes up to reach the desired goal value.

Postponing retirement savings can be very risky to the individual's future financial security in multiple ways. In the worst case scenario, they may not have enough money saved up for retirement. A lower corpus would mean that the income available would be lower than what

was estimated and insufficient to meet all the expenses in retirement. Postponing retirement so that there are more working years to add to the corpus and fewer retirement years to fund, or cutting back on the lifestyle expected in retirement are consequences of underfunding the retirement corpus.

Risk of Early Retirement

Very often a long-term goal like retirement is not given the importance it deserves while apportioning available savings because people believe that there is time for them to catch up on their investment. Savings are apportioned to less important but urgent needs and wants. Postponing retirement implies much larger savings have to be made later to achieve the same retirement corpus. If the individual cannot make the additional savings and investments in the retirement corpus later, they may be risking their financial security in retirement. This could be because their income may not be adequate, other expenses such as health may have gone up in later life leading to lesser savings or even extreme situations such as loss in income or employment. Sometimes, because of health reasons they may be forced to take early retirement. If contribution to retirement corpus is not made consistently from the beginning this may lead to a situation of being completely unprepared for retirement.

1.5 Risk of Underestimating Retirement Goals

Given the particular features of retirement, namely a long period in retirement in which the expenses have to be funded out of the available corpus, it is important to have a degree of clarity on the retirement goal. In the initial years of the accumulation period, the retirement is many years in the future and there is likely to be uncertainty about the type of expenses and level of expenses that will be incurred in the retirement period. But over the years it is possible to refine the retirement plan based on updated circumstances and information so that the expenses and income required to meet it reflects what it is likely to be in retirement. If this exercise of updating the plan is not undertaken, there is a good chance there will be a gap in what the corpus is able to fund and what is actually required.

Relevance of Expenses: The importance of various heads of expenses will change in retirement relative to the working years. For example, health may be a large expense in retirement, while transportation may not be. Knowing the type of expenses will help prepare for them, such as taking health insurance cover to help meet health expenses. In the event this is not taken care of, it may be a drain on the corpus and affect the availability of income for other expenses.

Level of Expenses: The expectation of expenses in retirement may undergo a change over time. It may go up or it may go down. The size of the retirement corpus will have to be adjusted to reflect this need. If the corpus is unable to generate the income required, then it may become necessary to scale back expectations. This can lead to psychological issues in retirement.

Performance of Investments: Even if the requirement for income in retirement and the corpus is correctly estimated, there may still be issues if the investments in which the corpus is held does not perform as expected. If the investments were expected to generate a 10 percent return, then the savings required to reach the corpus would be determined accordingly. If this return did not materialize then the savings made will not accumulate to the corpus required. Periodically monitoring the performance of the investments and making course corrections where required will help reduce the risk of this happening. The investment choices can be altered or the savings can be increased, if possible, as a way to catch up on the shortfall in the corpus.

If appropriate checks and balances to identify and correct the above risks in time are not built into the retirement plan, then the retirement faces the risk of underfunding. Periodic review of needs and expectations, savings plan and investment performance, will help reduce the risk of a wide gap in retirement funding.

Managing the underfunding of goals may be done by postponing retirement by a few years that gives some more time to build the corpus and a lower retirement period to fund. Other options include choosing a less expensive lifestyle that can be accommodated by the available income and considering a second career among others.

1.6 Emotional Aspects of Retirement

Retirement planning typically targets the financial aspects of retirement. It helps take care of the monetary aspects of having an adequate income in retirement. But there is an emotional and psychological aspect to retirement that is important to be sorted out for a successful transition into retired life. People must be ready to let go of the pre-retirement life in terms of the financial aspects, social connections and the power and recognition that came with the job. One of the primary concerns as retirement comes closer is to fill up the spare time that will now be available. Exploring interests or hobbies that a person can become involved in either as a part-time employment or on voluntary basis should be done towards the mid-40s when there is greater clarity on what their interests are. This may be a continuation of their work-related skills or exploring new areas. Building a social structure distinct from the work environment is important to make retirement easier. Health is another important aspect that may affect a retiree psychologically. Increasing issues with health and dealing with it both financially and emotionally can be difficult. Making a healthy lifestyle a priority even in the working years will hold the person in good stead in retirement. If necessary, it may be a good idea to have professional help to deal with these aspects of retirement so that their wellbeing in the retirement years is taken care of.

Sample Questions

- 1. The retirement benefit in a Defined Contribution plan depends upon:
- a. The corpus accumulated in the scheme
- b. The last drawn pay of the employee
- c. The terms of employment at the time of recruitment
- *d.* The average rate of return in the debt markets

2. Which of the following is a consequence of inflation?

- a. It increases the value of money in the future
- **b.** It leads to appreciation in the purchasing power of money
- c. It reduces the purchasing power of money
- *d.* It decreases the current value of money

3. Life expectancy directly affects which of the following features of the retirement goal?

- a. Period in retirement
- b. Monthly expenses in retirement
- c. Remaining working years
- d. Returns earned on the retirement corpus
- 4. Which of these is a non-financial concern in retirement?
- a. Finding interests to occupy time
- **b.** Dealing with living on a tight budget
- c. Making investment decision in retirement
- *d.* Dealing with the risk of longevity

CHAPTER 2: FINANCIAL MARKETS AND INVESTMENT PRODUCTS

LEARNING OBJECTIVES:

- Need for making investments to reach retirement goals
- Difference between savings and investments
- Difference between asset and sub-asset classes
- Risk and Return trade-off
- Impact of macroeconomic factors on different asset classes
- Concept of asset allocation and impact on investor portfolio risk
- Indian Financial System and investment products

2.1 Need for Making Investments to Reach Retirement Goals

The retirement goal is unique in the sense that it requires a large corpus to be built out of owned funds since it cannot be funded through loans or borrowings. The other feature of the goal is that it is long-term in nature. It has to be met at a time well in the future. If the money saved for the goal was kept unused till it is required to meet the expenses in retirement, the money will lose value given the effect of inflation over the long period to retirement. Again, keeping the money idle would mean that the ability of money to be invested and earn returns is not being used.

Consider the case of 'X' who requires to accumulate a corpus of Rs.2 crores over 30 years.

If X intended to keep the savings idle, then he would require a monthly contribution of Rs. 55,555 each month for 30 years to accumulate the Rs.2 crores.

If X invested the savings in an investment that earned 10 percent, then he would require to invest only Rs. 8,847 each month for 30 years.

Investing the money instead of keeping the savings unutilized frees up a large chunk of X's savings for other goals and needs.

Large goals like retirement can only realistically be met if the money saved is invested.

2.2 Difference between Savings and Investments

Saving refers to the excess income available to an individual or household after meeting current expenses. These are the funds available to be apportioned to future needs that are referred to as financial goals. If the individual wants to secure the savings from a loss in absolute value, then it is held in secure and guaranteed avenues such as savings bank accounts. Typically, funds that are required for meeting the near term expenses or goals, or funds earmarked for meeting emergencies are held in this form. As we have seen in the

previous chapter, money left idle loses real value over time as a result of the effect of inflation and the purchasing power of savings erodes over time.

Savings are always scarce and seldom adequate to fund all the financial goals that an individual may have. It is important therefore to make most of the available savings. One way of doing this is to put the savings to work by investing it. Investing is the term used to describe the activity of employing available funds in suitable investment opportunities in physical and financial products with the intent of earning a return. The returns or gains made from investing are also then available to help meet the goals.

2.2.1 Trade-Off between Risk and Return

When savings are invested to earn returns, they are exposed to certain risks, depending upon the type of investments into which the savings are channelized. The investor needs to understand these risks before committing their savings to the investment.

Risk of Liquidity: When savings are invested, they are typically locked-in for a defined period of time. Unlike cash kept in sources such as savings bank accounts, invested funds are not available readily for use by the investor. Some investment products may allow easy realisation, but there may be a penalty imposed on early withdrawal, such as the penalty of lower interest imposed on a premature withdrawal of a fixed deposit with a bank.

Risk to Expected Returns: Depending upon the avenue chosen for investment, there may be a risk of the expected return not materialising. If the investment is a debt-oriented investment, then the interest income is known at the time of investment. However, the issuer may default in paying the interest, unless it is a guaranteed product such as a post office deposit that is guaranteed by the Government of India. In case of equity investments, there is no fixed or assured dividends or returns. Investors make estimates about expected returns based on historical returns and assumptions on performance of the economy, company and other relevant factors. If the business does not do as expected the company may not declare a dividend for its shareholders at all and the price of the shares may not see the expected appreciation thus affecting the total returns from the equity investment. In case of real estate investments, the investor expects to earn a periodical rental income and appreciation in the value of the property. However, there is a possibility that a tenant may default on paying rent or the property may remain unoccupied and not earn rental income at all.

Risk to Capital Invested: Investments may involve the risk of a partial or even complete erosion of the principal invested. Investment in equity may see a fall in price to levels where there may be an erosion in the capital invested. A default by the issuer of a debenture at maturity may mean that the capital invested will be lost, unless the debt instruments are secured on the assets of the issuer. Physical investments such as real estate and gold too may see a fall in values that erodes the capital invested.

The potential for return from an investment is expected to compensate for the risk that is undertaken: higher the risk in the investment, higher is the expected return. Equity investments are expected to provide higher returns to compensate the investor for the higher risk to returns and principal. A bond with a higher credit rating will pay a lower coupon as compared to a bond of the same tenor but with a lower credit rating, to reflect the lower risk of default in payment of the periodic coupon income and repayment of principal. If an individual wants to select investments without too much risk, they must be willing to settle for lower returns. This is the risk-return trade-off in investments. The limited access to the funds invested and the risk of loss in investments are the trade-offs that are accepted for the higher returns that it is possible to earn from investments like real estate and equity. The extent of risk an individual is willing to take on for returns will vary depending upon their circumstances. For example, investors with a higher level of income and savings and greater financial security may be willing to take higher risk relative to investors without a secure source of income and lower accumulated wealth. If the goals for which the investments are being made are well in the future, then the investor may be willing to invest in products that may show volatility in returns, but has the potential to earn high returns over a period of time. On the other hand, if the goals are closer at hand and the funds are required to meet the goal, then the investor will seek to invest in low risk products that are likely to earn low returns but will preserve the capital accumulated.

When savings are invested, the returns earned on it help accumulate the funds required to meet the individual's financial goals. For example, retirement is a goal that requires a large sum of money to be accumulated given the long years in retirement when expenses have to be met. When the savings being set aside for the retirement corpus is invested, the returns earned on the investment too contributes to the final corpus.

Consider the following example:

X wants to accumulate a corpus of Rs. One crore through monthly savings over a 25 year period. If X were to depend upon his savings alone, he would require to set aside approximately Rs. 33,000 per month. Instead, if the monthly savings were being invested at 8 percent, the savings required to reach the same sum of Rs. One crore in 25 years would be approximately Rs. 10,500.

If the money set aside is invested then the returns earned on the investment would also contribute to the corpus required, thus freeing up the savings for other goals and needs which otherwise would have had to be set aside for the retirement goal. In the above example, approximately Rs.22,500 (Rs.33,000- Rs.10,500) becomes available to Mr. X each month to use for other goals because investing around Rs.10,500 every month and earning compounded returns on it gets him to his goal.

Higher the returns earned lower will be the savings that have to be invested. In the above example, instead of 8 percent if the savings earned 10 percent then the monthly savings required to be invested to reach the corpus would be around Rs.7,500 instead of around Rs. 10,500. Depending upon the type of investment selected to invest the savings, there will be some degree of risk taken on by Mr. X. Monitoring the investment periodically for any change

in the circumstances that may increase the risk, and moving the funds if so required, will help Mr. X manage the risks.

2.3 Asset Class and Sub-Asset Classes

Every investment option is characterised by the risk and return features inherent in it. The returns may be described as high or low, pre-defined or variable, stable or volatile. This would depend upon the factors that affect the returns. For example, the returns on the equity shares of a company would depend upon the profits the company makes and the business risks that the company faces. This translates into the possibility of a higher long-term return if the company's performance is good. But in the short-term the holder of equity shares is likely to see a good amount of volatility in returns as market participants evaluate the impact of different factors on the expected performance of the company would depend on the ability to generate enough cash to pay interest, even if the company would make losses or a minimal profit. The price of the bonds reacts to changes in factors that will impact interest rates in the economy. This translates into steady periodic return from interest income with some degree of volatility in prices. A group of investments that exhibit similar risk and return characteristics, and respond in a similar fashion to economic and market events are grouped together as an asset class.

Broad Asset Classes

Investment products are primarily classified as physical assets and financial assets. Physical assets are tangible assets and include real estate, gold and other precious metals. Physical assets are typically growth investments that are bought for the appreciation in value rather than the income they generate. Physical assets are also seen as a hedge against inflation. Financial assets represent a claim that the investor has on benefits represented by the asset. Financial assets include bank deposits, equity shares, bonds and others. These assets may be structured as growth-oriented assets where the appreciation in value constitutes the primary source of returns. Equity investments are an example of growth-oriented investments. Assets may be income-oriented, such as deposits, where the periodic income such as interest is the main source of return. They may also be structured to provide liquidity and capital preservation. Financial assets are typically standardized products and controlled by the regulations in force at the point in time.

Based on the return and risk attributes, financial assets or investment options can be broadly classified into the following asset classes:

- Equity
- Debt
- Cash

Physical assets can be categorized as:

- Real Estate
- Commodities

2.4 Features of Different Asset Classes

Each asset class has distinctive features as regards returns, risk and liquidity.

Equity

Equity represents ownership in the company that has issued the shares to the extent of shares held. Shareholders participate in the management of the company by exercising the voting rights associated with the shares held. They also participate in the residual profits of the company i.e. the profits remaining after all the dues and claims against the company have been met. In periods of high revenues and profits, the shareholders benefit from high dividends that are paid to them and from the appreciation in the value of the shares. However, if there are no residual profits or the Board of Directors of the company do not recommend a dividend from available profits then equity shareholders do not receive a dividend. Equity shareholders cannot demand a return of the capital invested. If the shares are listed on the stock markets, then the shareholder can sell at the current value. This may be higher or lower than the value at which the investment was made.

Investment in equity is investment in a growth-oriented asset. The primary source of return to the investor is typically from the appreciation in the value of the investment. Dividends are declared by the company when there are adequate profits and provide periodic income to the shareholders. The returns from equity investments are neither pre-defined nor guaranteed. They can be volatile from one period to the next and can even be negative. This makes equity investments risky, especially in the short-term. Since the market values of shares may decline in response to company-specific or economy-wide reasons, investors may find that they have to exit at a loss. Over time, the value of well-managed and profitable companies will see appreciation and generate high returns for the investors. Selecting the right stocks, monitoring the performance of the companies and exiting stocks where the performance is not as expected, is important for success in equity investing. Listed equity shares are liquid and can be easily converted into cash by selling in the market at prevalent prices. Within equity as an asset class there can be sub-categories based on the industry to which a group of companies belong, or the size of the company based on its market capitalization (large, mid or small). Sub-asset classes within equity may have features that are specific to that group. For example, among the universe of stocks available large-cap stocks typically feature greater stability in earnings relative to mid and small- cap stocks. They are therefore seen as less risky. Similarly, revenues of companies in the technology sector are sensitive to currency fluctuations since exports form a large segment of revenues, companies

in interest-rate sensitive sectors such as real estate, see benefits when interest rates in the economy comes down, and so on.

Debt

Debt represents the borrowings of the issuer. The terms of the issue will determine the conditions such as the coupon or interest payable on the debt, the tenor of the borrowing after which the borrower/issuer has to return the principal to the lenders/investors, the security against the assets of the borrower offered as collateral, if any, and other terms.

Debt may be raised in the form of deposits or by issuing securities. For example, a bank may accept deposits from the public, which is a borrowing of the bank and they have an obligation to repay. A bank may also issue securities to raise debt from the public. Securities are standardized in terms of the face value of each bond, coupon payable and tenor of the security. Deposits are typically unsecured, while debt securities are secured against the assets of the borrower and therefore offer greater protection to the holder of the security. Deposit holders can exit the investment only at the end of term of the deposit. Pre-mature withdrawal may imply a penalty in the form of lower interest on the deposit. Securities issued through a public issue have to be mandatorily listed. Investors can exit by selling the security on the stock exchanges. The price at which they sell may be higher or lower than the price at which they bought the debt security. A higher price implies capital gains, which adds to the total returns of the debt security holder.

Debt as an asset class represents an income-oriented asset. The major source of return from a debt instrument is regular income in the form of interest. The interest is typically known at the time of issue and may be guaranteed either by an undertaking of the government or by security created on the physical assets of the issuer. Some debt instruments may be unsecured, in which case it is seen as riskier. Debt is issued for a specific tenor or term after which it is redeemed and the principal returned to the investor. Debt securities, such as bonds and debentures, may be listed on the stock markets. Such bonds may see an appreciation or depreciation in its value. The total returns to the investor in such securities will be from the interest income and the gain or loss in its value. The price of debt securities reacts to interest rate levels in the economy and this brings some volatility in the total returns from debt securities. Risk in debt securities primarily comes from the possibility of default by the issuer in paying interest and/or repaying the principal. Liquidity in debt instruments is low, even when they are listed. Most debt-oriented instruments impose a penalty if the funds are withdrawn before the committed time. Sub- categories within debt may be created based on the credit risk associated with the instruments (Government securities or corporate securities), or the tenor (short or long term) of the securities.

Cash and its equivalents

Cash and its equivalents are investments used for parking funds for a short period of time and earning a nominal return. The objective of investments made in such assets is preserving the

absolute value of the capital invested and high liquidity rather than earning returns. Cash and equivalent assets have the highest liquidity. Other products that meet these specifications include savings bank accounts and money market mutual funds, among others.

Physical Assets

Physical assets are tangible assets and include real estate, gold and other commodities. Changes in the value of physical assets are impacted by demand and supply. The return from physical assets is primarily in the form of the appreciation in value rather than the income they generate. Some such as real estate may provide both income and growth, while others such as gold are pure growth-oriented assets. The value of physical assets is seen to move in tandem with inflationary trends, and as such they may be able to generate inflation-protected returns. The primary risks in physical assets are from the illiquidity that some, such as real estate, suffer from. It is not easy to be able to sell a property quickly at what is perceived as the right price. Real estate also suffers from opacity in valuation and transactions, apart from legal and maintenance issues. The other limitation of physical assets as an investment is that they are typically large ticket investments and require substantial savings, or a combination of savings and loan to acquire the asset.

2.5 Asset Class Returns

The nature of returns earned from different asset classes is likely to be different. This difference makes each asset class suitable to cater to a different need of the investor. Some asset classes may cater to the need for growth, others may cater to the need for income, and still others may cater to the need for liquidity. The return from an asset class may be evaluated on the basis of these questions:

- What constitutes returns from the investment: periodic income, capital appreciation or a combination of the two?
 - If it is a combination of the two, which component is the primary contributor?
- Are the returns from the investment known in advance? Is it fixed? Is it guaranteed?
- Will the returns vary from one period to the next?
 - How much do the returns vary, if they do?

The return earned from an asset class may be in the form of periodic income such as dividend, interest and rent. The periodic income may be known at the time of investment. For example, an investor buying a bond or investing in a fixed deposit knows the coupon rate or interest rate they are going to receive. Investors in equity shares do not know the dividend they may receive. They may even not receive dividend income in a year. The interest income remains the same throughout the life of the debt instrument. There are a few debt securities that offer interest that vary with market rates. In the case of dividend income, the rate of dividend goes

up when the company's revenues and profits go up and may go down when profits are low. Some interest income may be guaranteed. For example, any investment made in government securities, small savings schemes and post office deposits, among others are guaranteed by the Government of India. Some interest income may be secured against the assets of the company. If the issuer fails to pay the interest income, then the holder of security has the right to the asset to the extent of their dues.

The return from an asset class may be in the form of appreciation in the value of the investment. Equity shares, debt securities, real estate properties are all capable of earning an appreciation in its value. In case of equity shares, this component of returns is typically the primary source of return and it may see frequent changes since share values are reported on the stock markets on each trading day. Debt securities see a change in value with changes in interest rates in the economy. But the gains constitute a smaller portion of the returns, especially for debt securities. In real estate investments too, the appreciation in value is a significant portion of the total return. However, the change in values are not frequent. An asset such as gold provides no periodic income and appreciation is the only source of income.

Asset values can see a depreciation instead of an appreciation, and this will bring down the returns and can even make it negative. For example, if a bond pays 8 percent per annum coupon interest but the price falls by 10 percent in the year then the total return from the bond is -2 percent (8 percent +(-10 percent)).

Asset	Risk	Returns	Liquidity
Classes			
Cash	Risk of inadequate	Periodic interest income.	č
	returns (inflation risk).	Low returns commensurate with the low risk.	withdrawn at any time with no cost or penalty.
Bonds	Corporate bonds have the		Liquidity in
	risk of default by the issuer.	in the form of	debt
	Investments in	coupon/interest income.	instruments is low. There
	debt	They also have the	may be a lock-in, penalty
	instruments are subject to	potential to gain in value if	for early withdrawal or
	inadequate returns (inflation	there is a fall in interest	low trading in the stock
	risk), fall in value (interest	rates and the risk of loss in	markets, all of which
	rate risk) and reinvestment	capital value if interest	make these instruments
	risk.	rates rise (interest rate	low on liquidity.
		risk).	

Following is the list of generally used asset classes and their main features:

a			· · · · · · · ·
Stocks		Returns from equity is	
	(market risk) and hence seen	primarily from	can be easily sold at the
	to be a risky investment	the	current price, which
	unless the investment	appreciation in value of the	makes them liquid.
	horizon is long enough to	stock along with the	
	provide the opportunity for	dividend that the	
	appreciation in the value of	company may declare.	
	profitable businesses. It is	The fall in the value of the	
	important to select the right	stock may result in loss to the	
	stocks (selection risks) for	investor.	
	investment.		
	Liquidity risk is the primary risk		, .
	faced in real estate		Ũ
	investments. Moreover, it		•
	cannot be sold in smaller units if		, ,
	so required.	estate are seen as a hedge	
	Lack of transparency in pricing	against inflation.	investments makes the
	and transactions and weak		process complicated.
	regulatory protection are		
	among the biggest risk that real		
	estate faces. Managing the		
	property and legal issues are		
Real	other risks that real estate		
estate	investors face.		
	The returns are impacted by		
	economic cycles.		
	The primary risk in gold is from	Returns from gold is only	Liquidity is high in gold and
	the volatility in prices driven by		
Gold	speculative forces.		

2.5.1 Total Returns from an Asset Class

Asset class returns may be from a combination of periodic income such as interest or dividend or rent and the appreciation in the value of the investment made. This is the total return from the investment.

In income-oriented investments, the interest income is the primary source of return. The contribution of appreciation in the value will be small. For example, a short-term debt mutual fund earns interest income and a small contribution from appreciation in the value of the debt securities held.

In a growth-oriented investment the capital appreciation is the principal source of return. For example, appreciation in the value of the shares is the primary return from an equity investment.

There are products that yield a combination of periodic income and capital appreciation. For example, an investor in a debt mutual fund can earn both interest income as well as benefit from an appreciation in the value of debt securities that accompany a fall in interest rates in the markets, depending upon the type of debt securities held in the portfolio.

Total returns in an asset class, earned from a combination of periodic income and appreciation/depreciation in its value, is likely to be volatile in nature. This is because the frequency or quantum of appreciation/depreciation in value is not fixed. Share prices are likely to show changes from one day to the next. Total returns from equity are thus volatile. Change in the price of debt securities are less frequent and volatile and therefore the total returns are less volatile.

Asset classes with high volatility in total returns are generally considered for long term investments. Longer investment horizon allows an investor to benefit from the appreciation in the value of the asset and ride out the period(s) of fall in the values of an asset and therefore a fall in total returns from an asset. As goals come closer and the investment horizon shrink investors should shift funds from the volatile asset class to one with steady returns.

If the funds earmarked for emergencies are held in equity investments, then there is the risk that the investment values may be down when the funds are urgently required and the investor may have to sell at a loss.

2.5.2 Fixed and Variable Returns

The return from an asset class may be fixed in terms of quantum and periodicity. For example, a bank deposit pays a fixed interest every period, as decided at the time the investor made the deposit. The investor has clarity on the amount that will be received and when it will be received. This is useful in planning income and expenses when the funds need to be used. The drawback is that there is no scope for the return to go up. The investor in the fixed deposit is tied to the contracted interest rate even if the interest rate increases subsequently.

If the returns are variable, such as dividends from equity investments or mutual fund schemes that earn total returns, there is no certainty regarding the amount that may be received or the timing of the return. The return will increase or decrease to reflect the earnings of the investment. There is a possibility to earn high returns from such investments. But it makes monitoring of performance important so that investors can exit an investment that is likely to under-perform.

2.6 Common Risks in Investments

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

Inflation Risk

Inflation risk represents the risk that the money received on an investment may be less worth when adjusted for inflation. The purchasing power of money is eroded because of the increase in the price of goods and service. Inflation risk is highest in fixed return instruments, such as bonds, deposits and debentures, where investors are paid a fixed periodic interest and returned the principal amount at maturity. The real value of the investment gets eroded over time because of inflation.

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

Default Risk

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

The sovereign government alone can guarantee their obligations and there is no credit risk associated with their borrowings. All other borrowers have some degree of credit or default risk associated with them. This is measured using the credit rating assigned to a debt instrument. A high credit rating means lower risk of default. The interest paid by bonds with high credit rating is low since the risk is low. The credit rating may change if there is a change in the ability of the borrower to meet their obligations.

Liquidity Risk

Liquidity risk is the risk that an investment cannot be easily sold when desired, or it has to be sold below its intrinsic value, or there are high costs to carrying out transactions. All of these affect the realisable value of the investment.

Consider these examples to understand the liquidity risk in investments. The market for corporate bonds in India is not liquid, especially for retail investors. Investments in property and art are also subject to liquidity risk, since identifying a buyer and determining the price is

a lengthy process in the absence of frequent transactions. Some investments come with a lock-in period during which investors cannot exit the investment.

Re-investment risk

Re-investment risk is the risk that the periodic cash flows received from an investment may not be able to earn the same rate of return as the original investment. If these cash flows are reinvested at lower rates, then the total return from the investment will come down and vice versa.

Business Risk

Business risk is the risk inherent in the operations of a company and caused by factors such as cost of raw materials, employee costs, introduction and position of competing products, marketing and distribution costs. The effect of these factors on the financial performance of the company may affect its ability to meet its obligations on the debt raised by it. It will also reflect on the share prices in the stock markets. Business risks are specific to a company or industry. Holding a diversified portfolio of securities so that all investments are not affected by a particular business risk is a way to manage this risk.

Interest Rate Risk

Interest rate risk refers to the risk that bond prices will fall in response to rising interest rates, and rise in response to declining interest rates in the market. Bond prices and interest rates have an inverse relationship. In other words, an increase in interest rates in the market will lead to a decline in the prices of existing bonds and vice versa. The extent of interest rate risk in a bond will depend upon its duration. The duration of a bond is a measure of the sensitivity of its price to changes in interest rates. It is calculated based on the coupon, term to maturity and yield applicable to the bond. Higher the duration, greater will be the interest rate risk in the bond and vice versa. Bond investments are subject to volatility due to interest rate fluctuations. This risk also extends to debt funds, which primarily hold debt assets.

Market Risk

Market risk refers to the risk of the loss of value in an investment because of adverse price movements in an asset in the market. The price of an asset responds to information that impacts the intrinsic value of an investment. Market risk affects those investments where transactions happen at current applicable prices, such as equity, bonds, gold, real estate, among others. Investments such as deposits or small savings schemes are not marketable securities and the investor gets a pre-defined amount on maturity. They have no market risk; but they also do not gain in value.

2.7 Matching Investor Needs to Asset Class Features

Investors select the asset class that meets their specific requirement in terms of risk, return and liquidity features to meet their financial goals. Investors seeking higher return and willing to take the higher risk and types of risk associated with the asset class will look at equity or commodities; while investors seeking lower income and lower risk will consider debt investments. Investors in need for periodic income will consider debt-oriented investments while those seeking appreciation will consider growth-oriented investments such as equity. The investment horizon suitable to an asset class also varies. Investors who expect to hold the investment for very short periods consider cash and equivalents to park their money. These investments have little or no volatility in returns, and investors will be able to use the funds when required without any risk of loss to the principal invested. Bonds are suitable for intermediate and long holding periods. Investors need to have a long investment horizon for holding equity and other asset classes with volatile returns. A long investment horizon gives these investments time to benefit from economic cycles and see appreciation in their values.

At any point in time there are multiple goals that an investor may have all of which cannot be met with any one type of asset class. For example, the emergency funds may be held in ultrashort term deposits, retirement funds may be held in a combination of debt and equity investments, savings for other long term goals may be held in equity investments or gold or real estate, goals like paying for a child's education may be held in debt instruments.

2.8 Impact of Macro-Economic Factors on Asset Classes

The factors that affect the performance for each asset class are distinctive and therefore their performance may vary from time to time depending upon the prevalent economic factors. For example, commodities as an asset class perform well during inflationary times. Equity may be negatively impacted by inflation and tend to correct down, unless the price of the product or service offered by a company can be raised to reflect the higher costs of production, and the demand for the product is not affected by the increase in prices. Some of the important macro-economic factors that need to be tracked to monitor the expected performance of the different asset classes are explained below.

Gross Domestic Product

Gross Domestic Product (GDP) is the final value of all goods and services produced by a country in a given time period. Rate of growth in GDP is a widely used measure of economic growth.

If a country produced goods and services worth Rs. 100 trillion in a year and the value rose to Rs. 108 trillion in the next year, we can say that the country registered an 8 percent economic growth.

Real GDP is computed using prices prevailing in a specified base year to exclude the impact of inflation on the price of goods and services. GDP is measured on a time scale, usually on a year to year basis. The GDP of an economy goes through cycles of expansion and recession that create business cycles.

During a recession, growth in sales, production and employment slows down. This affects the performance of companies and therefore equity investments. During expansion, growth is significantly higher than trend rate. Overheating in the economy leads to an inflationary situation. Real estate prices and rentals see a boom as do commodities. Monetary actions, such as increasing interest rates, taken to cool the economy will have a negative impact on bond prices as also equity markets.

Inflation

Inflation is the rate at which the general level of prices for goods and services increases from one period to another. Inflation reduces purchasing power by reducing the quantity of goods that can be acquired for the same income. Inflation is measured using inflation price indices such as the Wholesale Price Index (WPI) and Consumer Price Index (CPI). Prices of goods and services are determined by demand and supply. Inflation can be caused if supply cannot keep up with demand. Supply-side factors such as rise in prices of raw materials or labour also leads to increase in the prices of goods and therefore inflation.

High inflation reduces the real return on financial assets and forces investors to turn to hedges such as gold, commodities or real estate.

Actions taken to contain inflation such as interest rate hike or tax hike affects asset values. It has a negative impact on both production and consumption and therefore economic growth, making equity and debt unattractive. An easy or expansionary monetary policy keeps interest costs low and encourages economic activity. Consequently, equity investments see an appreciation as stock market prices start rising in anticipation of better corporate performance. Bond values appreciate in an environment of low interest costs. Real estate sector sees improvement in demand as lower interest rates encourages more real estate investments.

Inflation and deflation impact asset valuation and investment decisions in opposite directions.

Government Finances

Government spending has a positive impact on growth provided government deficits are within reasonable limits. An increase in expenditure without a matching rise in revenue collection can lead to large deficits, which are met through market borrowings. Governments may resort to spending or expansionary methods to boost economic growth, as it directly increases demands. A reduction in personal or corporate income tax affects aggregate demand by increasing the amount of income available for consumption or investment. An increase in consumption and demand indicates better revenues for businesses and equity markets respond positively to it. The gap between revenues and expenses, i.e. the (deficit,) is funded by the government through market borrowings. A high fiscal deficit has the effect of crowding out other borrowers, such as companies, from the market. Large government borrowings push up market yields. This affects the profitability of borrowers. The high interest cost burden will take a large chunk of revenues and leave very little for future capital formation. Equity markets will fall in response to expected fall in companies' profitability and ability to expand operations. The higher yields in the market will pull down bond values. Interest-rate sensitive sectors will see a slow-down in activity.

Current Account Deficit

The current account balance is the difference between total exports and total imports of goods and services. The difference between exports and imports of goods is known as trade balance. Emerging economies often run substantial current account deficits (CAD) because of their need to import commodities and other inputs for economic activity. A CAD means that the country is importing more from the rest of the world than it exports to it, so it is a net debtor of foreign currency. The CAD can be managed in two ways. One, foreign inflows on the capital account (such as foreign direct or portfolio investment) can offset the gap in net exports. Two, if capital inflows are insufficient the country's forex reserves have to be run down by the central bank. India is a net importer of commodities so the CAD depends critically on the exchange rate of the rupee and world oil prices.

2.9 Asset Allocation

Asset Allocation is the investment strategy of creating a portfolio that targets the returns and liquidity needs of the investor while rationalizing the risk through diversification. The returns and risk of each asset class is distinct. The performance of the investments across varying economic conditions is also likely to be different since the factors that affect the performance are also distinct. Allocating investments across cash, debt, equity, gold, real estate and other suitable asset classes ensures that the portfolio is protected against the decline in one or few asset classes. If a portfolio is diversified, then irrespective of which asset class is outperforming the investor will benefit depending upon their portfolio's exposure to it. The better performing asset classes in the portfolio will help protect the returns of the portfolio from the poor returns in other assets. Determining the proper mix among asset classes is important and it must reflect the investor's need for returns and liquidity in conjunction with their ability to take risk.

a. There are different methods adopted to construct a portfolio that is diversified across asset classes to manage risks. Strategic Asset Allocation (SAA) is a long-term strategy tailored to the specific goals and risk preferences of the investor. It considers the goals of the investor, the investment horizon suitable for the goals, ability of the investor to take risks and related factors while allocating the investible resources to different

asset classes. A longer investment horizon may mean a higher ability to take on volatility in returns. The investor has the holding period required to ride out multiple economic cycles and the equity allocations in the portfolio will benefit from the higher levels reached. If the investor's goals are close to the distribution stage, then a more conservative allocation with focus on income-oriented debt investments will be preferred.² The asset allocation made under the SAA model is not aligned or rebalanced based on the expected performance of the various asset classes. The rebalancing in SAA is triggered by two factors: If the performance of different asset classes in the portfolio has led to a change in the preferred allocation, then a rebalancing exercise is undertaken to restore the original allocation. For example, if the retirement portfolio of the investor had an allocation of 60 percent to equity and 40 percent to debt and an upturn in equity markets has pushed up the prices and therefore the proportion of equity in the portfolio has gone up to 70 percent, then a rebalancing is undertaken to bring down the equity holding to 60 percent and the debt up to 40 percent. A change in the goals, needs and risk preference of the investor may trigger a new allocation. For example, if the retirement portfolio mentioned above (point a) moves from accumulation stage to the transition stage, then the portfolio allocation will be redesigned to move from growth orientation to income orientation.³

The drawback of the SAA is that it is likely to under-perform when a particular asset class is booming. This is because the portfolio is not realigned to reflect asset class performance. In the earlier example, even if equity markets are doing well, the portfolio is rebalanced to reduce the holding in equity to bring the allocation back to the original proportions.

b. Tactical Asset Allocation (TAA) is another strategy used to allocate resources to different asset classes. TAA makes and rebalances allocations based on expected market performances. It is a dynamic strategy and short-term in nature. The focus is on the performance of asset classes rather than the investor's objectives and goals.

Typically, a portfolio is constructed using Strategic Asset Allocation strategy while the Tactical Asset Allocation Strategy is used in the short-term to add some value.

2.10 Financial System and Investment Products

Financial securities are investment instruments issued under the regulatory norms of the financial systems. The financial system includes the regulators such as the Ministry of Finance, Reserve Bank of India (RBI), Securities and Exchange Board of India (SEBI), Pension Fund Regulatory and Development Authority of India (PFRDA), Insurance Regulatory and Development Authority of India (IRDAI) and others, the securities markets and its participants, the banking system, issuers and investors. Issuers, permitted by regulations to do so, issue securities to raise funds needed to carry on their economic activities. These securities are

² The distribution stage of retirement is when the corpus created in the accumulation stage is employed to generate the income required to meet expenses in retirement.

³ The accumulation stage is the stage at which the saving and investment for the retirement corpus is made.

subscribed to by investors eligible to do so. The securities issued need to be in compliance with the regulations specified by the concerned regulators.

The securities issued may be broadly classified under:

- Equity Instruments
- Debt Instruments

The securities are first issued in the primary markets where investors subscribe directly from the issuer. Subsequently, the securities are listed in the stock markets where they are traded between investors using the trading and settlement mechanism offered by the stock exchange.

Apart from securities issued in the financial markets, issuers may use deposits to raise funds from the public. Deposits are debt-oriented in nature and creates a debtor-creditor obligation between the acceptor of deposit and depositor.

Issuers who raise funds in the market include:

- Central and State Governments
- Public sector entities
- Private sector companies
- Banks and Financial institutions

Investors who provide funds for economic activities include:

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

2.10.1 Equity Instruments

The different features of equity investing have been discussed earlier in Section 2.4. The various options available to investors for participation in equity markets are:

Direct Investment

The research and evaluation is done by the investor who decides on what to invest in and the timing for entry and exit. The trades are executed through brokers who are members of stock exchanges. The stocks are bought in the name of the investor and held in their demat account. The costs of transaction and taxes are borne directly by the investor. Creating an effectively diversified portfolio that will meet the return and risk requirements of the investor will take time, given the limited resources that retail investors will have. Managing a portfolio may require time, knowledge and skills beyond the capability of most investors.

Portfolio Management Services (PMS)

Investors can choose to invest through a Portfolio Management Service (PMS) offered by banks, broking houses, mutual funds and others. The service can either be a discretionary PMS, where the portfolio manager manages the portfolio in alignment with the investor's requirement or a non-discretionary PMS where the portfolio manager will provide advice and information to the investor who will themselves take the decisions on investment choices and timing of the investment. The portfolio manager will execute the decisions taken by the investor. Transactions in the investor account lead to transaction costs and taxes.

Equity Mutual Funds

Equity funds invest in equity instruments to meet the objective of growth. The construction of the portfolio is as per the regulations that ensure a minimum level of diversification and risk mitigation. It is managed by professional fund managers who make and monitor the investment decisions. There are wide variety of schemes focusing on different market segments such as large, mid or small cap, sectors, strategies and investment styles for investors to choose from. Costs are borne by the scheme and are limited by regulation. Investors indirectly bear the costs. Tax implications arising from portfolio decisions are attributed to the scheme and may have beneficial treatment. Taxes arising from the investor's transaction decisions are borne by them. Investors do not directly hold the securities, though they are the beneficiaries of these investments.

2.10.2 Fixed Income Investments

The different features of debt/fixed income asset class have been discussed earlier in Section 2.4. Fixed Income Investments can be in debt securities, fixed deposits and savings schemes.

Government Securities

Government securities (G-secs) are issued by the RBI on behalf of the government. G-secs represent the borrowing of the government, mostly to meet the deficit. With a view to encouraging retail participation, the government has reserved 5 percent of the auction amount in every auction for non-competitive buyers, including retail investors. In order to buy G-secs, retail investors have to open a Constituent Securities General Ledger (CSGL) account with their bank or any other holder Securities General Ledger (SGL) accounts. Investors can also transfer the G-secs to their normal demat account, after buying them. The minimum investment amount is Rs. 10,000. There is no cumulative option in a G-sec. Interest is paid out on pre-specified dates into the designated bank account of the investor. Interest is not subject to TDS but is fully taxable. Redemption proceeds are also paid into the bank account. G-secs are benchmark securities in the bond market, and tend to offer a lower interest rate compared to other borrowers for the same tenor. This is because there is no credit risk or risk of default in a G-sec. The low liquidity in the secondary retail markets may mean that investors may not be able to sell and realize the gains in price, if any.

Inflation-Indexed Bonds

Inflation Indexed Bonds (IIB) are a category of government securities issued by the RBI which provides inflation protected returns to the investors. These bonds have a fixed real coupon rate which is applied to the inflation adjusted principal on each interest payment date. On maturity, the higher of the face value and inflation adjusted principal is paid out to the investor. Thus, the coupon income as well as the principal is adjusted for inflation. The inflation adjustment to the principal is done by multiplying it with the index ratio. Another category of inflation-indexed instruments issued by the RBI for retail investors is the Inflation-Indexed National Saving Securities-Cumulative 2013. These bonds of 10-year tenor were available to retail resident individuals, minors, HUFs, and charities among others. The bond carries a fixed interest of 1.5 percent and an inflation rate calculated on the basis of the Consumer Price Index (CPI). The interest is compounded every six months and cumulated and paid with the principal on maturity. The fixed rate of interest will be the floor and will be paid even if there is deflation. The interest is taxable according to the tax status of the investor.

Corporate Bonds

Corporate bonds are debt instruments issued by private and public sector companies. They are issued for tenors ranging from two years to 15 years. The more popular tenors are 5- year and 7-year bonds. Bonds of all non-government issuers that are issued to the public come under the regulatory purview of SEBI. They have to be compulsorily credit-rated and issued in the demat form. The coupon interest depends on the tenor and credit rating of the bond. Bonds with the highest credit rating of AAA, for example, are considered to have the highest level of safety with respect to repayment of principal and periodic interest. Such bonds tend to pay a lower rate of interest than those that have a lower credit rating. All public issues of

bonds have to be mandatorily listed on a stock exchange. A plain vanilla bond will have a fixed term to maturity with coupon being paid at pre-defined periods and the principal amount being repaid on maturity. The bond is usually issued at its face value, say, Rs. 100 and redeemed at par, the same Rs. 100. The simple variations to this structure could be a bond issued at a premium or discount to face value or redeemed at a premium or discount to face value. In some cases, the frequency of the interest payment could vary, from monthly, to quarterly and annual. Or, the bonds could feature a cumulative option where the interest is not paid out to the investor periodically but instead re-invested and paid out along with the principal at maturity. Apart from a regular fixed-interest-paying bond, the other types of bonds issued are: zero coupon bonds that do not pay a periodic coupon but the applicable interest is built into the difference between the issue price and redemption price, floating rate bonds which pay a coupon that is reset at pre-fixed intervals with reference to a benchmark rate and bonds with put or call options that give the issuer and investor respectively the right to redeem the bond before maturity. Convertible bonds, allow investors to convert the bond fully or partly into equity shares, in a pre-determined proportion. Interest earned is fully taxable.

Infrastructure Bonds

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

Bonds issued by financial institutions, infrastructure companies and other qualified entities are eligible for such deduction. The bonds are structured and issued by these institutions as interest paying bonds, zero coupon bonds or any other structure they prefer. These bonds have a minimum lock-in period (which could be three years, or five years) during which they cannot be transferred or pledged. Infrastructure bonds are compulsorily credit rated, and can be issued in the demat form. Interest from these bonds is taxable. Infrastructure bonds do not carry any government guarantee.

2.10.3 Bank Fixed Deposits

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

Bank FDs are considered to be a safe investment option. This is because each depositor is insured upto Rs. 5 lakh by the Deposit Insurance and Credit Guarantee Corporation (DICGC). It includes all deposits and interest on them, held across branches of a given bank in the same capacity.

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

Interest rates depend on the duration of deposit, amount deposited and policies of the bank. In general, longer term deposits pay a higher rate than shorter term deposits. Banks also offer special rates to senior citizens, defined as those who are over 60 years of age. Interest rates also vary from bank to bank. Interest rates do not remain unchanged. However, a rate committed to be payable for a tenor, until maturity, does not change even if market interest rates change. New rates usually apply only for fresh deposits.

2.10.4 Small Saving Instruments

Small saving schemes have been introduced by the Government of India to encourage investors to save regularly. The main attraction of these schemes is the implicit guarantee of the government, which is the borrower. These schemes are offered through the post office and select banks.

The saving schemes currently offered by the government are:

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

Public Provident Fund

PPF is a 15-year deposit account that can be opened with a designated bank or a post office. Minimum amount that needs to be deposited in this account in a financial year is Rs. 500. The maximum limit is Rs.1,50,000 deposited either in one lump sum or in instalments not exceeding 12 in a financial year. Detailed features about the public provident fund have been discussed in Chapter 6.

National Savings Certificate (NSC)

National Savings Certificates are issued by the government and available for purchase at the post office. NSCs are issued with tenors of 5 years. Interest is compounded on an annual basis and accumulated and paid on maturity. Detailed features about the National Savings Certificate have been discussed in Chapter 6.

Senior Citizens' Saving Scheme (SCSS)

The Senior Citizens' Saving Scheme is a savings product available to only senior citizens of age 60 years or above (first holder) on the date of opening the account. The account can be opened at any post office undertaking savings bank work and a branch of a bank authorized to do so. The scheme can be held in individual capacity or jointly with the spouse. Detailed features of the Senior Citizen Saving Scheme have been discussed in Chapter 6.

Post Office Schemes and Deposits

The different kind of post office deposit schemes are a) Post Office Monthly Income Scheme b) Post Office Time Deposits (POTD) and c) Post Office Recurring Deposit Scheme. Detailed features of these schemes have been discussed in Chapter 6.

Kisan Vikas Patra (KVP)

The KVP can be purchased by an adult for self or by an adult for a minor investor. It can be purchased from any departmental post office or bank through cash, local cheque or demand draft. Detailed features of these schemes have been discussed in Chapter 6.

Sukanya Samriddhi Account

The Sukanya Samriddhi Account is a scheme launched for the benefit of girl children. The account will be opened in the name of the girl child by a natural or legal guardian. The account is opened with an authorized list of banks including SBI, Axis bank, ICICI bank, Canara bank, and others. Only one account can be opened in the name of a child and a guardian can open a maximum of two accounts in the name of two different girl children. The age of the child cannot be more than 10 years at the time of opening the account. The minimum investment in the account is Rs. 1000 in a financial year and a maximum of Rs. 1,50,000. Investments can be made in a lump sum or in tranches. There is no limit on the number of deposits that can be made in a financial year in multiples of Rs.100. The account will mature on the completion of 21 years from the date of opening the account. Partial withdrawal, maximum up to 50 percent of balance standing at the end of the preceding financial year can be taken after account holder's attaining age of 18 years. The account will stand closed if the girl child gets married before the completion of the 21 year tenure. Any amount deposited in the account is eligible for deduction under section 80C of the Income Tax Act.

Sovereign Gold Bond Scheme, 2015

The Sovereign Gold Bond Scheme (SGB) was launched in 2015 to provide an alternative way for investors to take exposure to gold as an investment. SGBs are government securities denominated in grams of gold. The bonds are issued in denomination of one gram of gold and in multiples thereof. The tenor of the bond is 8 years. On maturity the value of the bond may be higher or lower depending upon the prevailing price of gold. The tranche of the bond

issued in July, 2017 bears an interest of 2.50 percent per annum on the initial investment. The interest will be paid semi-annually to the account of the bond holder. The bonds can be held in physical form or in dematerialized form. The minimum investment is 1gms and the maximum is 4 kg for individual investor for each fiscal year. The interest on Gold Bonds shall be taxable as per the provision of Income Tax Act, 1961 and the capital gains tax shall also remain same as in the case of physical gold. Joint holding, nomination, limited early withdrawals and the facility of marking lien is available on these bonds.

Gold Monetisation Scheme, 2015

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

2.10.5 National Pension System (NPS)

The NPS is a defined contribution scheme introduced in January 2004 for Central Government employees joining services on or after January 1, 2004. Most of the State Governments have also notified NPS for their employees joining services on or after the date as notified. It was subsequently made available to all citizens w.e.f May 1, 2009 on a voluntary basis. The NPS account can be opened by any Indian citizen not less than 18 years of age and not more than 70 years of age. The contributions made by an individual to the fund are managed to create a retirement corpus.

The NPS is a contributory pension system where the subscriber contributes to the fund over their working life and at retirement draw the corpus so created to buy an annuity that will provide regular income in retirement. The details about the NPS are discussed in Chapter 4.

Atal Pension Yojana (APY)

The APY is a scheme of the Government of India to provide the security of a pension for persons in the unorganized sector. Citizens of India between the age of 18 years and 40 years can join the scheme. The APY account is a bank account linked scheme where the fixed contribution, which is based on the amount of pension chosen and the age of joining of the subscriber, is auto-debited. They must have a bank account through which the contributions will be routed. The subscriber has to decide the monthly pension they need (between Rs.1000-Rs.5000). The contribution they have to make will depend upon the pension required and the age of joining. The earlier the age of joining, the lower will be the contribution required. For example, to receive a pension of Rs.5000, a person who joins at age 18 will make a monthly contribution of Rs.210 while a person who joins at age 35 will contribute Rs.902.

2.10.6 Pradhan Mantri Vaya Vandana Yojana

The Pradhan Mantri Vaya Vandana Yojana (PMVVY) is a scheme launched by the Government of India to provide pension for citizens who have completed 60 years of age. The scheme is operated by LIC of India. Detailed features of these schemes have been discussed in Chapter 6.

2.10.7 Annuity

An annuity is special type of insurance contract under which a corpus sum is created either as a lump sum or in instalments over a period of time, in return for which the insurance company undertakes to make a periodic payment to the purchaser of the annuity. Detailed discussion about annuity is done in Chapter 6.

2.10.8 Investment linked Insurance Products Investment-based Life Insurance Products

Life insurance products may combine insurance and investment both on the traditional platform and the unit-linked products. These are not pure insurance products since they provide a maturity benefit to the policy holders.

Endowment Policies

Endowment is a level premium plan with a savings feature. At maturity a lump sum is paid out, equal to the sum assured plus any accrued bonus. If death occurs during the term of the policy, then the sum assured and any bonus accrued are paid out. They may be participating (with profits) or non-participating (no profits) policies. The benefits are enhanced by guaranteed and reversionary bonus that is declared on policies. **Money Back Insurance Policies** are a type of endowment policies that covers life and also assures the return of a certain percent of the sum assured as cash payment at regular intervals. Since this is generally a participating plan the sum assured is paid along with the accrued bonuses. The rate of return on the policies is quite low.

Whole Life insurance policies

Whole Life insurance provides life insurance cover for the entire life of the insured person or up to a specified age. Premium paid is fixed through the entire period. The primary advantages of whole life policies are guaranteed death benefits; guaranteed cash values, fixed and known annual premiums. Whole Life insurance is mainly devised to create an estate for the heirs of the policy holders.

Variable Insurance Products (VIP)

Variable Insurance Products are products that combine insurance and investment. The premium paid will have a component for risk cover and another portion which is the investment component (after accounting for expenses) which is credited to a policy account. Each policy will have a policy account and it will hold the accruals due to the policy. All VIPs will define a minimum floor rate of return for the policy. Additional return, over and above the floor rate may be linked to the performance of an index or benchmark or in the form of bonus in case of participating policies or additional interest in case of non-participating policies. The minimum policy term is five years and policies have a lock-in period of three years.

Unit Linked Insurance Plans (ULIP)

ULIP invest the investment portion of the premium money in various proportions in the equity and debt markets through funds chosen by the investor. The returns on ULIPs are linked to the performances of the markets. Each fund has its own risk and return profile based on the asset class that the fund has invested in. Investors are also given the option to switch between funds.

ULIPs may offer a single premium option where a lump sum premium is paid once. They may also feature limited premium payment period where the premium is paid only for a portion of the term of the policy. The sum assured will be a multiple of the annual premium. In a unitlinked plan investors also have the option to make additional premium payments in the form of 'top-ups' which again gets invested in the funds after the mandatory assignment to risk cover.

At the time of maturity of the plan, the policy holder will receive the value of the fund as on that date. In the event the policy holder dies during the term of the policy, the beneficiary will receive either the sum assured, the higher of the fund value and the sum assured or the sum assured and the value of the fund, depending on the terms of the policy.

2.10.9 Mutual Funds

Mutual funds are investment products available to investors through which they can invest in an asset class of their choice such as equity, debt, gold or real estate. Each product offered by a mutual fund is called a scheme or fund. A mutual fund may offer multiple schemes or funds, each catering to a different investment need of the investor.

- Investors in mutual funds get the services of a professional fund manager to manage their investment activities such as evaluating and selecting securities, creating and managing the portfolio, and reviewing and rebalancing the portfolio based on the performance of the portfolio.
- Some securities may not be available for investment by retail investors. There are bonds and equity shares that are placed to institutional investors only. Mutual funds provide access to investors to such securities through their portfolio.
- Mutual funds offer tax advantage to investors on returns earned by the portfolio. The income and capital gains earned by a mutual fund scheme from the portfolio of securities is exempt from tax.
- Mutual funds allow investors to participate in a diversified portfolio even with a small investment.
- It gives investors the flexibility to structure the investment (Lump sum or periodic) and returns (dividends or appreciation) to suit each investors' need from the investment.
- Mutual fund investment simplifies the process and costs of investing and holding securities.

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

Mutual fund units are first offered to investors during the New Fund Offer (NFO). A closedend fund does not allow further subscription directly from the mutual fund after the NFO. Investors can buy additional units from other investors on the stock exchange where the scheme is listed. Open ended scheme allows investors to subscribe to additional units post NFO directly from the mutual fund at current prices. Interval funds offer additional units to the investors at pre-fixed intervals. Investment in mutual funds can be done in a lump sum or in periodic instalments called systematic investment plans (SIP). Redemption of funds from closed-ended funds can be done only on completion of the tenor of the fund. Open-ended funds allow investors to withdraw at any time at current NAV. Withdrawals can be done to the extent required and in a lump sum or in periodic instalments.

The investor's holding in a mutual fund is denoted in units. The value of each unit, called the Net Asset Value (NAV) will reflect the value of the securities held by the scheme after

adjusting for permissible costs. Mutual funds can be categorized based on asset class in which the pooled funds are invested. The risks and returns from the mutual fund will depend upon the asset class in which the funds are invested and the strategies used to manage the portfolio.

Equity Funds

Equity funds invest predominantly in a diversified portfolio of equity instruments. The fund earns returns from the dividends declared by the stocks held in the portfolio and from the appreciation (or depreciation) in the value of these securities. These funds can be further classified based on the type of securities included in the portfolio. This may be on the basis of the market capitalization of the stocks (Large, Mid and Small). Funds that invest in large cap stocks are seen to have stable returns with lower risk of volatility. Mid and small cap stock funds generate better returns when markets are in an upturn, but they tend to be more volatile in their returns. Some funds may choose to invest in a particular sector or theme. They do well if the economic factors support the theme or industry but also suffer from the risks of limited diversification. Some funds may follow the strategy of investing in a concentrated portfolio. The fund will outdo the market indices if the selected stocks perform as expected. But they also stand the risk of losing heavily if the selections prove wrong. Other strategies include identifying companies whose performance is expected to turnaround and whose stocks are valued low in the market, or investing in stocks whose growth is expected to be higher than that of the market. Index funds replicate an identified equity fund index, say the Sensex or the NIFTY50. The portfolio will have the same shares that constitute the index and in weightage as each security has in the market index. The returns from an index fund closely tracks the returns from the index it is based on. Some equity funds are designated to provide tax benefits for the investor.

Debt Funds

Debt funds invest in debt securities issued by the central and state governments, companies, financial institutions, banks and others. The fund's return is primarily from the interest income earned on the securities. Depending upon the type of securities held in the portfolio, the returns can also have a component of appreciation (or depreciation) in the value of securities. The primary risks in debt funds is that of credit risk, i.e. the risk of default by the issuers of debt securities. This puts the interest income and repayment of principal invested at risk. Debt instruments may also see a change in prices or values in response to changes in interest rates in the market. The degree of change depends upon the duration of the debt instrument and instruments with longer duration exhibit a higher sensitivity to interest rate changes. Fund managers make choices on higher credit risk for higher coupon income and higher interest rate risk for higher capital gains depending upon the nature of the fund and their evaluation of the issuer and macro-economic factors.

Debt funds can be categorized based on the type of securities they hold in the portfolio. Short term debt funds invest in debt instruments with low tenors to earn interest income and

eliminate or reduce volatility in values. Overnight funds invest in securities with tenor not exceeding one day while **Liquid funds** invest in securities with tenor not exceeding 91 days to maturity. These funds are suitable for short-term parking of funds and seek to provide safety of principal and superior liquidity. **Ultra short-term funds**. invest in money market and other short term securities of duration between 3 months and six months. Low duration funds invest in securities with duration between six months and 12 months and money market funds invest in securities with duration not exceeding 1 year. The objective is to generate a steady return, mostly coming from accrual of interest income, with minimal NAV volatility. **Short Duration Funds** invest in securities with maturities between 1-3 years. Short duration funds earn interest from short term securities and interest and capital gains from longer term securities. The volatility in returns is directly related to the proportion of long tenor securities held in the portfolio.

Long term debt funds are structured to generate total returns made up of both interest income and capital appreciation from the securities held. Since market interest rates and value of a bond are inversely related, any fall in the interest rates causes a mark-to-market gain in a bond portfolio and vice versa. The extent of change in market prices of debt securities is linked to the average tenor of the portfolio- higher the tenor, greater the impact of changes in interest rates. Medium duration funds invest in securities with duration between 3-4 years, medium to long duration funds invest in securities with duration between 4-7 years and long duration funds invest in portfolio with duration greater than 7 years. Dynamic bond funds invest across duration depending upon the fund manager's view on interest rate movements. If the manager believes that interest rates could move up, the duration of the portfolio is reduced and vice versa. A Corporate Bond fund is a debt fund which invests at least 80% of its portfolio in debt securities of the corporate sector. Credit Risk funds invests in securities with less than the highest credit rating. Gilt funds invest in government securities in which there is no risk of default and liquidity is considerably higher. However, prices of government securities are very sensitive to interest rate changes. Long term gilt funds have a longer maturity and therefore, higher interest rate risk. Floating rate funds invest primarily in floating rate debt instruments where the coupon rate periodically moves up or down with reference to the market rate. Since the coupon of the bond will be in line with the market rates, there is low interest rate risk in the bonds. Target maturity funds are a category of openended debt funds that hold the debt securities in the portfolio to maturity and thus protect investors who hold the units to maturity from interest rate risk. Fixed maturity plans (FMPs) are closedend funds that invest in debt securities with maturities that match the term of the scheme. An FMP structure eliminates the interest rate risk or price risk for investors if the fund is held passively until maturity. Therefore, even if the price of bonds held in the portfolio moves up or down, as long as the fund receives the interest pay-outs and the original investment on maturity, the FMP does not suffer significant risks.

Hybrid Funds

Hybrid funds invest in a combination of debt and equity securities. The allocation to each of these asset classes will depend upon the investment objective of the scheme. The risk and

return in the scheme will depend upon the allocation to equity and debt and how they are managed. A higher allocation to equity instruments will increase the risk and the expected returns from the portfolio. Similarly, for generating income if the debt instruments held are short term in nature, then the extent of risk is lower than if the portfolio holds long-term debt instruments that show greater volatility in prices. Conservative hybrids invest minimum of 75 to 90 percent in a debt portfolio and 10% to 25% in equity securities. The debt component is conservatively managed with the focus on generating regular income, which is generally paid out in the form of periodic dividend. The allocation to equity is kept low and primarily in large cap stocks, to enable a small increase in return, without the high risk of fluctuation in NAV. Aggressive hybrids invest 65%-80% in the equity market, but invest 20% to 35 percent in debt, so that some income is also generated and there is stability to the returns from the fund. Balanced funds are designed as equity-oriented funds. Balanced hybrid funds typically have an asset allocation of 40% to 60% in equity, and 40% -60% in debt. Dynamic Asset Allocation Funds invest in both equity and debt and the allocation is managed dynamically. Multi-Asset Allocation Funds invest in atleast 3 asset classes with a minimum 10% allocation to each asset class. Arbitrage funds follow an arbitrage strategy with a minimum of 65% in equity and related instruments. Equity savings funds invests a minimum of 65% in equity and related instruments and a minimum of 10% of total assets in debt.

Solution-Oriented Funds: Retirement Fund and Children's fund are schemes designed to meet the captioned need and have a lock-in of 5 years.

Other Funds

A **Fund of Funds (FoF)** is a mutual fund that invests in units of other mutual funds that fit into its investment objective. It specialises in analyzing funds, their performance and strategy and adds or removes funds based on such analysis.

Exchange Traded Funds (ETFs) hold a portfolio of securities that replicates an index and are listed and traded on the stock exchange. The return and risk on ETF is directly related to the underlying index or asset. The expense ratio of an ETF is similar to that of an index fund. ETFs are first offered in a New Fund Offer (NFO) like all mutual funds. Units are credited to demat account of investors and ETF is listed on the stock exchange. On-going purchase and sale is done on the stock exchange through trading portals or stock brokers. Settlement is like a stock trade, and debit or credit is done through the demat account. ETF prices are real-time and known at the time of the transaction, unlike NAV which is computed end of a business day. Their value changes on a real-time basis along with changes in the underlying index.

Gold ETFs have gold as the underlying asset so as to provide investment returns that, closely track the performance of domestic prices of gold. Each ETF unit typically represents one gram of gold. For every unit of ETF issued, the fund holds gold in the form of physical gold of 99.5 percent purity or gold receipts. They are also allowed to invest in the gold deposit schemes of banks to a limit of 20 percent of the net assets of the scheme. The custodian of the fund is responsible for the safekeeping of the assets. The actual returns from gold ETF may be lower

than market returns due to the effect of fund management expense charged and cash holdings.

International funds invest in markets outside India, by holding certain eligible foreign securities including equity shares of companies listed abroad, ADRs and GDRs of Indian companies, debt of companies listed abroad, ETFs of other countries, units of index funds in other countries, units of actively managed mutual funds in other countries. International equity funds may also hold some of their portfolios in Indian equity or debt. It provides diversification from exposure to global markets and the benefit of investing in asset classes not available domestically.

Arbitrage funds aim at taking advantage of the price differential between the cash and the derivatives markets. Funds buy in the spot market and sell in the derivatives market, to earn the interest rate differential. For example, funds may buy equity shares in the cash market at Rs. 80 and simultaneously sell in the futures market at Rs. 100, to make a gain of Rs. 20. If the interest rate differential is higher than the cost of borrowing there is a profit to be made. In case of mutual funds, there is no cost of borrowing. The price differential between spot and futures is locked in if positions are held until expiry of the derivative cycle. On settlement date both positions are closed at the same price, to realize the difference. A completely hedged position makes these funds a low-risk investment proposition. They feature lower volatility in NAV, similar to that of a liquid fund.

Real Estate Mutual Funds invest in real estate either in the form of physical property or in the form of securities of companies engaged in the real estate business. SEBI's regulations require that at least 35 percent of the portfolio should be held in physical assets. Securities that these funds can invest into include mortgage-backed securities and debt issuances of companies engaged in real estate projects. Not less than 75 percent of the net assets of the scheme shall be in physical assets and such securities. Assets held by the fund will be valued every 90 days by two valuers accredited by a credit rating agency. Real Estate Investment Trusts (REIT) are trusts registered with SEBI that invest in commercial real estate assets. The REIT will raise funds through an initial offer and subsequently through follow-on offers, rights issue and institutional placements. The minimum subscription amount in an initial offer shall be Rs. 50,000. The units will be listed on the stock exchange. Not less than 80 percent of the value of the REIT assets will be in completed and rent generating properties and not more than 20 percent shall be in under-construction properties, listed or unlisted debt securities, equity shares of real estate companies, government securities, mortgage backed securities and money market instruments. A full valuation of the assets shall be done each year and shall be updated every six months. The NAV will be declared within 15 days of such valuation/updation. Not less than 90 percent of the net distributable cash flows of the REIT will be distributed to the investors' atleast on a half-yearly basis.

Mutual funds offer investment options for each scheme that define how the investor will take the returns from the investment. Most mutual funds offer a dividend option and growth option. The dividend option implies that the funds will pay-out the returns generated in the form of periodic dividends. There is a dividend re-investment option too where the dividend declared is not paid out but re-invested in the scheme. The NAV of the scheme will fall to the extent of the dividend that is paid out of its net assets. In the growth option, the returns generated is retained in the scheme and translates into an appreciation in the NAV, and hence the value of the investment. The investor can realize this appreciation at any time by redeeming the units.

The tax impact of the returns earned by an investor from the mutual fund investment will depend upon the type of scheme-equity-oriented or debt-oriented, nature of returnsdividends or capital gains and the period of holding- not more than one year/three years and more than one year/three years. The returns are taxed when they are realized and received by the investor.

2.10.10 Real Estate

Investment in physical real estate are typically large ticket investments made with a combination of own funds and loans. The self-occupied house will very often form a large part of the financial commitment of the individual, especially in the early earning years. A selfoccupied property has limited use as a tool for wealth creation for retirement because it cannot be sold and neither can it generate income. The reverse mortgage scheme which is discussed in chapter 6, is one way of generating income from self-occupied property. Real estate investments not acquired for self-occupation, contributes both growth and income to a portfolio in the form of rental income and capital appreciation. In India the gain in the value of the property constitutes a greater portion of the return on investment from real estate. Rental incomes are a hedge against inflation, as rentals rise with inflation. Real estate investments are categorized on the basis of use, such as residential property and commercial property. Other classifications include those based on the stage of construction, such as prelaunch, post-launch and linked to the stages of construction. The primary risks in real estate is in the form of volatility in prices as a result of impact of business cycles on demand and supply. The returns from property, whether in the form of rentals or capital appreciation, depends upon the location. Liquidity risks are high in real estate since selling the property at the perceived right price takes time. Determining the right value is also subjective, given the variations in property on account of factors like location attributes, age, type and quality of construction, among others. Other risks include vacancy risk, especially in commercial properties and risk of non-delivery or default, particularly seen in investments made in the pre-launch stage.

Investment in real estate can also be done through collective investment vehicles like Mutual funds, Investment trusts and Private Equity Funds.

Sample Questions

1. Which of the following is true about retirement goal?

- a. It has to be built out of owned funds
- b. It requires a large corpus
- c. It is long term in nature
- d. All of the above

2. Which of the following is a sub-asset class under equity?

- a. Large cap Equity
- b. Total return stocks
- c. Low risk stocks
- d. Volatile stocks

3. Which of the following asset classes' returns are only from the appreciation in price?

- a. Real Estate
- b. Equity
- c. Bonds
- d. Gold

4. Which of the following is essential for efficient investing in equity?

- a. Large investment amount
- b. Ability to time the entry and exit into the market
- c. Long investment horizon
- d. Short investment horizon

CHAPTER 3: RETIREMENT PLANNING

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- The stages in retirement and the factors that affect savings and investment in each stage
- Calculating the retirement corpus, and the impact of changes in the inputs on the savings target and final corpus
- Activities in the accumulation and distribution stage to give effect to the plan
- The risks to the plan and how to manage it

Retirement planning is the process of putting in place the roadmap for retirement. A big part of the retirement plan is the financial aspect of how the retirement will be funded. The life style envisaged will define the expenses and income required in retirement, which in turn will set the goal for retirement savings. Planning for retirement is about linking the current financial situation with the expectations for the future and having a strategy in place to secure the financial future.

3.1 Evaluate Client's Current Situation

Understanding the current financial situation of the individual is vital in framing a viable retirement plan. This includes personal factors such as age, dependents, health history; financial details such as the level of income and expenses, assets and liabilities, other financial goals, retirement benefits that are available, risk tolerance levels and investment horizon.

All this information is evaluated to understand the elements that are central to planning for retirement savings including the ability to save, the investment horizon available to accumulate the savings, the risk tolerance levels that will determine the types of investments that can be used and the accumulated wealth available that can be apportioned to the retirement goal.

The retirement plan will seek to fuse the expectations for retirement with what is realistically possible given the personal and financial situation of the individual.

3.1.1 Lifecycles and its Impact on Saving and Investing for Retirement

Financial needs and financial compulsions vary not only across individuals but also across time periods for each individual. They vary depending upon the financial circumstances at the age and stage in life. The income and expenses, debt levels, ability to take risks and goal priorities are all dynamic. For example, debt repayment may take a large portion of the income in the early and mid-earning years, but are not so significant later in life. The availability of an

emergency fund to tide over unexpected short-falls in income is critical for the young earner with a dependent family, but not so important for a retired investor. One way to be able to incorporate the demographic and economic factors specific to each stage of life into the planning process is to consider the life cycle of the individual. This takes into consideration the financial and personal circumstances at that stage. For effective financial planning it is important to incorporate the lifecycle into the planning framework. Despite the uniqueness of each individual's situation there are some commonalities of the typical situations that individuals go through in each stage of the lifecycle and which affects the income, expenses and savings. The common stages are:

Young Earner: At this stage income is not very high and just about adequate to meet expenses. Creating an emergency or reserve fund to manage any possible loss or reduction in income should have first claim on savings. Any mandatory savings, such as provident fund deductions from income, should be assigned to long term goals such as retirement. While long-term goals like retirement exist, at this stage priority is given to short and medium- term consumption goals like buying a motor vehicle and lifestyle goods. There is a risk of falling into debt to meet consumption demands or even essential expenses in case of loss of income. Repayment of debt, such as educational loans and consumption loans, becomes a strain on income for a long time. Flexibility in making investments to align to income conditions is important for investors at this stage. Being tied to a long-term commitment, such as a home loan EMI, when income stability is not there can be risky to the investor. A suitable portfolio allocation will have to consider holding an emergency fund in safe and liquid short-term investments. Savings assigned to long term goals should be invested in growth assets like equity. The allocation to growth assets should move up as there is greater stability to income.

Young Family: At this stage household income is likely to be stable, though still not very high relative to the expenses that have to be met. Expenses are mainly discretionary expenses for a lifestyle they aspire to live. Debt may still be a concern and taking a big portion of income to service, especially if the family has bought a home. At this stage the young family will have protection as a priority. This will be primarily in the form of insurance and emergency fund. The amount of savings available after meeting all these essential claims will be limited, but whatever is available can be invested in asset classes capable of earning higher returns albeit with higher risk. Plan ahead for changes, such as moving from a double income to single income family or moving to being self-employed, that may disrupt income flows. Thus, at this stage it is essential to ensure that there are adequate savings to tide over the needs till income and expenses stabilize. An allocation of 60 percent to 70 percent in growth assets such as equity to meet long term goals is advisable at this stage.

Middle Earning Years: This is typically the peak earning years and income levels at this stage are high and stable. Expenses are likely to have stabilized too leading to higher savings. Debt levels are likely to be steady and easily serviced out of available income. Some goals, such as the education of children, may be close and require moving funds to less volatile investments. Other goals, like retirement, may still be 15-20 years away and still eligible for growth-

oriented investments. This stage is a good time to catch up on all the shortfall in retirement savings by apportioning larger portions of available savings to it. There is greater clarity on life style preferences, interests and health issues, all of which are important for firming up the retirement plans. Portfolios at this stage can see 50 percent to 60 percent in growth assets with a plan to systematically reduce exposure as goals come closer.

Pre-retirement: Preservation of assets is critical at this stage as earning years are coming to an end soon. While contribution to retirement will continue, this is the stage to move accumulated investments to less risky investments. Paying off any remaining debt and refraining from taking on any long-term obligations is important at this point. This is the stage when the distribution or income strategy for retirement should be finalized and there is likely to be more clarity on the length of retirement period. The portfolio should be in lower risk income-oriented assets such as income funds and deposits, with some exposure to growth. Around 60 to 70 percent of the portfolio should be allocated in lower risk products at this stage.

Retirement: At this stage the level of expenses in retirement is known and the decision on how to fund them has to be decided. This will be from any employer-linked pension, the income generated from the corpus accumulated, part-time employment or a combination of the different sources. While deciding on investing for income, the tax implications, need for assurance and risk levels have to be considered. Care should also be taken to invest some portion of the corpus in growth assets to beat inflation. The portfolio should be predominantly income-oriented, with not more than 25 percent to 30 percent in growth assets.

3.1.2 Budget to Realize Savings

The age and stage of life gives an understanding of the ability to save and the risk profile of the individual. Budgeting is an effective way to realize the potential to save. The steps in budgeting are the following:

- 1. List the regular income that is expected in the month. This is the income available to meet current and future needs.
- 2. List the mandatory expenses that have to be met like taxes, loan repayments. These have to be first met out of the available income. What remains is the disposable income.
- 3. The essential living expenses have to be met out of disposable income next. These include housing, food, transportation, health and other necessary expenses. While this category of expenses cannot be eliminated, it is possible to reduce the cost incurred on them.
- 4. Discretionary expenses are the last category of expenses and includes expenses on entertainment and recreation.

Savings is what remains from the income after meeting all these expenses. There should be a target to generate a pre-defined amount of savings each period. The savings required will depend upon the identified goals of each individual. Ad hoc or irregular savings does not serve the purpose of creating the corpus required to meet the goals. One way to reach the targeted savings is to expand income by taking on additional income earning opportunities. But the extent to which income can be increased is limited by skills and availability of time to take up additional employment. Controlling expenses is a more effective way to generate savings. It is possible to rationalize essential living expenses by choosing a less expensive place to live or a cheaper mode of transport and so on. The discretionary expenses is in the category of expenses that can be cut back or even eliminated to reach the savings required.

A budget helps put income and expenses in perspective. But to be workable, a budget needs to be realistic. Very narrow allocations to expenses or eliminating all expenses related to an individual's interests or hobbies can be stressful and likely to fail.

The savings ratio, or the savings relative to income, should ideally rise over time as an individual moves from one stage in the life cycle to the next and as the level of income and expenses change. Similarly, expense ratio should ideally move down to indicate that the household is saving more. The debt to income ratio measures the extent of income that goes towards servicing debt. This will peak when a large loan such as the home loan is taken and then move down as income goes up over time. These ratios give an indication of whether the household is managing income and expenses as they should to reach their goals. If not, changes need to be made in the budget to get savings back on track.

3.2 Learn the Process of Setting the Retirement Goal

The retirement goal has certain features that are unique to it. It is the goal with the longest accumulation and distribution periods and requires the largest corpus.⁴ Though the income required to meet expenses in retirement can be defined with certainty only close to the time of transition to retirement, the accumulation of the corpus has to be done from the beginning of an individual's working years. There are many variables in estimating the goal and these variables are likely to change multiple times given the long periods associated with the goal. It becomes important therefore for there to be an adequate rigour in determining the variables that affect the retirement goal and periodic monitoring to incorporate changes, if any, into the goal.

The process of determining the retirement goal is about defining the income that will be required to meet living expenses in the period when there is no income being earned from employment. Once this is done, then the planning process deals with how to accumulate the corpus required, and use this corpus to generate the income.

⁴ The accumulation stage is the stage in which the saving and investment for the retirement corpus is made. The distribution stage of retirement is when the corpus created in the accumulation stage is employed to generate the income required to meet expenses in retirement.

3.2.1 Expenses in Retirement

The first step in retirement planning process is to determine the expenses that have to be met in retirement. The expense in retirement is unlikely to be the same as prior to retirement. The level of expense may go down in some categories like transportation and personal upkeep, while it may go up in other categories such as leisure and health. Even in the retirement period the expense profile is likely to undergo change over time. The categories of expense heads during the retirement phase includes housing (including utilities, maintenance cost, taxes), living expenses (food and personal upkeep), medical care, transportation, recreational expenses and insurance (life, health, disability) and taxes. A retirement expense list may have all or some of these expenses (see Table: 3.1).

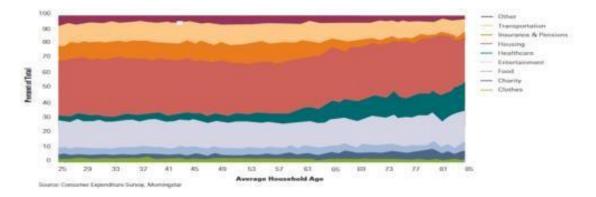
Expense Head	Amount (Rs.)
Housing	
Mortgage/Rent	
Property tax	
Home insurance	
Electricity	
Water	
Telephone & Communication	
Maintenance costs	
Miscellaneous	
Total	
Living Expenses	
Food	
Clothing	
Personal expenses	
Miscellaneous	
Total	
Medical Expenses	
Health insurance	

Table: 3.1 Retirement Expenses List

Expense Head	Amount (Rs.)
Long-term care	
Medical costs	
Miscellaneous	
Total	
Transportation	
Auto loan	
Fuel	
Maintenance costs	
Motor insurance	
Total	
Recreational Expenses	
Interests & Hobbies	
Entertainment	
Travelling	
Social activities	
Miscellaneous	
Total	
Total Expenses	

Ideally, mortgages and other large debt obligations should be paid off before retirement. Renting is an option instead of buying a home and may provide greater flexibility in deciding on where to live in retirement. However, it may bring in an element of uncertainty on housing costs and availability, which may be difficult to deal with later on in retirement. The expense profile of an individual against their age is graphically represented below (see Chart 3.1).

Chart 3.1: Changing Expenditures over Time



3.2.2 Determine Income Requirement in Retirement

Income Replacement Method

Income replacement ratio is calculated as gross income after retirement/gross income before retirement.

The income replacement ratio is the percentage of the income just before retirement that will be required by an individual to maintain the desired standard of living in retirement. While the categories of expenses may remain the same in retirement, the contribution to total expenses may be different from working years. For example, medical and health care expenses is likely to be a big component in later years of retirement as compared to working years and even the initial years of retirement. Transportation and tax outgo is likely to be lower in retirement years while recreational expenses may be higher in retirement years. Expenses incurred towards children's education is typically not there in retirement. The portion of income that was going towards necessary savings in the pre-retirement stage will now no longer be required.

Usually 70 percent to 90 percent of the income before retirement is required to maintain the lifestyle of the individual after retirement. However, this number may be lower if a large part of the pre-retirement income was going into savings. This is very likely the case with many individuals who hit a phase of high income in their early 50s, and with much of the large-ticket expenses already taken care of a large portion of the income may go into savings. In such a case, the income replacement ratio is likely to be much lower since the saving and probably tax component would account for a large part of the pre-retirement income.

In the initial years of planning, when there is less clarity on the future income, it is more convenient to go with thumb rules to determine the needs in retirement. But as the income and expense situation becomes clearer, especially in the last 5-10 years before retirement, it is best to consider the particular situation of each individual while determining the income replacement ratio. The income replacement method is simple to follow and useful to set a target for savings when retirement is some time away. But like all rules of thumb it does not take individual circumstances into consideration. For example, assuming that expenses in retirement will automatically go down may be erroneous.

The steps for estimating the income required in retirement under this method are:

- Calculate the current income.
- Estimate the rate at which the income is expected to grow over the years to retirement.
- Calculate the years to retirement.
- Calculate the income at the time of retirement as Current value x(1+ rate of growth)^(Years to retirement).
- Apply the income replacement ratio to this income to arrive at the income required in retirement.

Example

Pradeep has a current annual income of Rs. 10,00,000. He is 30 years of age and expects to retire at the age of 55. He also expects his income to grow at a rate of 10 percent and estimates that he will require an income replacement of 75 percent. What is the income required by Pradeep in retirement?

Current Annual Income (Rs.)	1000000	Formula
Age	30	
Retirement age	55	
Years to Retirement	25	55-30
Annual Rate of Growth in Income	10 percent	
		1000000*(1+10percent)^2
Income at the time of Retirement	1,08,34,706	5
Income Replacement Ratio	75 percent	
Annual Income required in Retirement	81,26,029	10834706*75percent

Expense Protection Method

In the expense protection method, the focus is on identifying and estimating the expenses likely to be incurred in the retirement years and providing for it. Typically, the expenses required by the person in retirement is taken as a percentage of the expenses of that person just before retirement – the assumption being that one's post retirement expenses will not include certain expenses such as transport, home loan EMI. On the other hand, the expenses incurred on other heads such as health, is likely to be higher.

Expense Protection is a slightly cumbersome method due to the detailed listing required of expenses incurred post-retirement. Estimating this wrongly may make the determination of retirement corpus inaccurate. The process involves preparing a list of pre and post-retirement

expenses, and arriving at the total expense list. The expense so calculated has to be adjusted for inflation over the period of time left to retirement to arrive at the expense in retirement.

If expenses are overlooked or underestimated there is a risk of overspending in retirement since the income required would be calculated lower than what is actually required.

Example

Pradeep has a monthly expense of Rs. 50,000 of which 60percent is for household expenses. He is 30 years old and expects to retire at the age of 55. He expects to incur additional expenses of Rs. 10,000 pm at current prices for discretionary expenses in retirement. If inflation is seen at 6percent, what is the expense that has to be met by retirement income?

Expenses		Formula
Current monthly expense (Rs.)	50000	
Proportion of household expenses	60 percent	
Current household expenses (Rs.)	30000	60 percent of Rs.50000
Additional discretionary expense in retirement (Rs.)	10000	
Total retirement expenses at current prices (Rs.)	40000	
Time to retirement (years)	25	Retirement age(55) – Current age(30)
Expected rate of inflation	6 percent	
Expense at the time of retirement (Rs.)	171675	40000 x (1+6percent)^25

3.2.3 Time Horizon

Time plays an important role in retirement planning. The time periods that are central to calculating the retirement corpus are:

1. Years to retirement: This is the period from the current point in time to the year of retirement. Another way to calculate it is as the period between current age and retirement age. With every passing year this period will reduce as long as the year/age of retirement has not changed. The years to retirement is important

to be able to determine the cost of expenses that have to be met in retirement. The effects of inflation on cost will depend on the years to retirement. Lower this number, lower will be the effect of inflation. This number is also important in the calculation of the periodic savings required to accumulate the corpus required to fund the expenses in retirement. Longer the period, greater will be compounding effects, and lower will be the allocation from savings required for the retirement.

2. Years in/during retirement: The years in/during retirement are the number of years from the beginning of retirement to the end of life for which an income has to be secured. This period cannot be defined precisely. However, life expectancy can be broadly estimated based on factors such as average life expectancy in the country for the specific gender, health conditions, genetic factors, lifestyle habits and so on. The years for which funding has to be provided will determine the corpus required. Underestimating the years, or longevity risk, will mean that there may not be enough money to last the retirement years.

3.2.4 Determining the Retirement Corpus

The income required in retirement can be estimated using either of the two methods described earlier. Once this has been done, the next step in retirement planning is to calculate the corpus that will generate the income required in retirement. The variables in this calculation are:

- The periodic income required
- The expected rate of inflation
- The rate of return expected to be generated by the corpus
- The period of retirement, i.e. the period for which income has to be provided by the corpus.

Impact of Inflation

Inflation is a general rise in prices of goods and services over a period of time. Over time, as the cost of goods and services increase, the value of one unit of money will go down and the same amount of money will not be able to purchase as much as it could have earlier i.e. last month or last year. Inflation eats away the purchasing power of money over time.

Inflation impacts retirement planning in two ways:

 At the time of calculating the income required, the value of the current expenses has to be adjusted for inflation to arrive at the cost of the expense at the time of retirement. For instance, if consumer goods prices rise 6percent a year over the next 30 years, items that cost Rs. 100 today would cost Rs. 179 in 10 years, Rs. 321 in 20 years and Rs. 574 in 30 years.

2. This figure is true for the beginning of the retirement period. Over the retirement years, the income required to meet the same level of expenses would not be constant

but would go up due to inflation. The corpus created to fund income during retirement will have to consider the escalation in cost of living during the period in which pension is drawn. In the previous example Rs. 1,71,675 is the monthly expense at the time of retirement. However, this will not remain the same throughout the retirement period but will increase over time, depending upon inflation. The increase in expenses has to be considered while calculating the retirement corpus else there is a risk of the retirement being under-funded. If you're planning to live on Rs. 60,000 a month at the start of retirement, a 6percent inflation rate means that in 10 years you would actually need Rs. 1,07,451 a month, and in 20 years you'd need Rs. 1,92,428 a month to cover the same expenses.

3. While the standard rate of inflation may be appropriate to calculate the future cost of living expenses, other expenses, such as health costs and travel, typically increase at a higher rate.

The Expected Rate of Return

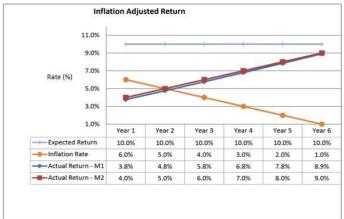
While estimating the corpus required to generate the retirement, it has to be kept in mind that this corpus will be invested to earn a return both at the time of accumulation and at the time of distribution, and this return will contribute towards the corpus that will be used to provide the income in retirement. The contribution that has to be made towards the retirement corpus from savings will be lower to the extent of the return generated. The size of the corpus that has to be in place at the start of retirement can be lower to the extent that these funds will generate a return through the retirement period. Higher the rate of return that the funds are expected to earn, lower will be the required corpus. However, a higher return will come with a higher risk. Investors may be willing to take higher risk in the accumulation period for higher return. But in the distribution stage of retirement the ability to take risk with the savings will be low.

The rate of inflation and the expected rate of return on investments act in opposite directions on the amount of retirement corpus required. While the rate of inflation pushes up the expenses and therefore the amount of retirement savings required to fund the income in retirement, the return that the corpus invested will generate will reduce the savings required. The real or effective rate of return that the investment will generate will then be the expected return adjusted for inflation.

Inflation adjusted rate or real rate of return is the periodic rate of return on an investment after adjustment for inflation.

Inflation - Adjusted Return $= \frac{(1 + \text{Return})}{(1 + \text{Inflation Rate})} - 1$

Chart 3.2: Inflation Adjusted Returns



Actual Return – Method 1 (see Chart 3.2): Calculation is done on the basis of discounting the investment return with the inflation rate (using the formula above).

Actual Return – Method 2 (see Chart 3.2): Calculation is done by simply subtracting the inflation from the expected return.

For example, if the rate of return on a bank fixed deposit is 8 percent p.a. and the current inflation rate is 6 percent p.a., calculate the real rate of return on the bank FD.

Here, nominal rate of return is 1.89 percent p.a., using Method M1 and we arrive at a real rate of return of 2 percent p.a using Method M2.

Calculation of Retirement Corpus Example

Rani requires a monthly income of Rs.35,000 by today's value for her retirement 25 years away at the age of 60. She expects to live up to 80 years. What is the retirement corpus required if the banks deposit into which she will invest her retirement savings is likely to yield 8 percent and the rate of inflation is 6 percent?

There are two stages to calculating the retirement corpus: in the first step the income required to meet expenses at retirement should be calculated and in the next step the corpus that will generate this income has to be computed.

Step 1: Calculation of income at retirement

Parameters		Formula
Income required at current value (Rs.)	35000	
Time to retirement (Years)	25	
Expected inflation	6percent	
Income required at retirement (Rs)	150215	35000 x (1+6percent)^25

Step 2: Calculation of retirement corpus

Parameters		Formula
Income required at retirement (Rs.)	150215	
Retirement Period	20	(80-60)
Rate of return on corpus	8percent	
Inflation rate	6percent	
Inflation adjusted rate of return	1.89percent	((1+8percent)/(1+6percent))-1

The retirement corpus can be calculated using the PV formula in excel (see Box 3.1). The inputs required are:

240

- Rate (inflation adjusted rate of return) : 1.89 percent/12
- Nper (retirement period in months)
- PMT (inflation adjusted monthly income at retirement) : Rs. 1,50,215
- Type (0 for payment at end of period and 1 for beginning): 1

The corpus required to generate a monthly income of Rs. 1,50,215 at the start of the retirement period of 20 years is Rs. 3,00,48,832.

Ca) 🖪 👦 - (el -) ±							Book	1 - Microso	oft Excel	
9	Home Insert	Page Layout	Formulas	Data	Review	View /	Acrobat				
Past	Cut Copy Format Painter Clipboard	Calibri B I U ~ F	• 11 • A 				irap Text erge & Cente				nditional Format matting ▼ as Table Styles
	PV 🔻	🍥 🗙 🖌 f 🗴	=PV(1.89%/1	12,240,1502	215,,,1)						
	A B	C	D	E	F	G	Н	1	J	K	L
1											
2		F	unction Argum	ients							<u>? ×</u>
3			PV								
4				Rate	1.89%/12		1	= 0.0015	75		
5	240,150215	,,1)		Nper	240			= 240			
6				Pmt	150215			= 150215	5		
7 8				Fv				= numb	er		
9				Туре	1			= 1			
10		L						, = -30048	021 04		
11		R	eturns the present	: value of an i	nvestment: t	he total amou	nt that a serie			orth now.	
12					Rate is t	he interest rai	te per period.	For example	. use 6%/4 fo	or quarterly pa	avments
13						6% APR.			, ,		
14											
15		F(ormula result = (\$;30,048,831. [,]	96)						
16					·				ОК	Car	
17		H	elp on this function	1							
18											
19											
20											

Box: 3.1: Calculating Present Value in Excel

The corpus of Rs. 30,048,832 will be invested at Rani's 60th year at a rate of 8percent to generate a monthly income of Rs. 1,50,215. The monthly income required will go up through the period of retirement as a result of inflation. But this has been taken care of while creating the corpus, since the calculation considered inflation adjusted return on investment. The income will be provided for 20 years required, after which the corpus will be exhausted.

3.2.5 Saving and Investment Plan to Create Retirement Corpus

Once the retirement saving required is estimated, it has to be created over the working years of the individual by setting in place a saving and investment plan. The amount of saving required will depend upon the corpus required, the time available to accumulate the savings and the return that will be generated by the investment avenue into which the savings being made will be channelized.

The retirement planning decisions taken have to be in conjunction with the other financial goals of the individual. Very often saving for immediate and urgent goals take precedence over long-term goals like saving for retirement. Given the importance of the goal it is recommended that atleast some savings, such as the mandatory deductions from salary, if

employed, or minimum voluntary savings, if self-employed, be assigned to retirement and allowed to compound and grow over time. The shortfall in the corpus should be made up as soon as the financial situation allows it, though the contributions have to now be larger to make up for lost time.

The investments into which the savings are channelized should reflect the risk profiling done for the investor as part of the financial planning exercise and the long investment horizon available in the accumulation stage of retirement.

Example

In the previous example, what is the monthly saving that Rani must make to create the retirement corpus if she expects a return of 12percent per annum on her investments?

The amount of monthly savings required can be calculated using the PMT function in excel (See Box 3.2). The inputs required are:

•	Rate (return on investment expected)	: 12percent/12
•	Nper (period in months available to create the corpus	: 300 months (25 x
	12) which is the period between now and retirement date)	
•	Future Value (retirement corpus required)	: Rs. 30,048,832
•	Type (0 for investment at end of month and 1 for beginning)	1

• Type (0 for investment at end of month and 1 for beginning)

Box 3.2: Calculating Monthly Savings using the PMT function in Excel

C:		• (°" •) ∓								Booki	L - Micros	oft Excel	
	Home	Insert	Page La	yout	Formulas	Data	Review	View	Acrobat				
Past	e Clipboar	y mat Painter	BI	- 1 <u>U</u> - [] Font	1 • A				Vrap Text 1erge & Cente				onditional For rmatting ← as Ta Styles
	PMT		• × •	<i>f</i> _x =P	MT(12%/1	2,300,,3	0048832,1)	-				X	
	А	В		С	D	E	F	G	н	1	J	К	L
1												-	
2				Fu	nction Arg	uments						1	
3				(PN	4T								
4						Rate	12%/12			0.01			
5),,30048832,	1)			Nper	300		= 1	= 300			
6						Pv				number			
7				_		Fv	00040000						
8				_									
9					Type 1 📧 = 1								
10										-15834.884			
11				Cali	culates the pa	ayment fo	r a loan based o						
12 13							Туре	is a logical v payment at	alue: payment the end of the	at the beginn period = 0 or	ing of the pe omitted	eriod = 1;	
14								paymone ac		ponod = 0 01	onnecodi		
15													
16				For	Formula result = (\$15,834.88)								
17				Hel	p on this fund	tion				ſ	ОК	Cance	al
18										_			
19													

The monthly savings required is Rs. 15,835. If this sum is invested at an annual rate of 12percent for 25 years, then the savings will compound to a value of Rs. 30,048,832, which is the retirement corpus required.

What will be the effect if Rani had 30 years to save for the same amount? The amount of monthly savings will come down to Rs. 8,512 since there is a longer period over which Rani can make contributions, and the money can be invested and grow to the corpus required.

Similarly, what will be the effect if Rani decides to invest in a lower yielding investment such as a bank fixed deposit that generates a return of 8percent? The monthly savings required will double to Rs. 31,387 to generate the same corpus since the funds saved will be earning at a lower level.

The monthly saving required is therefore a function of the corpus required, the period available for saving and the return that the investments will earn. Each individual makes a trade-off between these three factors depending upon their situation.

If Rani is unable to save Rs. 15,835 required each month, she can choose to postpone her retirement age to 65 instead of 60. This will give her an additional 5 years to contribute to the savings.

Income required at retirement will now be Rs.2,01,022 since inflation would have pushed up costs for another 5 years. The period of retirement is lower at 15 years. The retirement corpus required will be Rs. 31,535,237. The monthly savings required over a period of 30 years, now that Rani has postponed her retirement by five years, is Rs. 8,934.

Rani can reduce the monthly saving required if she invests in an investment giving a higher yield than the 12percent she has currently estimated. For example, if she invests in an instrument which gives her a 15percent yield, then instead of the Rs. 15,835 she needed to save, she now needs to save only Rs. 9150 each month over the 25 years to retirement. However, the higher return will come at a higher risk and Rani should be able to find investments that will generate the yield she requires at a level of risk that she is comfortable with. Making unrealistic estimations of the return that can be earned will result in the corpus growing at a lower than expected rate, and Rani finding that her retirement savings is not adequate when she is ready to retire.

Rani can also choose to reduce her income requirement in retirement so that the retirement corpus required will come down and therefore the savings that she has to make too will reduce. But while she may be able to cut down on her discretionary expenses in retirement, reducing her expected expenses unrealistically will mean that she may not be able to live comfortably and will probably find her retirement corpus inadequate. This is too big a risk to take in retirement and a better option for Rani would be to find additional ways to save during her earning years or to postpone her retirement.

3.2.6 Adjusting Savings Required for Existing Investments

The savings required to be made for accumulating the corpus should be adjusted for the existing investments that can be assigned to the goal. This would depend upon the suitability of the investment for the role. If there are many years to retirement, then growth investments like equity and real estate held may be assigned to the goal. The longer investment horizon will reduce the risks of short-term volatility in the returns in such investments. Lower risk debt investments may also be assigned to the goal. The steps in adjusting the targeted savings for existing investments are:

- 1. Select the investments to be assigned to the retirement goal
- 2. Calculate the years to retirement
- 3. Estimate the expected annual return from the investment
- 4. Calculate the future value of the investment
- 5. Deduct this value from the retirement corpus required at retirement to arrive at the amount for which periodic savings need to be made
- 6. Calculate the periodic savings required to accumulate this amount.

Example

Consider the earlier example where the corpus required for Rani to generate a monthly income of Rs. 1,50,215 at the start of the retirement of 20 years to begin 25 years hence is Rs. 3,00,48,832. The monthly savings required is Rs. 15,835 to accumulate the retirement corpus. Assume that Rani has investments in equity mutual funds currently worth Rs. 10,00,000 which she intends to assign to the retirement goal and the investment is expected to earn an average return of 12percent. How will the monthly savings be adjusted to reflect the same?

Step 1: Calculation of future value of equity investments

Parameters		Formula
Current value of investment (Rs.)	10,00,000	
Time to retirement (Years)	25	
Expected rate of return	12percent	
Future value of investment (Rs)	1,70,00,064	1000000 x (1+12percent)^25

Step 2: Calculation of monthly savings after adjustment

		Formula
Corpus required at retirement	3,00,48,832	
Value of current investments at the time of retirement	17000064	
Adjusted value of goal	13048768	30048832- 17000064
Expected return on investment	12percent	
Years to retirement	25	

The monthly savings can be calculated using the 'PMT' function in Excel. The inputs required are

- Rate (return on investment expected): 12percent/12
- Nper (period in months available to create the corpus): 300 months (25 x 12) which is the period between now and retirement date)
- Future Value (retirement corpus required): Rs. 130,48,768
- Type (0 for investment at end of month and 1 for beginning):1

The monthly savings required to accumulate the funds for the retirement goal is Rs.6876.

The investor's financial situation may make it difficult to find the savings required to fund the retirement goal. Some of the scenarios are:

- 1. The investor may decide to postpone saving for retirement if there are other urgent needs that needs to be given priority funding. In the above example, if Rani decided to start saving for retirement after five years when she expects her savings to be comfortable, then the monthly saving required would be almost double at Rs.13,059. This is because now there are only 20 years to save instead of 25 years. This is the impact of compounding.
- 2. The investor may decide to invest in a riskier asset to earn more returns. This will bring down the savings contribution that has to be made to the retirement goal. In the earlier example, if Rani's savings were invested to earn 14percent instead of 12percent, then the monthly saving required would be only Rs.4785 instead of Rs.6876. On the other hand, if he invested it to earn only 10percent then the monthly savings required would go up to Rs.9753.
- 3. The investor may choose to delay retirement in order to increase the time available to accumulate the funds required. The monthly income now required will go up because of the effect of inflation. However, the increased time available will reduce

the monthly savings required and the corpus required will come down because there are fewer years in retirement.

4. The investor may choose to reduce expenses in retirement and live on a smaller budget. This will bring down the corpus required and the monthly savings required to build it. However, the risk is that it may not be possible to manage with the smaller budget and lead to running out of funds in retirement.

3.3 Investing for Accumulation

The periodic savings made for the retirement goal have to be invested to accumulate the corpus required. Investments in the accumulation stage have the benefit of time on its side. A long investment horizon enables taking on some risk in investing the savings to earn better returns, and to benefit from compounding.

3.3.1 Align Investments to Investor Needs

The investments into which the savings will be invested will depend upon the return requirements of the investor. Investing in a product with a very low return will make it difficult to reach the corpus, and require a greater contribution from the investor to compensate for the lower returns. This may not be viable given the level of savings possible for the investor. Since this is the accumulation stage, growth should be the priority over income. However, while considering the return earned it is also important to evaluate the risks involved and to align it to the risk tolerance of the investor. The risk tolerance of an individual is a function of the ability to take risk and willingness to do so. The ability depends on factors such as:

Age: The younger the investor the greater is the propensity to take risk. This is because of the confidence that they have the time to earn back in case of loss.

Income: People with higher household incomes are more willing to take risk than those in the lower income groups. Households with double income have the security to take higher risks than families dependent on one income. A higher income security leads to a greater ability to take risks.

Debt: Households with large debts have a lower tolerance for risk than those with low obligations.

Wealth: Households with accumulated wealth are in a better position to take risks than those with more liabilities than assets.

Investment horizon: When the investment horizon is long enough the propensity to take risks is more too. This is because there is adequate time to make up short-term losses in the long run.

The ability to take risks is just one part of the equation. A person who may score high on all the factors that indicate a high ability to take risks may still be unwilling to take it in the investments. This will bring down their risk tolerance and investments must align to this lower

risk profile. Investors with a lower risk profile will not be comfortable with volatility in the returns from their investments. Security of principal invested would be a high priority for them. They would prefer investments that pay out some benefits periodically to those that are growth-oriented. Such investors are comfortable with conservative rather than aggressive investment choices. The reward from such investments are also low and the investor may need to be able to make a higher contribution to the goal over a longer period of time to accumulate the required funds. Fixed income investments will be the category most suitable given their needs and risk orientation.

Investors who have the ability and willingness to take risk have a higher risk tolerance. Such investors will be willing to tolerate temporary volatility, negative returns and even erosion in capital when the trade-off is higher long-term growth in investment. The extent to which they are able to tolerate this would determine the asset composition of their portfolio between growth assets like equity, real estate, and others. For example, investors with a moderate risk appetite may look to add more large- cap stocks in their portfolio and a lower exposure to mid and small cap stocks, while those with a higher risk appetite will seek greater exposure to mid and small cap stocks that have the potential to generate higher returns albeit with higher risk.

3.3.2 Review and Monitoring Investments

Once the suitable investments avenues have been decided, the next step is to make the investments. Records have to be maintained so that the investments can be periodically monitored. The review process should cover the following:

1. A change in the circumstances of the investor may make an investment no longer appropriate for inclusion in the investor's portfolio. For example, if the ability to take risk has changed then the investment portfolio has to reflect this. A change in the investments will also imply a recalculation of the savings required since the returns are likely to change too.

2. It is important to periodically monitor the performance of the investments to ensure that it is on track to earn returns as expected. If there is a significant change in the investment's expected performance then the funds must be switched to a better option. If this is not done, then the corpus may fall short of the expected amount.

3. There may be changes in features of selected investments that may make investments unviable or unsuitable. For example, the tax benefits available on an investment may no longer be available or may even increase, the facility to periodically invest in a mutual fund may no longer be there, and others. All this will affect the decision to include an investment in the portfolio.

3.3.3 Monitoring Retirement Plan

Life events, such as marriage, birth of child, divorce, new job profile and change in earning levels, change in health situation, all imply a change in the individual's financial situation and expectations from the future. The retirement plans have to be dynamic and reflect the changing life situations. Revising retirement plans are not expected for every pay hike, but it should be done whenever there is a significant change. One significant milestone is when the asset allocation of the portfolio has to be rebalanced to reflect a transition from accumulation to distribution stage in retirement. As the retirement comes closer, the funds have to be systematically moved to lower risk products to protect the value of the corpus created.

Monitoring Progress

The saving and investment plan has to be monitored to ensure it is on track to reach the goals. A review will help identify under-funding of the corpus. If identified early enough investors can take steps to correct it. If the shortfall in the corpus is because of the investor finding it difficult to save the targeted amount, then it may require a review and tightening of spending habits and budgets. If it is because of under-performing investments, it may need a rebalancing of the portfolio to remove the under-performers from the portfolio.

3.4 Planning for the Distribution Stage in Retirement

Closer to retirement, the planning imperative moves from accumulation to distribution. So far the focus of retirement planning would have been to accumulate a corpus adequate to generate the income required in retirement. The 5 to 10 year, period just before retirement is designated as the pre-retirement stage. Activities in this phase of retirement planning sets the stage for retirement. This is the period in retirement when the financial and non-financial elements of retirement all start to fall in place. Many of the factors used in retirement planning will now move from being estimates to being defined clearly. For example, factors such as the expenses in retirement, inflation, investment returns on the corpus, and personal factors such as expected lifestyle in retirement and health factors, will now be known. Based on this, it will be possible to determine the expenses to be met, income likely to be generated, and therefore the adequacy of the retirement corpus that has been accumulated over the working years. The focus at this stage should be on protecting the corpus created so far, estimating the adequacy of the corpus and charting out a living plan. In the pre-retirement stage it is important to make the consolidation and distribution plan as detailed as possible.

3.4.1 Pre-Retirement Stage Activities

Rebalance the Portfolio

In the accumulation stage, the focus of asset allocation should ideally have been on growth. Growth assets have volatile returns and continuing to hold the assets in such investments may be risky. The risks arise if there is a fall in the value of assets close to when they have to be liquidated as the retirement funds are required and the time required for recovery is not there. Such a scenario may wipe out a significant portion of the corpus created. To avoid such a situation, in the pre-retirement stage it is advisable to rebalance the portfolio so that the asset allocation is oriented towards protecting the corpus by investing in safer investments. Just as asset allocation was used to optimize returns and manage risks in the accumulation stage, similarly allocating assets across less volatile assets will help protect the corpus without completely stifling growth.

Consolidate the investments in the pre-retirement stage. Value the investments accumulated to see if it is likely to be adequate to meet the retirement needs. The pre-retirement stage is also likely to be the period of high incomes and stable expenses. Use the excess income to ramp up the retirement savings if there is a likely shortfall in the corpus.

This will also set the stage for executing the plan for generating the income stream from the portfolio in the retirement stage.

Streamline finances

The pre-retirement stage is the time to get ready for the transition to retirement. Things that need attention would include paying off or paying down debt as far as possible so that the mandatory payments or obligations in retirement are eliminated or at least reduced. This is particularly important where there is outstanding mortgage for the primary home in retirement.

Life insurance

Life Insurance is the other important financial factor to be assessed. Insurance is necessary to support those who are financially dependent on the primary income earner, in the event of the death of the income earner. A premium is paid to secure this protection. In retirement when the income is generated from the corpus already created then insurance has little or no relevance, unless earned income (income from employment) continues to be a major portion of the income in retirement. Other situations when life insurance may be relevant in retirement includes a situation where a major portion of the pension and other benefits in retirement may be lost to the surviving spouse in the event of the death of the retiree. Or, if there are financial responsibilities to children and others or debt such as mortgage that is still outstanding even at retirement then it is prudent to pay premiums and keep life cover. It is important to rationalize life insurance cover to reflect the reduced financial responsibilities so that the premiums are not a drain on the retirement income. The amount of cover that is required in retirement must be decided based on factors like the extent to which the income from employment in retirement helps meet expenses, or the extent to which retirement benefits will reduce for the surviving spouse in the event of the death of the retiree or the amount required to meet the financial responsibilities in retirement. Look at level premium term insurance that will provide the insurance required at a low cost. The level premiums mean that it will remain the same through the term. Cancel the policies as and when the need for cover comes down. Consider the health insurance available and any health benefits that may be available in retirement, and take additional health cover that may be required now that the health situation is clearer. Signing on for insurance when in good health will provide health cover at better premiums.

Create a Budget and transform financial habits

At the beginning of the retirement planning exercise, various thumb rules would have been used to estimate living expenses in retirement. These expenses would be clearer and more specific as the retirement comes closer. It is now possible to estimate the expenses likely in retirement. Use the format described in section 3.2.1 to list the expenses under various heads. Categorize these expenses as mandatory, essential and discretionary to help allocate income in retirement. Any loan repayments, taxes and contractual obligations will be mandatory expenses and need to be provided first. Ideally, in retirement this should not be a very large proportion of the total expenses. The essential living expenses include housing, food, transportation and health-related expenses, and finally discretionary expenses will include all expenses related to recreation. Now that expenses are known, assess if the corpus created is adequate to generate the required income.

This is also the time to create a budget for living comfortably within the income that the corpus is likely to generate in retirement. Test drive the budget for a couple of months and fine tune the details before retirement so that the new income and expense situation will not come as too much of a change. This is the time to transform financial habits so that they are suitable for the discipline required in retirement. Living within a budget, controlling spending habits, staying away from unnecessary debt, are all habits that will hold in good stead in retirement.

Put financial affairs in order

Closer to retirement is the time to consolidate all financial and investment information and personal data that will be essential to keeping records updated. Update will and other estate planning related documents if necessary. Set deadlines for important financial decisions to be made and execute within the time defined.

3.4.2 Plan for Retirement Income

In the distribution stage the primary goals of the retirement plan will be the following:

- Create a fixed income stream to meet essential expenses
- Protect income from inflation
- Save on taxes at the withdrawal stage and the income generation stage
- Calibrate withdrawal
- Protect from longevity

A budget created for retirement living will give an idea of the mandatory and essential expenses that have to be met in retirement. The pension from the employer, if any, together

with an annuity that gives the required income stream to meet these expenses will give the comfort of knowing that there is a guaranteed income to take care of the essential needs. Including variable annuity and inflation-adjusted annuity, whose returns counter the effects of inflation, inflation-indexed bonds, real estate rental income, and some equity exposure through hybrid mutual fund schemes, in the income mix will give inflation protection to the income. The advantage of the annuity product is that it guarantees returns for life, depending upon the option chosen. The disadvantage is the lower returns and the loss of purchasing power over time due to the effects of inflation. One way of dealing with it is to link the annuity's contribution to the total income mix to the stage of retirement. In the early retirement years, an annuity's contribution to total income can be lower and just enough to meet essential needs, and increase as the individual moves to mid and late retirement years. In the early retirement years, the income stream can have contributions from other guaranteed fixed income sources such as monthly income scheme (MIS) and Senior Citizen Savings Scheme offered by the Post office, other fixed income products such as bank fixed deposits, bonds and debentures, mutual fund schemes and some inflation-protected investments such as real estate rentals, equity and others. The mix will improve the return of the overall income portfolio. The risk is that the fixed income products provide such income only for a specific period, depending upon the term of the investment product. The return may change when re-invested on maturity, unlike an annuity that is fixed for life. As the retirement progresses, individuals may be unable and unwilling to deal with the uncertainty in income and the administrative issues of making fresh investments as the earlier investments mature. As retirement progresses, the annuity may be a preferred product for income. A portion of the corpus should be earmarked for growth that will effectively counter the effects of inflation on the overall portfolio. Holding some investments in assets whose returns beat inflation, such as equity and real estate, will help protect the investment portfolio from inflation. This should not be a large portion of the portfolio, as the ability to see an erosion in the capital, possible in such investments, will be lower in retirement.

Apart from guaranteed regular income, the other features important to products that would form a major part of a retirement distribution portfolio include liquidity, tax advantages, capital preservation. The post-retirement portfolio will benefit from following the principles of asset allocation in investing the accumulated corpus. Creating a distribution portfolio by including investments across asset classes and sub-asset classes will help meet the investment objectives of generating income throughout the retirement life, protecting the portfolio from inflation and providing the necessary liquidity.

The retirement plan has to consider the impact of taxation both at the time of transitioning the portfolio from growth-orientation to income-orientation, and at the time of drawing income from the corpus. Many products used for accumulation will treat the appreciation as long-term capital gains and provide the benefit of indexation in calculating the capital gain tax payable. This includes mutual fund units. In case of equity products there would be no taxation on long-term capital gains. Other tax-advantaged products include investments in

the public provident fund and provident fund schemes, insurance products that are completely tax-free on maturity, and the NPS where there is no tax on the amount used to buy the annuity. Similarly, pension plans of insurance companies allow commutation of up to $1/3^{rd}$ of the vesting amount which is exempt from tax. Others like bank fixed deposits, bonds and debentures typically have returns that are taxable. While considering products for accumulation consider the post-tax returns, which is what the investor will actually earn.

Income received from most products will be taxed according to the tax rates applicable on income. There are bonds issued by public sector enterprises like HUDCO that provide tax free interest income. These bonds are issued for tenors of 15 years-20 years and offer a good income option in retirement. But they are available infrequently and there may be a restriction on individual subscriptions. Apart from these bonds, fixed income products suitable for generating income in retirement, including annuities, fixed deposits and savings schemes. Income from these products however is taxable. Returns from hybrid debt-oriented mutual funds, offer better returns, from the limited equity exposure, and the return can be structured to reduce taxes. For example, since the dividends from such schemes are taxed at the marginal rate of tax applicable to the investor, investors can use the systematic withdrawal plan to redeem units to generate the income from the investment and pay long term capital gains at 20 percent after indexation if they fall in the higher tax brackets. Other income, such as rental income, is also taxable as income from property. However, the taxability of rental income can be reduced using deductions allowed under the Income Tax Act. Longterm capital gains from equity investments attract only a 10% tax however, given the risk of volatility, portfolios in retirement should have limited exposure to equity.

The strategies to maximize post-tax returns in retirement is discussed in Chapter 8.

Set in place a simple automated system to receive all income in retirement to a particular bank account. Consolidating in a single account will give a better idea of available income and help manage expenses within the available income.

Managing inadequacy of Income

The income from the corpus may prove to be less than what is desired for a comfortable retirement. There are many ways in which this can be handled. Some of the options are:

- Postpone retirement so that there is more time to accumulate more funds, and simultaneously reduce the years in the retirement period for which income has to be provided.
- Consider a second career or employment in retirement.
- Budget to reduce discretionary expenses so that the expenses can be managed within the available income.
- Seek financial assistance from family.
- Consider the reverse mortgage scheme if the retiree owns the residence.

These options are discussed in greater detail in chapter 8.

3.5 Risks in Distribution Stage

The primary risk in the distribution stage is that the income generated from the retirement corpus accumulated in the accumulation stage is inadequate to meet the expenses in retirement. The reasons that may result in the inadequacy are discussed below.

3.5.1 Underestimating Retirement Needs

The expenses in retirement may be underestimated in the planning stage, resulting in the corpus required being more than what is accumulated. Some of the reasons for underestimating the needs include the following:

Longevity is the risk of living longer than estimated and running out of retirement funds. The need to manage the risk of longevity may be realized at different stages in retirement. The pre-retirement stage is the best time to assess if the years in retirement has been underestimated. Ramping up savings allocated to retirement and rationalizing expenses in retirement are ways to deal with it. Closer to retirement when increasing the corpus is not an option available then delaying the retirement or considering a second career in retirement that will provide a stream income that reduces and delays drawing from the retirement corpus. Buying a deferred annuity that allows locking-in a lifetime income starting later in the retirement stage is another way to ensure an income stream throughout retirement. Managing the risk of longevity is most difficult in the mid or late retirement stages. Converting assets, like real estate, jewellery and others, into financial resources is one way of doing it. The reverse mortgage scheme allows monetizing the primary residence also into a stream of income till the end of life.

Inflation applies a continuously upward pressure on the sum of money required to meet expenses. It is important to incorporate the effects of inflation on expenses through the retirement period. Ignoring inflation or underestimating the effect of inflation would imply underestimating the costs that have to be met, and therefore the corpus required to fund retirement. As discussed earlier in the chapter, the distribution portfolio in retirement must hold products that generate income and products with returns that are able to beat inflation to reduce the stress on the corpus.

Underestimating expenses in the planning stage can result in the income from the corpus being inadequate to meet the expenses. The expense that is most likely to be underestimated are expenses related to health. Periodically assessing the health situation and the funds required to meet the expenses may help in ensuring that the savings are adjusted for the additional funds required. Taking health insurance in time may help meet some of the likely expenses.

The large retirement corpus can be a temptation to splurge, especially at the start of retirement when there is time on hand to pursue interests. But if this large expense was not

part of the expenses based on which the corpus was created, then there is a good chance that the large outflow is going to affect the ability to meet the expenses for which the corpus was created. A large withdrawal early in the retirement period limits the benefits of compounding to the corpus and therefore has a bigger impact as compared to a similar sized withdrawal in the middle or later years of retirement.

3.5.2 Lower Level of Retirement Savings and Investment

The retirement plan will define the periodical savings that need to be made and invested to accumulate the corpus required. For example, if a corpus of around Rs. One crore has to be accumulated over a period of 25 years, then the monthly savings required is Rs.5322 if the investments will generate 12 percent. Assume that the individual is able to save only Rs.4000 per month. Then the corpus available is likely to be around Rs. 75 lakhs. The shortfall in the corpus will mean that the income generated will be lower in retirement.

Living by a realistic budget to find the savings required is the prudent way to avoid such a situation. Periodically monitoring the level of accumulation will help identify shortfalls and see if there are adjustments that can be made to the level of savings. For example, if the savings possible in the first 10 years is only Rs.4000 per month as against the required savings of Rs.5332, then in the remaining 15 years the savings has to go up to Rs.18200 per month to make up the shortfall to reach the required corpus. The ability to save is likely to have gone up in this period and it may be possible to make the additional savings required.

(The FV and PMT functions in MS Excel can be used to make the above calculations)

3.5.3 Investing Conservatively or Aggressively

The savings made are invested to earn returns to generate the corpus required in retirement. If the individual chooses to invest in investments that have lower risk, then the returns earned will also be lower. This will reduce the final corpus that is accumulated. For example, in the previous example if the investment earned 10percent instead of 12percent then the corpus in 25 years with a monthly saving for Rs.5,322 will be only Rs.70 lakhs. Given the long investment horizon, investing in products with lower risk and returns, may mean that the savings are not being utilized to their full potential.

On the other hand, taking excessive risks with the savings may result in losing the principal beyond any redemption. Select investments that are well regulated, provide transparency in its features and all information required to evaluate it at the time of investment and subsequently, and the flexibility to exit if necessary.

3.5.4 Lower than Expected Growth in Investments

The savings may be invested in products suitable for the available investment horizon but may still suffer from lower returns if the growth in investments is not as expected. If the investment that was expected to earn a 12percent growth manages to generate only 10 percent, then the impact will be seen on the final corpus. Holding a diversified portfolio and monitoring the performance of the investments atleast once a year will help spot underperformance. Switching out funds from underperforming investments to those that are expected to do well is the way to protect the portfolio from lower growth.

3.5.5 Fall in Annuity Rates and Interest Rates

The income in retirement will depend upon the interest income that is available on investments at the time when the growth assets are converted to income streams. If the interest rates are low, then the retiree will be stuck with a low income portfolio. Buying into products such as annuities when the interest rates are low will mean that the retiree will be stuck with low income for life. Staggering investment into income generating products over a period of time is one way of ensuring that the retiree can avoid the risk of investing all the retirement funds when interest rates are low. Holding a diversified income portfolio built over time will provide the protection that the retiree needs.

3.5.6 Risks of Early Withdrawal

Withdrawing from accumulated corpus at an early stage will result in shortfall in the target corpus in retirement period. The benefit of compounding will not be reaped if large amount is withdrawn early.

3.6 Monitor and Update the Retirement Plan

The retirement plan lays out the financial roadmap for reaching the retirement goal. Given the long period to retirement there is a good chance that many of the variables that were factored into calculating the retirement corpus required may change. These changes have to be accounted in the calculations if the retirement corpus has to remain relevant to the individual's needs.

An important part of the plan should be a schedule for reviewing the plan. The purpose of the review should be the following:

- To identify any significant change in needs. For example, if there is a deterioration in the health of the individual or dependents then the corpus required may have to be increased to generate higher income for the additional expenses. Or, it may mean that the number of years in retirement may come down if the health condition is serious.
- To assess the need for a change in investment strategy. A change in the risk tolerance levels of the individual may mean that the portfolio may need to be rebalanced to reflect the new preference.
- To identify changes in inflation numbers that will affect the estimation of the expenses to be met in retirement.
- To identify changes in the investment returns expected, which will affect the corpus value in the accumulation period and the generation of income in the distribution stage.

- To monitor the performance of the investment portfolio. This is essential to identify underperforming investments and switch funds so that the poor returns do not affect the goal.
- To review beneficiaries identified in different investments through nominations, joint holdings and other means.

The review may be on a fixed schedule, say annual. This would be relevant for some elements of the plan such as monitoring the performance of the investment portfolio. The relevance of inflation rates and investment rates will need to be monitored in response to changes in economic cycles.

3.6.1 Change in Needs

A change in the needs of the individual will trigger a review. This may be in the expected life style in retirement which may mean that a higher or lower income is required in retirement. Accordingly, the corpus required will change and this will have an impact on the savings required.

3.6.2 Change in Life Cycle

A change in the lifecycle has an impact on the income, expenses, savings, risk tolerance and other factors that have a financial implication for the goal. As incomes increase and expenses stabilize, it is possible to increase savings assigned to the goal. Similarly, the risk tolerance may change and these have to be considered in the portfolio construction.

3.6.3 Change in Life Events

Life events such as marriage, birth, death, significant changes in income from employment or otherwise, significant change in expenses, may all trigger modifications to the retirement plan. Unexpected events like a disability and additional personal responsibilities will also affect financial situations. It may take the form of increase or decrease in savings, ability to take risks and a resultant change in the portfolio.

3.7 Behavioural Bias in Decision Making

Creating and managing the retirement portfolio, both in the accumulation stage and distribution stage, can be affected by behavioural biases that individuals may exhibit in dealing with money. For example, investors may cultivate a belief that they have the ability to outperform the market based on some investing successes. This is called optimism or confidence bias and can put the retirement at risk if it led to making unsuitable investment choices. Familiarity bias leads investors to choose what they are comfortable with. This may mean that they include asset classes that they are familiar or comfortable with, stocks or sectors on which they have greater information and so on rather than investing in assets what their portfolio and stage of retirement demands. Anchoring is when investors hold on to some

information that may no longer be relevant, and make their decisions based on that. Holding on to losing stocks in expectation of the price regaining levels that are no longer viable given current information is an example of this and may lead to the portfolio underperforming. The fear of losses may lead to inaction. This may lead to funds remaining un-invested or underinvested and in the long run affect the final value of the retirement corpus. Herd mentality and recency bias may lead to investors making sub-optimal decisions and choices based on what other investors are doing or recent experiences.⁵ Individual investors can reduce the effect of such biases by adopting a few techniques. As far as possible the focus should be on data and what it is saying. Setting in place automated and process-oriented investing and reviewing methods can help biasessuch as inertia and inaction. Facility such as systematic investing helps here. Over evaluation can be avoided by doing reviews to a schedule. Investing strategies such as value investing, which is contrarian in nature; helps avoid the effect of herd mentality. It is always good to have an adviser the investor can trust who will take a more objective view of the investor's finances in making decisions and will also help prevent biases from creeping in.

⁵ Herd Mentality: This bias is an outcome of uncertainty and a belief that others may have better information, which leads investors to follow the investment choices that others make.

Recency Bias: The impact of recent events on decision making can be very strong. This applies equally to positive and negative experiences. Investors tend to extrapolate the event into the future and expect it to repeat.

Sample Questions

- 1. At which stage is it good to reduce the proportion of growth assets in the portfolio?
 - *a.* Middle earning years
 - *b.* Young earning years
 - c. Pre-retirement stage
 - d. Young families
- 2. Which of these expenses are likely to be higher in retirement?
 - a. Housing
 - b. Transportation
 - c. Personal needs
 - *d.* Health related expenses
- 3. What should be the investment objective of the portfolio assigned to accumulating the retirement corpus?
 - a. Growth
 - b. Lowering risk
 - c. Regular income
 - d. Maximising returns
- 4. Which of the following features of growth assets make them unsuitable to hold in the portfolio as retirement comes close?
 - a. High level of returns
 - *b.* Income-orientation of returns
 - c. Low level of returns
 - d. Volatility in returns

CHAPTER 4: RETIREMENT PLANNING PRODUCTS: NATIONAL PENSION SYSTEM

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Features and Benefits of National Pension System
- How NPS works?
- Basic requirements for investing in the NPS
- Procedure for investing in NPS
- Taxation aspects of investing in NPS

4.1 National Pension System

The Pension Fund Regulatory and Development Authority (PFRDA) was initially established in 2003 as an interim regulator for NPS and subsequently with the passage of the PFRDA Act 2013 and its notification on February 1, 2014, PFRDA has been established as the statutory Authority for regulating and developing the pension sector in India.

The National Pension System (NPS) is a defined contribution scheme launched by Govt. of India for Central Government employees (excluding Armed Forces) joining services on or after January 1, 2004, which have been subsequently adopted by various state governments and in May 2009 was extended to all citizens of India on a voluntary basis. The NPS Corporate Sector model was launched in 2011 to add one more option for employers to provide retirement benefits for their employees. The Atal Pension Yojana (APY) was launched in 2015 to provide a guaranteed pension cover to people in the unorganized sector. All these models are provided under the NPS architecture with the common aim of providing old age income security after retirement from work.

The eligible subscribers to the NPS are allotted a 12-digit unique Permanent Retirement Account Number (PRAN) on registration with the NPS. All activities of the subscriber, such as contributions, investments, withdrawals, personal information modifications etc. are recorded under the PRAN. The PRAN is portable across employers and locations, whether in the government sector, private sector or self-employed.

The NPS is a contributory pension system where the subscriber contributes to the fund over their working life and at retirement draw the corpus so created to buy an annuity that will provide regular income in retirement. The money contributed by the subscriber (and employer, where applicable) is invested in the fund(s) chosen by them from the options provided by the NPS. The expected risk and return from each fund will depend upon the type of investments it shall hold, which will be declared upfront. NPS is a market linked product wherein subscribers earn market returns on their contribution and the pension drawn will depend on the corpus that is available to buy the annuity on retirement. The pension funds pool the contribution of different subscribers. The money so contributed is invested in a portfolio of securities according to the investment objective of the respective fund and regulatory norms laid down by PFRDA, and managed by fund managers appointed by the PFRDA. The contributions made periodically along with the returns earned will accumulate over time in each subscriber's individual pension account to form the retirement corpus. Longer the period of investments, higher will be the retirement corpus available to the subscriber from the contributions made, returns earned and the benefits of compounding. There is no defined benefit available at the time of exit. The NPS gives the subscriber the flexibility to choose the following:

- the contribution they want to make (except in the government model where there is a prescribed minimum contribution by the employee),
- the period for which they will make the contribution,
- the type of funds in which the contribution has to be invested to earn returns,
- the fund manager who will manage the funds, and
- the facility to track the performance of their funds and switch between funds (investment options) and fund managers, depending upon their performance or changes in the risk and return preferences of the subscriber.

4.1.1 Intermediaries and Constituents of the NPS

The NPS is distinguished by its unbundled architecture in which the authority and responsibility of managing the pension system is clearly demarcated amongst multiple constituents. The advantage of this structure is that there is no concentration of decision-making authority with a single entity and each entity functions independently of each other thereby reducing the risk of misuse and failure of the system. Clearly defined reporting roles among the different intermediaries also means that there are checks and balances at each stage. Subscribers are given the option to choose among different entities providing a service. This increases the efficiency and service-orientation of the intermediaries. The regulations that govern the role, responsibility and authority of each intermediary is distinct.

The different intermediaries and constituents of the NPS is illustrated in Chart 4.1.

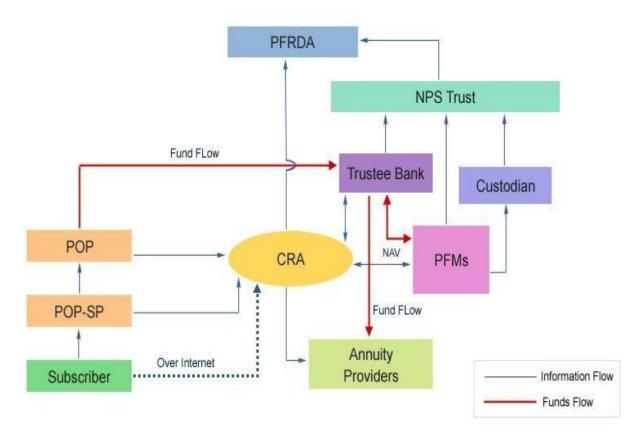


Chart 4.1 NPS Architecture

Source: NSDL NPS Regulator

The PFRDA is the regulator of the NPS. The PFRDA is the authority established under the Pension Fund Regulatory and Development Authority Act, 2013 to promote old age income security by establishing, developing and regulating pension funds, to protect the interest of subscribers of schemes of pension funds. The PFRDA regulates NPS and the pension schemes not regulated by any other enactment, defines the eligibility norms for intermediaries, registers and regulates the intermediaries and establishes the mechanism for protecting the interests of the subscribers through various regulations and guidelines issued from time to time. The PFRDA directs and regulates the various aspects of the scheme via regulations, guidelines, and circulars.

NPS Constituents

The NPS system consists of the NPS Trust, Central Recordkeeping Agency (CRA), Pension Fund (PF), Trustee Bank, Points of Presence (POP), Custodian, Retirement Adviser and Annuity Service Providers. The NPS provides choices of intermediaries within the architecture which gives subscribers the choice to select the most efficient service provider at the lowest costs prescribed by PFRDA. In the event of an intermediary being unable to continue to provide services, there are clearly laid down procedures to transfer the subscribers and assets to an alternative service provider at no additional cost to the subscriber.

NPS Trust⁶

The NPS Trust is a trust set up under the Indian Trusts Act and PFRDA is the settlor of NPS Trust. The primary function of the NPS Trust is to hold and manage the assets and funds created out of the contributions made by the subscribers and held in their beneficial interest. The creation of the Trust, the appointment of the Trustees and the duties and responsibilities of the Board of Trustees will be defined by the Trust deed executed by the PFRDA in favour of the Trustees and the PFRDA (NPS Trust) Regulations, 2015. The Board of Trustees have the fiduciary responsibility for taking care of the funds and protecting the subscribers' interests. The NPS Trust has the responsibility to monitor and evaluate the functioning of all the intermediaries involved in registering subscribers, collecting, managing, distributing and recordkeeping of funds accumulated under the NPS. This includes intermediaries like the Central Record Keeping Agency (CRA), Points of Presence, Trustee Bank, Pension Funds, Custodians and other entities. The securities and other permitted instruments purchased by each pension fund will be in the name of the NPS Trust and held in the custodial account of the NPS Trust. The beneficial owners of these assets are the individual NPS subscribers.

Points of Presence (PoP)

The PoP is the first point of interaction between the subscriber and the NPS and constitutes the backbone of a strong and effective distribution system for the NPS. The registered PoPs have authorized branches to act as collection points and extend services to customers, called POP-Service providers (PoP-SP). The functions of the PoP include:

- Providing information and addressing questions of prospective subscribers.
- Acceptance of subscriber registration forms and KYC documents.
- Verification of KYC documents submitted by the subscriber.
- Submission of application forms and supporting documents to CRA through electronic or physical mode for individual pension account opening (PRAN generation).
- Processing requests of subscriber contributions made towards his/her individual pension account (PRAN).
- Maintaining records of subscriber applications, subscriptions and other details.
- Processing requests for change in personal details.
- Processing requests for change in investment scheme/fund manager.
- Processing request for change in PoP-SP.
- Processing request for NPS withdrawal (exit or partial).
- Processing subscriber shifting from one model to the other.
- Issuing printed account statement.

⁶ In the Union Budget of 2019-20, it was announced that "Keeping in view the wider interest of the subscribers and to maintain arm's length relationship of the NPS Trust with PFRDA, steps will be taken to separate the NPS Trust from PFRDA with appropriate organisational structure"

Accepting grievances from subscribers and uploading the same on the central grievance management system (CGMS) of CRA on a daily basis. Receiving and addressing grievances raised by subscribers against the PoP/PoP-SP on the CRA call centre or the CGMS. There are various categories of PoP as registered by PFRDA and they can perform any one or more of the following activities:

- NPS distribution and servicing for public at large through physical as well as online platforms
- NPS distribution and servicing for citizens at large through online platforms only
- NPS distribution and servicing only for own employees and other personnel either through physical or online platforms
- NPS Lite-Swavalamban Schemes
- Atal Pension Yojana
- Any other scheme regulated or administered by PFRDA

The duties of the point of presence are detailed in Chapter 9 under the PFRDA (Point of Presence) Regulations, 2018.

Central Record-keeping Agency (CRA)

The CRA is the core infrastructure of the NPS. Protean eGov Technologies, KFin Technologies Private Limited and CAMS are the three CRAs for the NPS.⁷ The CRA is responsible for building, operating and maintaining the infrastructure required for the NPS system. The main functions include:

- Maintaining subscriber records, administration and customer service functions.
- Issuing Permanent Retirement Account Number (PRAN) for each subscriber, maintaining the database of all PRANs and recording transactions relating to each PRAN.
- Issuing PRAN card, User-ID, I-PIN and T-PIN to subscribers to view account details online and access the call centre.
- Providing account maintenance services to the subscribers such as change of scheme, change of fund manager, change in demographic details, change of nomination and others.
- Acting as the interface between the various intermediaries of the NPS system. This includes monitoring contributions by each subscriber and instructions and communication of the same to the trustee bank and pension funds and unitisation of contributions based on scheme NAV.
- Periodically sending pension account statement to each subscriber at the end of the financial year within 2 months.
- Providing a centralized grievance management system.

⁷Subscribers have the option to select between either of the two CRAs from February 15, 2017.

- Providing timely fund allocation to pension fund, measuring fund performance using NAVs declared by the pension funds.
- Coordinating instructions with the trustee bank for remitting withdrawal funds to subscriber's account and to annuity service provider for the annuity scheme.
- Processing exit/withdrawal request of subscribers.
- Creating, establishing and updating network and infrastructure across the country, modules, processes and utilities to address the needs of the different stakeholders.

Pension Funds (PFs)

These are professional fund managers appointed by the PFRDA for investing the contributions made by subscribers in a portfolio of securities and managing them, and making payments to the subscribers according to the rules laid down by the PFRDA. Some of the fund managers in the NPS system are –ICICI Prudential Pension Fund Management Company Ltd., LIC Pension Fund Ltd, Kotak Mahindra Pension Fund Ltd., SBI Pension Funds Pvt. Ltd. etc. The functions of pension funds include:

- Investing the contributions as per the mandate
- Constructing the scheme portfolio
- Computing and declaring scheme Net Asset Value (NAV) on a daily basis
- Maintaining books and records,
- Reporting to authorities at periodic intervals
- Making public disclosures

To be eligible for registering as pension funds, their promoters, also called sponsors, are required to meet eligibility norms laid down in the PFRDA (Pension Fund) Regulations, 2015 which are discussed in Chapter 9.

The pension fund manages the schemes as per the investment guidelines notified by the PFRDA and the pension fund is not allowed to invest (directly or indirectly) outside India. The pension funds do not offer any implicit or explicit assurance of benefits to subscribers except under market based guarantee mechanism to be purchased by the subscriber. The securities purchased by the Pension Funds are held in the name of National Pension System Trust and these securities are valued at market value for computing the scheme NAV on the basis of which units are allocated to subscribers by the CRA.

Trustee Bank

The trustee bank handles the funds side of the transactions between various entities. It is authorized to hold the funds on behalf of the NPS Trust for the beneficial interests of the subscribers of the NPS. The PFRDA (Trustee Bank) Regulations, 2015 lays down the eligibility criteria for an entity to be considered for appointment as the trustee bank for the NPS. These are as follows:

- It should be a scheduled commercial bank, registered and regulated by the RBI with extensive rural and urban network of branches as may be specified in the selection process.
- It should have made a net profit in the last three consecutive financial years and must satisfy the minimum capital adequacy ratio specified by the RBI.
- It is authorized to undertake the business of the central and state governments.
- All the branches should be networked and the bank should have Cash Management Services business.

Axis Bank Ltd. is currently the designated trustee bank for the NPS. Its role is to facilitate fund transfers across subscribers, pension funds and the annuity service providers based on the instructions received from the CRA. The trustee bank receives funds from the nodal offices/PoPs across sectors, reconciles it with the subscriber contribution file and transfers it to the pension funds and in case of exit/withdrawals it transfers funds to subscribers and annuity service providers. The trustee bank holds the funds in the name of the NPS Trust and the subscribers are the beneficial owners.

Annuity Service Providers

Annuity Service Providers (ASPs) are life insurance companies empanelled by the PFRDA to provide the annuity to the subscribers through their annuity plans. Investors can choose any ASP from which they can buy the annuity and the ASP will provide the monthly pension to the subscriber for the rest of their lives. The ASPs that are empanelled with PFRDA. For example, Life Insurance Corporation of India, HDFC Life Insurance Co. Ltd., etc.

Custodian

For providing custodial and depository participant services for the pension schemes regulated by PFRDA, a custodian(s) registered with SEBI is appointed by PFRDA and whose cross holding, if any, by a pension fund or its sponsors, trustee bank or central recordkeeping agency should be less than 50 percent. The securities purchased by the pension funds on behalf of NPS trust are held by the custodian, who also facilitates securities transactions by making and accepting delivery of securities. The PFRDA has appointed the Stock Holding Corporation of India Ltd. as the custodian.

Retirement Adviser

These are individuals, registered partnership firm, body corporate, or registered trust or society registered with the PFRDA for providing advice on NPS or other pension scheme regulated by PFRDA to prospects/subscribers or other persons or group of persons. Retirement adviser may have a tie up with the points of presence for providing services to the prospects and there is no restriction on the number of PoPs with whom the Retirement Adviser may have such arrangements. The Retirement Adviser is expected to advice/facilitate the prospects or subscribers with/on aspects such as NPS enrolment and exit, revision in personal details, change of pension fund and asset allocation etc. and also advice the subscribers on a periodic basis about the performance of pension funds, underlying asset

portfolio, NAV, general financial market trends or any other relevant information through dedicated e-mail, newsletters.

4.1.2 Models under the NPS

The National Pension System (NPS) platform offers different models to suit the different specifications of its users. These include:

- The Government model for the Central and State Government Employees and also employees of Central Autonomous and State Autonomous Bodies.
- The All Citizens model as a voluntary contributory pension scheme available to all Indian citizens aged between 18-70 years of age.
- The Corporate model for companies/entities desirous of adopting the NPS platform to provide retirement benefit to its employees.
- The Atal Pension Yojana for unorganised sector.

All the models broadly use the NPS architecture to provide the systems to aggregate the contributions of the subscribers, invest it to accumulate pension wealth and provide the pensions at retirement.

Government Model

The Government model is applicable for all Central government employees (except armed forces) who joined services on and after 1st January, 2004. This model is also applicable to central and state autonomous bodies and have also been adopted by various state governments for their employees. The individuals mandatorily subscribe to the NPS on becoming government employees following the process prescribed for the same. Every month 10 percent of salary (Basic+DA) is contributed by the employee and 14 percent of salary by the government to the individual pension account of the subscriber (employee). Thus, the government has moved from a defined benefit (DB) pension system to a defined contribution (DC) pension system for its employees.

Government employees covered under the government model of the NPS submit the duly filled in application form for allotment of the Permanent Retirement Account Number (PRAN) to the Drawing and Disbursing Officer (DDO) attached to the employee. The application form requires the name, address, date of birth, bank details, nominee details, signature and latest photograph. The DDO verifies the information provided and certifies the employment details in the application form and attest the date of birth as filled in the application form. The application is forwarded to the Central Recordkeeping Agency (CRA). Once the PRAN is generated by the CRA, the PRAN kit is distributed to the subscribers. The DDO is also responsible for forwarding any requests for change in details, withdrawal requests, and grievances of the subscriber. The subscribers under this model also have the option to digitally register themselves either using the Aadhaar card or PAN card.

From 1st April, 2019 subscribers under the Government model have the option to decide the investment pattern for their contributions and choose the pension funds to manage their

funds. The current system of allocating the funds among the three public sector undertaking fund managers (LIC Pension Fund Limited, SBI Pension Funds Pvt. Ltd., UTI Retirement Solutions Ltd.) based on their past performance will continue as the default option for new and existing subscribers. Subscribers may choose to have their contribution managed by any of the pension funds including the private sector pension funds. They can change their option once a year. Subscribers who want returns with a minimum amount of risk can choose to invest 100% of the funds in government securities. Government employees can choose between a conservative life cycle fund (LC-25) with a maximum equity exposure of 25% and moderate life cycle fund (LC-50) with equity exposure capped at 50%. The choice of investments plans can be changed twice in a financial year. Once a subscriber selects the investment scheme and pension fund the corpus already accumulated will also be transferred to the new scheme. The government pays the cost related to opening and maintaining the Tier I account, which is the primary retirement savings account. The Tier II account is the voluntary investment account that each NPS Tier I account holder is entitled to open. The account may be opened through the government nodal office or by contacting any PoP-SP under the NPS or online through the eNPS platform. The charges associated with the Tier II account is borne by the subscriber. Investment of the funds contributed in the Tier II accounts will be according to the choices made by the subscriber on asset allocation and fund managers. The contributions of each subscriber to the Tier I account is deducted mandatorily from the

salary of the employee each month, and it is invested along with co-contribution made by the employer.

Withdrawal and other details under the government model will be according to the terms laid down under the NPS and discussed later in this chapter.

All Citizen Model

The All citizens model of the NPS is available for all citizens of India who meet the eligibility conditions specified. The subscriber signs on directly for this model and makes periodic voluntary contributions. The subscriber will decide the recordkeeper (CRA), pension fund and how the funds contributed will be invested in debt and equity investments offered by the NPS. The charges associated with opening and maintaining the Tier I account which is the retirement savings account and the Tier II account or investment account is paid by the subscriber. The procedure for opening and maintaining the NPS account, the choices available to the subscriber on the way the funds are managed and the other financial and non-financial transactions are discussed in the subsequent sections of this chapter.

Corporate Model

The Corporate model of the NPS is available to entities registered under the Companies Act, various Cooperative Acts, Central and State Public Sector Enterprises, Partnership firms and Limited Liability Partnerships, Proprietorships, Trusts and Societies. Companies can extend the benefit of NPS to their employees. The advantage to the company is that they can provide retirement benefits to their employees using the established NPS architecture instead of

taking on the responsibility of setting up and managing trusts, investing the funds and providing annuity. The contribution to the retirement account may be made by the employer alone, employee alone, or the employer and employee in any decided proportion. The subscription limits, investment options, charges and other operational details, including withdrawal, are the same as specified under the regulations that govern the All Citizens Model of the NPS.

The choice of fund manager and investment option (asset allocation between debt and equity investments) can be made either at employer level or the employer may give that flexibility to the employees. However, whoever exercises the choice should select both the pension fund and the asset allocation and in case of employer exercises the choice, the employees after one year will have the option to exercise their own choices. The contributions of the employees and employer, if applicable, will be routed through the Point of Presence (PoP)/PoP-SP with which the company has tied up to provide the service or they can themselves undertake these activities after obtaining registration as PoP from PFRDA. The charges for maintaining the Tier I retirement savings account will be borne either by the corporate or by the employee, at the discretion of the corporate. If the employee chooses to add on a Tier II investment account, then the charges associated are borne individually by the employee.

Employees can now get their recognized provident fund/superannuation fund transferred to the NPS. They must have an active NPS tier I account and approach the provident fund/superannuation fund through their current employer and request for the transfer of funds to their NPS account. The provident fund/superannuation fund will initiate the transfer and issue a cheque to the nodal office/PoP for a government employee/private sector employee as the case may be. The fund will issue a letter to the current employer mentioning that the amount being transferred is to be credited to the Tier I NPS account of the subscriber. The amount so transferred will not be treated as income for the current assessment year and there will be no tax payable on the transfer.

The NPS allows the flexibility to the subscriber to transfer the retirement account between sectors. The subscriber can move the account between employers in the event of a change in employment from the State government to Central government or vice versa, or to the corporate sector or to the All Citizens model, as the case may be.

Atal Pension Yojana

The Atal Pension Yojana (APY) was launched to provide defined pension to the weaker sections of the society, based on age of entry, contributions made and the period of contribution. The scheme is available for citizens of India working in the unorganized sectors. The subscriber will draw minimum fixed pension of Rs.1000, Rs.2000, Rs.3000, Rs.4000, Rs.5000 per month from the age of 60 years depending on their contributions, which itself would vary on the age of joining the APY. For example, a contribution of Rs.210 per month from age 18 will guarantee a monthly pension of Rs.5000 from age 60 onwards. For the same pension, the amount of contribution required at age 30 is Rs.577 and at age 40 it is Rs.1454.

Earlier the age of joining, lower will be the contribution required to earn the targeted pension amount. The Government of India will also contribute 50 percent of the contribution amount or Rs.1000 per annum whichever is lower for the period of five years beginning 2015-16 to 2019-20.

The Government's contribution is applicable for subscribers who signed up for APY before March 31, 2016. Workers in the unorganized sector who subscribe to the APY will not be eligible for the co-contribution by the GoI if the pay is covered under any other existing social security scheme such as the EPF, or if the person is an income tax payer. The pension is guaranteed by the Government of India.

The subscriber must be a bank account holder between the age of 18 years and 40 years at the time of joining the APY. The earlier Swavalamban Scheme subscribers between ages 18-40 years have also been migrated automatically to the APY. They must have an Aadhaar number and provide proof of the same or the proof of having made the request for Aadhaar enrolment. The existing Swavalamban beneficiaries opting out from the automatic migration to APY would continue with Swavalamban Scheme till they attain the age of exit under that scheme. This does not apply to subscribers whose accumulated pension wealth under this scheme excluding government contribution if any and returns thereon is less than Rs.one lakh in which case they can withdraw the amount in a lumpsum. A valid mobile number may also be given to facilitate the communication regarding contribution.

The APY is implemented through the branches of scheduled commercial banks, regional rural banks and Core Banking enabled Post Offices. Applicants who have net banking facilities can make the application online on the net banking platforms. Other entities such as Non-Banking Financial Services Companies, Micro-Finance Institutions and Mutual Fund agents can act as business correspondents to source business for the banks. A bank account holder can open an account by submitting the APY form duly filled in, Aadhaar number and mobile phone details and depositing the initial contribution. eAPY is the digital onboarding facility provided by Protean eGovernance Technologies CRA using Aadhaar based eKYC that allows digital enrollment without the need to visit the bank branch. It is mandatory to provide the savings bank account details and authorization letter to enable the bank/post office to automatically debit the amount of contribution each month/quarter/half-year from the subscribers account. A non-bank account holder needs to provide KYC documents and Aadhaar number and open a bank account first and then the APY account. The PRAN will be generated immediately and provided by the bank.

The contribution will depend upon the age of the subscriber which will determine the years of contribution till age 60 and the amount of pension selected. The initial contribution will be debited from the bank account immediately. Subsequent contributions will be debited on the same date each month, and the subscriber should ensure that the account is adequately funded. In case of default there will be a penalty imposed. If the account is not adequately funded then it will be considered as a default and the contribution will have to be paid in the subsequent payment cycle, along with the overdue interest for delayed contribution. Deduction will be made from the subscriber's account for account maintenance charges and

other charges. This will be done even if the account is in continuous default on contributions. The account will be closed when the corpus comes down to zero. The Government's contribution, if any, to an account in default that is being closed, will be returned to the government. The APY contributions by subscribers are invested according to the norms specified by the government predominantly in government securities, term deposits, other debt securities. The subscribers do not have a choice on investment pattern or pension fund.

On attaining 60 years the chosen pension amount will be provided to the subscriber, and on the death of the subscriber to his/her spouse. Exit before 60 years will be permitted only in special cases. In the event of death of the subscriber before the age of 60 the spouse will have the option to continue the contribution till the vesting age and receive the pension when it is due. The other option would be for the spouse to withdraw the accumulated corpus under the scheme.

4.1.3 Types of NPS Account

Each subscriber can open two types of accounts with the NPS: The Tier I account is the primary retirement savings account while the Tier II account is a voluntary investment account. Both accounts are offered under the same NPS architecture and have the same facilities and investor protection mechanisms.

Tier I Account

The Tier I account can be opened online or at a Point of Presence (PoP) by a subscriber eligible to do so by completing the prescribed formalities. The Tier I account is the retirement account and has restrictions on the withdrawal of funds from the account and its end usage. As discussed earlier, there are different models through which a subscriber can subscribe to a Tier I account. Depending upon the model, the contribution to the Tier I account may be made by the subscriber alone or by subscriber and employer, as the case maybe. The choice of the pension fund and investment options for the Tier I account will depend upon the model, as explained in section 4.1.2. A subscriber can make a maximum of three nominations to the Tier I account and specify the percentage allocated to each nominee.

Tier II Account

A subscriber must have a Tier I account to be able to open a Tier II account. No separate KYC formalities need to be complied with for the Tier II account for subscribers who have already complied with the same at the time of opening the Tier I account and have been issued a Permanent Retirement Account Number (PRAN) card. There are no charges for opening a Tier II account. It may be opened along with the Tier I account or subsequently at any time provided the subscriber has an active Tier I account. For NPS subscribers under the All Citizens Model, the PoP through which the Tier II account is activated should be the same as the one through which the Tier I account was registered. Subscribers who have registered on the NPS under the government model may activate the Tier II account through any PoP. The Tier II

account will have the same schemes and fund manager options that the Tier I account has to offer. The subscriber can choose a different pension fund and investment options for Tier I and Tier II accounts. The subscriber has the facility to make fresh nominations for the Tier II account. The nominations made in the Tier I account of the subscriber will not be applicable to the Tier II account.

Tier II – Tax Saver Scheme 2020

The NPS Tier-II Tax Saver Scheme (NPS-TTS) is available as an investment option to any Central Government subscriber to the NPS who have an active Tier I pension account. The investment made in this scheme will have tax savings benefit under section 80 C of the Income Tax Act. The maximum limit eligible under section 80C is Rs.1,50,000. The investment, including any reinvestment, will have a lock-in period of 3 years from the date on which the units for contribution made is credited under the subscriber's PRAN. The scheme will invest between 10%-25% in equity, up to 90% in debt and up to 10% in cash, money market instruments and liquid schemes of mutual funds. The subscriber can choose any pension fund and are allowed to have a maximum of 3 pension funds separately for NPS-TTS. Any change in pension fund will be permitted only after the lock-in period. No withdrawal will be permitted from the fund during the lock-in period. However, if the subscriber dies the nominees or legal heir can withdraw the corpus. If the subscriber closes the Tier I account then further contribution to the NPS-TTS will not be permitted and the corpus accumulated in the TTS account may be withdrawn on completion of the lock-in period.

Difference between Tier I and Tier II Account

Contribution to the Tier I account could be from the subscriber and the employer, where applicable. Subscription to the Tier II account is voluntary and only from the subscriber. There should be at least one contribution made to the Tier I account in a financial year. The use of the accumulated corpus in the Tier I account by the subscriber is regulated by the PFRDA (Exit and Withdrawal from NPS) Regulations, 2015 and as amended from time to time. A specified proportion of the corpus has to be used to buy a life annuity from any of the Life Insurance Companies regulated by the IRDAI. There is no such restriction on the use of funds accumulated in the Tier II account. Funds can be withdrawn at any time from the Tier II account for any use and the subscriber can even transfer funds from the Tier II to Tier I account. Transfer from the Tier I account to the Tier II account is, however, not permitted.

Particulars	Tier I	Tier II
Option of selection of account	Mandatory	Optional
Withdrawal Facility availability	Conditional and Restricted	Yes
Minimum Contribution at the time of account opening	Rs. 500/-	Rs. 1000/-

Particulars	Tier I	Tier II
Minimum amount of subsequent contribution	Rs.500/-	Rs.250/-
Minimum contribution required per year	Rs. 1000/-	-
Minimum number of contributions per year	One	-
Frequency of contributions permitted	Unlimited	Unlimited
Tax Benefits	Yes	No

No Third Party Contribution

Third-party contributions are not allowed for both Tier I and Tier II account. The PoP/nodal office has to ensure that the contributions are being made through the subscriber's bank account from his legitimate source of income. A declaration to this effect is taken from the subscriber every time a contribution is made to the Tier II account. However, like in government sector, subscribers under the NPS corporate sector having an arrangement with the employer can contribute to their Tier II account by way of salary deductions.

4.1.4 Fees and Charges relating to NPS *Fund Management Cost*

The NPS is one of the lowest cost pension scheme available to the investor. The intermediation and operational costs have been kept economical and reasonable as these have a significant impact on the accumulation of corpus that facilitates pension on exit from NPS. The pension funds are currently allowed fund management charge of 0.01% p.a. Apart from fund management charges, there are other costs that the subscribers have to bear depending upon the services provided by the intermediaries.

The subscriber conducts many financial and non-financial transactions with the various intermediaries that constitute the NPS. There are charges that have to be paid for the various services offered to subscribers under the NPS system.

Mechanism for paying charges

- Some charges may be paid upfront to the intermediary at the time of utilizing the service or conducting the transaction. This may be an absolute amount, say Rs.20 for a switch request, or it may be a percentage of the value of the transaction, say 0.25 percent of the contribution amount with maximum of Rs.25,000 or account opening charges.
- Some charges are charged to the individual account by cancelling units available in the

subscriber's pension account. For example, if an investor has to pay a charge of Rs.100 for a service and the NAV of the units of the schemes in which their funds are invested (50:50) are Rs.12.5 and Rs.20, then Rs.50 is charged from the first scheme by cancelling or reducing the holding by 4 units (Rs.50/12.5) and 2.5 units are cancelled from the second scheme (Rs.50/20).

• Some expenses, such as the Investment Management fee of pension fund, custodian fee and NPS Trust expenses, are deducted from the value of the investments while calculating the Net Asset Value of the scheme.

Ultimately, the subscriber bears the charges payable on the various transactions and services.

Common financial and Non-financial transactions

Common financial and non-financial transactions that are charged include the following:

Transactions with the Central Record Keeping Agency (CRA)

- Opening the NPS account (one-time)
- Maintenance of account (annual)
- Other transactions

Transactions with the Point of Presence (PoP)

- Initial subscriber registration (one-time)
- Initial and subsequent contribution processing
- Non-financial transaction processing
 - Change in subscriber details like name, address, nomination and others
 - o Change in investment options and fund manager
 - Requests for subscriber shifting from one sector to another/one PoP-SP to another
 - o Request for printed account statement
 - Request for reprinting of PRAN
 - Request for re-issue of IPIN/TPIN
 - Withdrawal requests

Charge made by the Pension Fund

• Investment management fee that includes all transaction charges related to the portfolio of the fund such as brokerage and transactions fees.

Other Charges

- Custodial asset servicing charges
- NPS Trust fees

• Retirement Adviser (RA) fee

4.1.5 About NPS

- Eligibility to join the NPS & reasons for disqualification from the same
 - Any Indian Citizen in the age group of 18 years and 70 years is eligible to join NPS on voluntary basis. (for all-citizen and corporate model)⁸
 - Compliance with the KYC norms.
 - Undischarged insolvents, persons of unsound mind and persons who already hold an account with the NPS are disqualified.
- Process to join the NPS
 - Submission of application form through Point of Presence or
 - Online account opening through e-NPS platform.
- Details of contributions to be made to the Tier I account, frequency and mode
 - Minimum contribution of Rs.1000 in a year over a minimum of at least one contribution of not less than Rs.500.
 - Accepted modes of payment are cash, local cheque, demand draft and online transfers.
- Vesting criteria and formalities for withdrawing funds from Tier I
 - 40 percent or 80 percent of funds to be used to buy annuity on exit from the NPS as prescribed by PFRDA.
 - The remaining funds can be withdrawn in a lump sum.
 - On the death of the subscriber the entire amount can be paid out to the nominee in a lump sum.
- Investment approaches available to subscribers to invest money
 - The money will be invested across the following asset classes:
 - E: Investments predominantly in equity market instruments
 - C: Investments in fixed income instruments other than government securities
 - G: Investments in government securities
 - A: Investments in Alternative Investment Products⁹

Under the **Active choice**, the investor will decide how their money will be allocated between the four asset classes, with a maximum cap of 75 percent in equity and 5 percent in alternative investment products. In the **Auto Choice**, the allocation will be done based on a pre-determined ratio linked to the asset allocation chosen (LC25/50/75) and the subscriber's age. Subscribers joining the NPS beyond the age of 65 years can have a maximum exposure to equity of 15% and 50% under the Auto and Active choices

⁸ Reference PFRDA Circular No. PFRDA/2017/35/PD/1 dated November 1, 2017.

⁹ Investment in asset class A (alternative investment products) is only available to the subscribers opting for Active choice investment option, subject to regulatory limits.

respectively.

- If the subscriber does not indicate the investment choices in the application form, then the contribution will be invested in the Auto choice under Life Cycle 50 (LC50) option.
- Investment guidelines to be followed in investing the subscribers' funds

The investment guidelines for each asset class (E, C, G, A) are issued by PFRDA and the pension funds adhere to these guidelines while investing the contributions received from the subscribers.

- Financial and non-financial transactions conducted with the intermediaries
- Tax benefits available under the NPS

4.2 Working of NPS

4.2.1 Accumulation of corpus

The NPS offers an investment vehicle for subscribers seeking to accumulate a corpus for retirement by contribution to the scheme over the years of employment. The employee and/or employer contribute to the retirement account of the subscriber/employee over the employment years. The contribution is invested according to the asset allocation choices made by the subscriber to create the retirement corpus. The corpus will depend upon:

- The amount of contributions made to the retirement account. Higher the contributions made, higher is the likelihood that there will be a larger corpus accumulated for retirement. While there is a minimum limit on the contribution (Rs.1000 per annum) that can be made under the NPS, there is no upper limit. Subscribers can contribute as much as they are able to put towards their retirement goals.
- The returns earned on the contribution. This will depend upon the asset allocation choices made by the subscriber to invest the contribution made to the retirement account and the performance of the investments made. The NPS provides multiple investment options, such as equity, government securities and other debt instruments, from which the subscriber can choose depending upon their risk and return preferences. The subscriber can allocate resources between the options available to diversify the risks.¹⁰
- The period for which the accumulation is made. Longer the contributions remain invested, higher will be the accumulations as the contributions benefit from compounding benefits. The NPS does not permit early withdrawals from the retirement account except upto a limited percentage of the contributions made by the subscriber, and only for specified needs. This restriction keeps the funds invested to earn returns.

¹⁰ Not applicable for Atal Pension Yojana.

The contribution earns market returns but there is no guarantee on the returns or the final corpus. This corpus is partly used to buy an annuity that will provide pension income in the retirement years.

4.2.2 Investment Options under the NPS

The subscribers to the NPS can choose the investment options in which their contributions have to be invested. Following options are offered by the NPS.

E (Equity): High Return, High Risk option- Fund invests predominantly in equity-oriented investments.

C (Corporate Bonds): Medium Return, Medium Risk option- Fund invests predominantly in fixed income bearing securities other than government securities.

G (Government Securities): Low Return, Low Risk option- Fund invests predominantly in pure low risk government fixed income securities.

A (Alternative Investments): High risk and High return option-Fund invests in Alternative Investment Schemes including instruments like CMBS (Commercial Mortgage-Backed Securities), MBS (Mortgage-Backed Security), REITS (Real Estate Investment Trust), AIFs (Alternative Investment Funds), InvIts (Infrastructure Investment Trusts), Basel III Tier 1 Bonds issued by Banks etc. This asset class is not available for investment of contribution made under Tier II account.

Active Choice

The subscriber can choose the proportion of their funds that may be invested in each of the investment options. This is called the Active Choice. The only restriction is that the proportion invested in asset class E cannot exceed 75 percent and that in asset class A is restricted to 5 percent. The cap on allocation to equity will start reducing by 2.5% each year from age 50 onwards till it comes down to 50% at age 60 and above. For example, the subscriber may choose an asset allocation of 50 percent in 'E', 25 percent in 'C' and 25 percent in 'G'. The asset allocation may be changed in favour of the safer 'C' and 'G' assets classes as retirement comes closer and the accumulated corpus has to be withdrawn to provide the pension.

Auto Choice

Instead of actively choosing the proportion to be invested in each asset class, the subscriber can opt for the Auto choice option. Under this choice the subscriber's contribution will be invested in the lifecycle fund. The lifecycle fund is a dynamic allocation of the subscriber's wealth to the different asset classes in a defined proportion determined by the age of the subscriber, with the exposure to equity decreasing and that to the safer corporate bonds and government securities increasing with the age of the subscriber. There are three lifecycle funds offered to subscribers- LC25 (Conservative), LC50 (Moderate), and LC75 (Aggressive).

LC25: Conservative Lifecycle Fund.

Under the Conservative Lifecycle Fund (Table 4.2.1), the exposure to equity investments under asset class E starts at 25percent till the age of 35 and gradually reduces as per the age of the subscriber. The exposure to asset class C upto the age of 35 years will be at 45 percent and asset class G at 30 percent. From age 36 onwards, the allocation to E and C categories will reduce each year and the allocation to G increases. The exposure to the higher risk product, 'E', is reduced and that to the lower risk products increased as retirement approaches closer.

Asset Allocation (in percent)							
Asset Class Asset Class Asset Class							
Age	E	С	G				
Upto 35							
years	25	45	30				
36 years	24	43	33				
37 years	23	41	36				
38 years	22	39	39				
39 years	21	37	42				
40 years	20	35	45				
41 years	19	33	48				
42 years	18	31	51				
43 years	17	29	54				
44 years	16	27	57				
45 years	15	25	60				
46 years	14	23	63				
47 years	13	21	66				
48 years	12	19	69				
49 years	11	17	72				
50 years	10	15	75				
51 years	9	13	78				
52 years	8	11	81				
53 years	7	9	84				
54 years	6	7	87				
55 years							
and beyond	5	5	90				

LC50: Moderate Lifecycle Fund.

Under the Moderate Lifecycle Fund (Table 4.2.2), the exposure to equity investments starts at 50percent till the age of 35 and gradually reduces as per the age of the subscriber.

	Asset Allocation (in percent)					
	Asset Class Asset Class Asset Class					
Age	E	С	G			
Upto 35						
years	50	30	20			
36 years	48	29	23			
37 years	46	28	26			
38 years	44	27	29			
39 years	42	26	32			
40 years	40	25	35			
41 years	38	24	38			
42 years	36	23	41			
43 years	34	22	44			
44 years	32	21	47			
45 years	30	20	50			
46 years	28	19	53			
47 years	26	18	56			
48 years	24	17	59			
49 years	22	16	62			
50 years	20	15	65			
51 years	18	14	68			
52 years	16	13	71			
53 years	14	12	74			
54 years	12	11	77			
55 years						
and beyond	10	10	80			

 Table 4.2.2: Life Cycle Fund: LC50

LC75: Aggressive Lifecycle Fund

Under the Aggressive Lifecycle Fund (Table 4.2.3), the exposure to equity investments starts at 75percent till the age of 35 and gradually reduces as per the age of the subscriber.

Asset Allocation (in percent)					
	Asset Class	Asset Class			
Age	E	С	G		
Upto 35					
years	75	10	15		
36 years	71	11	18		
37 years	67	12	21		
38 years	63	13	24		
39 years	59	14	27		

Table 4.2.3: Life Cycle Fund: LC75

Asset Allocation (in percent)								
	Asset Class Asset Class Asset Class							
Age	E	С	G					
40 years	55	15	30					
41 years	51	16	33					
42 years	47	17	36					
43 years	43	18	39					
44 years	39	19	42					
45 years	35	20	45					
46 years	32	20	48					
47 years	29	20	51					
48 years	26	20	54					
49 years	23	20	57					
50 years	20	20	60					
51 years	19	18	63					
52 years	18	16	66					
53 years	17	14	69					
54 years	16	12	72					
55 years								
and beyond	15	10	75					

The subscriber does not have to make any rebalancing decisions for the portfolio when the auto choice is selected. The reallocation will be done on the subscriber's birthday according to the life cycle fund selected by the subscriber.

In the Active choice however, the subscriber has to make the investment calls of increasing or reducing exposure to different asset classes based on their stage in life and/or expectation of the performance of different asset classes and preference for risk and return.

The subscriber in the All Citizens and Corporate Sector Models will have the choice to change the investment option (Active or Auto choice) as well as asset allocation ratio (allocation among asset classes- equity, corporate bonds, government securities and alternate investments) four times in a financial year. The change made will apply to the existing corpus as well as prospective subscriptions. The option to make alterations will be available separately for Tier II accounts for subscribers in the government, all citizens and corporate sector models.

The pension funds have the responsibility to manage the funds of the subscribers as per the investment guidelines of the PFRDA. The guidelines ensure adequate protection for the investor by prescribing allocation across asset classes. The portfolios are diversified across the three asset classes so that poor performance of one asset is offset by the better performance of the other asset classes. Further, regulatory limits on the type of securities to which the funds can take exposure and the maximum limits also ensure diversification of risks for the subscribers.

Investment Guidelines for NPS Portfolio

The PFRDA has registered multiple pension funds who are authorized to receive the contributions from subscribers and invest them in a portfolio of securities that reflect the investment choice selected by the subscriber. The pension funds must adhere to the investment guidelines laid down by the PFRDA while selecting securities for the portfolio and managing it. The subscriber can select a pension funds to manage their contribution, from amongst those registered with the PFRDA. When the subscriber makes their contribution, the NPS system transfers their money for investment to the investment option of their choice (E,C,G,A) by the pension fund of their choice. They can also shift their holdings to another fund manager (once in a year), if they so choose.

Each pension funds manages multiple schemes: schemes for the Central and State Governments, all citizens model of the NPS, schemes under the corporate model and Atal Pension Yojana. Each scheme will have a distinct portfolio of securities that adhere to the guidelines laid down by the PFRDA and will be managed separately.

Some of the important guidelines that pension funds need to follow in creating and managing the portfolios are:

- Investments in the 'G' category of securities shall include Government securities, investment in debt instruments guaranteed by the central or state government, units of mutual fund schemes dedicated to government securities (limited to 5 percent of the total portfolio of G-Sec in the scheme). Investment in this category of securities will be limited to 55% of portfolio in case of Government models, NPS Lite and APY.
- Investments in the 'C' category of securities shall be made in listed and proposed to be listed debt securities issued by companies, banks, financial institutions. If the residual maturity of the bond is less than three years on the date of making the investment, then the investment will be limited to 10% of the corporate bond portfolio of the pension fund. The same shall also apply to Rupee bonds issued by International Bank for Reconstruction and Development, International Finance Corporation and Asian Development Bank. Other investments include term deposits of eligible banks of tenure not less than one year, units of debt mutual funds (with a limit of 5% of the total portfolio of the debt investments in the concerned schemes) and infrastructure bonds, securities or units issued by an Infrastructure Debt Fund operating as a Non-Banking Finance Company or mutual fund respectively and credit rated municipal bonds. The bonds invested should have a minimum AA credit rating. Pension funds are also now allowed to invest in debt ETFs launched by the government of India up to 5% of the assets under management of the corporate bond portfolio of the pension scheme. Investment in this category of securities will be limited to 45% of portfolio in case of Government models, NPS Lite and APY.
- Investments in the 'E' category of securities will include shares listed on the NSE or BSE which has a market capitalization of not less than Rs.5000 crores and has derivatives trading on the stock exchanges with the shares as the underlying, units of

equity-oriented mutual funds, ETFs that replicate the BSE's Sensex or NSE's Nifty 50 or those constructed to hold shares disinvested by the government in corporate

bodies, derivatives with stocks or indices as the underlying for hedging (contract value limited to 5 percent of equity portfolio invested in the other permissible securities). There is a limit of 5 percent on investment in equity mutual funds in a manner that the aggregate portfolio invested in such mutual funds shall not be in excess of 5 percent of the total portfolio of the fund at any point in time and the fresh investment in such mutual funds shall not be in excess of 5 percent of the year. Investment in this category of securities will be limited to 15% of portfolio in case of Government models, NPS Lite and APY.

- Investment in the 'A' category include instruments like listed Commercial Mortgage Based Securities (CMBS), Asset Backed Securities regulated by SEBI, Real Estate Investment Trusts (REITS), Alternative Investment Funds (AIFs) (Category I and II only), Infrastructure Investment Trusts (InvIts), listed Basel III Tier I bonds issued by scheduled commercial banks etc. The instruments must have a minimum AA (AAA in case of REITs and InvIts) equivalent rating from atleast two rating agencies. Investment in this category of securities will be limited to 5% of portfolio in case of Government models, NPS Lite and APY.
- Money market instruments invested by any of the above schemes will include commercial paper with a minimum credit rating of A1+, Certificates of Deposits, units of liquid mutual funds, term deposit of up to one-year duration. Investment in this category of securities will be limited to 10% of portfolio.
- Investments can be made in IPO/FPO/ NFO/OFS/secondary markets for each asset class, subject to the securities meeting the eligibility criteria prescribed.
- Cumulative investments in units and debt instruments of REITs and InvITs shall not exceed 3% of the total AUM of the pension fund.
- Investment in units of overnight funds and other short duration funds as specified by Sebi for investment of surplus funds for short term investments.
- Equity exposure in non-sponsor group companies is limited to 15 percent of the paid up capital of the non-sponsor group companies or 15 percent of the AUM under equity exposure, whichever is lower. In case of the group companies of the sponsor, the above limit is 5 percent.
- In case of debt securities, the exposure is limited to 10 percent of the net worth of the issuing non-sponsor group company or 10 percent of the AUM in debt securities, whichever is lower. In case of group companies of the sponsor the above limit is 5 percent.
- Investment exposure to an industry is limited to 15 percent (under all NPS schemes) by each pension fund.
- No investments will be made in securities outside India.
- No implicit or explicit assurance of returns will be provided by the pension fund.
- The asset class 'A' is not available for investment of contributions made under Tier II account.

Risk Profiling of NPS Schemes

Pension funds are required to evaluate and disclose the risk profiles of the Tier I and Tier II schemes of each asset class- equity, debt, government securities and Scheme A. The evaluation will be done in line with the guidelines laid down by PFRDA for the same. Prescribed values will be assigned to defined parameters for each security held in the portfolio. For debt securities the parameters are credit risk, interest rate risk and liquidity risk and for equity securities the parameters are market capitalization, volatility and impact costs. The scores assigned to each security will be weighted by the allocation in the portfolio to each security. Based on the final portfolio score each scheme will be assigned a risk profile between low, low to moderate, moderate, moderate to high, high, very high. The risk profiling of schemes will be done on a quarterly basis.

Computation of Net Asset Value

The scheme portfolio is marked to market on a daily basis and the Net Asset Value of each scheme will be calculated as:

(Current Market Value of Securities+ Value of Current Assets + Accrued Income- Accrued Expenses-Current Liabilities)/Number of Outstanding Units

The NAV of the scheme will move up when the market value of the securities in the portfolio rise, and fall when the value of securities fall. The NAV will be declared on every business day, and all financial transactions related to the scheme will be conducted based on the NAV.

Subscriber Holdings

The subscriber's holding in an NPS scheme is denoted in units and the value of corpus is computed by multiplying the units with the scheme NAV. Each unit has an initial face value of Rs.10. However, subscribers buy and redeem units at the applicable NAV of the scheme at the time of investment or withdrawal. Consider the example of a subscriber who invests Rs.5000 at the beginning of each month in the NPS 'E' scheme managed by XYZ Pension Fund Private Ltd.

Example:

Month	NAV (A)	Contribution (B)	Units (B/A)
1	14.3472	5000	348.500
2	14.2490	5000	350.902
3	13.9150	5000	359.324
4	14.0054	5000	357.005
5	14.7823	5000	338.242

Month	NAV (A)	Contribution (B)	Units (B/A)
6	14.9768	5000	333.850
		30,000/-	2087.823

At the end of 6 months the subscriber has invested Rs. 30,000 and holds 2087.823 units. The value of the corpus at the end of 6 months if the NAV is Rs.15.2128 is Rs. 31,761.63.

The contribution made each month into the retirement account is converted into units at the current NAV and held in the retirement account. The units accumulate in the account, and is monetized at the time of withdrawal at the applicable NAV at that time.

4.2.3 Pension from Annuity

The NPS is a retirement product that addresses the needs of the accumulation and distribution stages of retirement. The various schemes of the NPS allow the subscriber to accumulate his/her retirement corpus according to their risk and return preferences. The corpus created over time is available at retirement to create the income stream or pension. This is done by purchasing an annuity. An annuity is a financial product that provides an assured stream of income (similar to the concept of pension) according to the terms of purchase. The regulations require that at least 40 percent of the accumulated corpus in the NPS account has to be used to purchase an annuity. The subscriber may also choose to use any proportion of the corpus above 40 percent to purchase the annuity.

The income stream from the annuity purchased will depend upon the annuity rates at the time of purchase. The annuity rates will depend upon factors such as interest rates in the market. Purchasing an annuity when rates are high implies a better pay-out to the annuitant. The payout is guaranteed for life or for the term which is agreed in the annuity contract. As such it is suitable for providing a guaranteed income in retirement.

Types of Annuities

Annuities are products offered by Insurance companies. PFRDA has empanelled some insurance companies to provide annuity products for the NPS subscribers on exit. Subscribers can compare between the different annuity providers and select the one that offers the best rates for the product that suits them.

Some of the types of annuity available in the Indian market are:

- Annuity payable for life at uniform rate
- Annuity payable for 5/10/15/20 years and thereafter as long as the annuitant is alive
- Annuity for life with return of purchase price on death of the annuitant
- Annuity for life increasing at the simple rate of 3 percent
- Annuity for life with option of 50 percent of annuity for spouse for life on the death

of the annuitant

- Annuity for life with option of 100 percent of annuity for spouse for life on the death of the annuitant
- Annuity for life with option of 100 percent of annuity for spouse for life on the death of the annuitant and return of purchase price on death of last survivor

Any one option can be chosen. Once an annuity is purchased, neither the option nor the annuity service provider can be changed. Unless the contract specifies return of purchase price, the amount used for buying the annuity is not available any more to the annuitant. The default option under the NPS is the Annuity for life, with option of 100 percent of annuity for spouse for life on the death of the annuitant from the Life Insurance Corporation of India. This default option does not apply for subscribers under the Government model.

The pension earned from annuity will be taxed as income under the head 'Salaries' in the hands of the annuitant.

Annuity rates (pay outs) may vary between annuity providers. The factors that affect annuity rates include the following:

- Type of annuity chosen. Where the annuity type chosen includes add-on features like return of purchase price, payment for life to spouse, inflation-adjusted payouts, and others, the payout to the annuitant is lower.
- Amount invested. Where a large amount is invested to buy the annuity, the rate offered is likely to be better.
- Personal factors of the annuitant that affect life expectancy, such as
 - Age of the annuitant: older the annuitant, higher is the payout since the period for which the income has to be paid is likely to be lower
 - Gender: women typically get lower payout relative to men since their life expectancy is higher
 - Health and lifestyle: poor health and lifestyle factors will increase the payout since these factors will reduce life expectancy.

4.2.4 Exit and Withdrawal from the NPS

The PFRDA (Exit and Withdrawals under National Pension System) Regulations, 2015 and amendments thereof specify the rules for exit and withdrawals from the NPS.

Exit and Withdrawal from NPS for NPS All-Citizen Model and Corporate Sector Model:

Normal exit: A subscriber can exit from the NPS on reaching the age of 60 or superannuation or retirement according to the terms of employment by using a minimum of 40 percent of the corpus to buy an annuity from the approved annuity service providers which will provide the monthly pension. The balance can be withdrawn as a lump sum. However, the subscribers joining the NPS beyond the age of 65 years (but before attaining the age of 70 years) can exit after completion of three years from the date of joining NPS. The subscriber will be required to annuitize atleast 40 percent of the corpus for purchase of annuity and the remaining corpus

can be withdrawn in lumpsum. In case the accumulated corpus at the time of exit is equal or less than Rs.5 lakhs, the subscriber will have the option to withdraw the entire corpus in lumpsum.

Premature exit: In case of resignation or exit from the NPS before the age of 60 or the age of superannuation as prescribed in the employment terms, at least 80 percent of the corpus has to be utilised for purchasing an annuity and the balance is paid out to the subscriber as a lump sum. This is allowed only if the subscriber has subscribed to the NPS for at least a minimum period of 10 years.

Subscribers joining the NPS beyond the age of 65 years (but before attaining the age of 70 years) can opt to exit before completion of three years from the date of joining NPS. In such case, the subscriber will be required to annuitize atleast 80 percent of the corpus and the remaining corpus can be withdrawn in lumpsum.

In case the accumulated corpus at the time of exit is equal or less than Rs. 2.5 lakh, the subscriber will have the option to withdraw the entire corpus in lumpsum.

NPS subscribers who have exited prematurely from their NPS account or if their PRAN has been deactivated on final exit can open a new NPS account under a new PRAN if they still meet the eligibility norms. In cases of premature exit where the subscriber has withdrawn the permissible lumpsum amount of upto 20% of the corpus but the portion with which the annuity has to be purchased remains invested in their NPS account. Now such investors will be able to continue in the NPS by redepositing the amount withdrawn as lumpsum and continue under the same PRAN. This option can be exercised only once.

Exit due to death of the subscriber: The entire corpus shall be paid to the nominee of the subscriber.

Exit and Withdrawal from NPS under the Government model

Normal exit: The subscriber exiting upon attaining the age of superannuation, as prescribed by service rules applicable to him, retires, then atleast 40 percent of the accumulated pension wealth shall be mandatorily utilised for purchase of annuity and the remaining accumulated pension wealth shall be paid to the subscriber in lumpsum or he shall have a choice to collect such remaining pension wealth in accordance with the other options specified by PFRDA from time to time in the interest of the subscribers. In case the accumulated pension wealth is equal or less than Rs.5 lakhs, the subscriber shall have the option to withdraw the entire accumulated pension wealth without purchasing annuity.

Premature exit: The subscriber before attaining the age of superannuation, as prescribed by service rules applicable to him, voluntarily retires or exits, then atleast 80 percent of the accumulated pension wealth shall mandatorily be utilised for purchase of annuity and the remaining accumulated pension wealth shall be paid to the subscriber in lumpsum or he shall have a choice to collect such remaining pension wealth in accordance with the other options specified by PFRDA from time to time in the interest of the subscribers. In case the accumulated pension wealth is equal or less than Rs.2.5 lakh, the subscriber shall have the

option to withdraw the entire accumulated pension wealth without purchasing annuity.

Exit due to death of the subscriber: In case the subscriber before attaining the age of superannuation, dies, then at least 80 percent of the accumulated wealth shall be mandatorily utilised for purchase of an annuity and the balance pension wealth shall be paid as lumpsum or otherwise to the legal heirs or nominees. In case the accumulated pension wealth is equal or less than Rs.5 lakhs, the nominee or legal heir as the case may be shall have the option to withdraw the entire accumulated pension wealth without requiring purchase any annuity.

4.3 Subscribing to the NPS

4.3.1 KYC Compliance

The Prevention of Money Laundering Act (PMLA) was promulgated by the government to prevent the entry of illegal funds into Indian markets. According to this Act, the identity of those entering into financial transactions must be known and verified. The procedure to do this is known as Know Your Customer (KYC) norms.

KYC norms apply for opening bank accounts, trading accounts, demat accounts, capital market investments, life and general insurance policies, investments in post office savings bank (POSB) products, fixed deposits, National Pension System (NPS) and other such financial transactions.

The KYC process under the NPS involves verification of proof of identity and proof of residence of the customer and age of the subscriber. Subscriber's identity has to be verified with a document carrying their photograph. Proof of address can be verified from address as stated in the passport, ration card, voter's identity card, and latest utility bills. The KYC process also requires verification of the PAN card where available.

Prospective subscribers have to submit the documents to comply with the KYC norms to the PoP/PoP-SP along with the subscriber registration form. The documents accepted include the following:

SL	Proof of Identity (Copy of any one)	SL	Proof of Address (Copy of any one)
1	Passport issued by Government of India.	1	Passport issued by Government of India
2	Ration card with photograph.	2	Ration card with photograph and residential address
3	Bank Pass book or certificate with Photograph.	3	Bank Pass book or certificate with photograph and residential address
4	Certificate of the POP bank for an existing Bank customer.	4	Certificate of the POP bank for an existing Bank customer
5	Voters Identity card with photograph and residential address	5	Voters Identity card with photograph and residential address
6	Valid Driving license with photograph	6	Valid Driving license with photograph and residential address
7	Certificate of identity with photograph signed by a Member of Parliament or Member of Legislative Assembly	7	Letter from any recognized public authority at the level of Gazetted officer like District Magistrate, Divisional commissioner, BDO, Tehsildar, Mandal Revenue Officer, Judicial Magistrate etc
8	PAN Card issued by Income tax department	8	Certificate of address with photograph signed by a Member of Parliament or Member of Legislative Assembly

SL	Proof of Identity (Copy of any one)	SL	Proof of Address (Copy of any one)
9	Aadhar Card / letter issued by Unique Identification Authority of India	9	Aadhar Card / letter issued by Unique Identification Authority of India clearly showing the address
10	Job cards issued by NREGA duly signed by an officer of the State Government	10	Job cards issued by NREGA duly signed by an officer of the State Government
11	Identity card issued by Central/State government and its Departments, Statutory/ Regulatory Authorities, Public Sector Undertakings, Scheduled commercial Banks, Public Financial Institutions, Colleges affiliated to universities and Professional Bodies such as ICAI, ICWAI, ICSI, Bar Council etc.	11	The identity card/document with address or letter of allotment of accomodation issued by any of the following: Central/State Government and its Departments, Statutory/Regulatory Authorities, Public Sector Undertakings, Scheduled Commercial Banks, Financial Institutions and listed companies for their employees. Pension or Family Pension Payment Orders issued by Govt. Departments or PSU containing address.
12	Photo. Identity Card issued by Defence, Paramilitary and Police department's	12	Latest Electricity/water/piped gas bill in the name of the Subscriber / Claimant and showing the address (less than 2 months old)
13	Ex-Service Man Card issued by Ministry of Defence to their employees.	13	Latest Telephone bill (landline & postpaid mobile) in the name of the Subscriber / Claimant and showing the address (less than 2 months old)
14	Photo Credit card.		Latest Property/house Tax receipt (not more than one year old)
14			Existing valid registered lease agreement of the house on stamp paper (in case of rented/leased accommodation)

If the document provided to establish proof of identity also has the address declared as the address of the subscriber in the application form, then the same may be accepted as valid proof of address and identity.

If the address of correspondence and permanent address are different then proof has to be provided for both addresses. All communication will be sent to the address provided for correspondence.

An NRI investor has to provide passport details for opening of account and also an Indian address for communication as well as details of bank account in India.

The subscriber has to submit two copies of the self-attested documents required for KYC compliance. One set is retained by the PoP/PoP-SP and other is sent to the CRA.

Process of KYC Verification

Subscribers applying online under eNPS have the option of bank-based KYC verification and Aadhaar number-based verification. Subscribers also have the offline Aadhar-based paperless KYC verification option and the online Aadhar-based eKYC authentication.

Under bank-based verification, the bank selected by the subscriber for KYC verification are given access to the information provided in the online application by the subscriber and this is verified against the information available in the Core Banking System. Once the information is confirmed by the bank, the KYC verification is deemed complete. If there is a mismatch in the name, address or bank account details provided, then the same is rejected by the bank. In this case subscribers have to take a print out of the application form, affix their photograph

and get the bank to verify the details and stamp the registration form to confirm the same.

In case the PoPs integrate eSign-online electronic signature service within their applications for online account opening for NPS, the requirement for sending the physical application form to the Central Recordkeeping Agency by the PoP/subscriber shall be dispensed with. The PoP can charge Rs.5 plus applicable tax per application for providing this service.

In Aadhaar-based verification, subscribers who were allotted an Aadhaar number and were in possession of the mobile number registered with Aadhaar could select the Aadhaar option for KYC verification on the eNPS platform. Verification is confirmed on entering the One Time Password (OTP) sent to the mobile number along with consent to use Aadhar details and the demographic details are fetched from Aadhar records. Subscribers are required to make the NPS contribution and complete the digital registration process through digital authentication (OTP) on mobile number and email or eSign. In the offline version of Aadhaar-based verification, the subscriber can generate a digitally signed Aadhaar XML file by accessing the UIDAI portal through the interface provided by the PoPs/eNPS. The details in the file include name, address, photo, gender, date of birth and hash of registered mobile number/email address and reference id. This information is used to validate the details provided by the subscriber in their application. The photograph extracted from the Aadhaar XML will be used for the NPS account opening. The applicant will upload the signature and bank details proof to complete the KYC process.

Other information required in the application form includes contact details and other details such as education qualification, occupation and income levels.

Apart from the KYC documents and formalities prescribed above, the KYC process requires a declaration of the subscriber under the Prevention of Money Laundering Act, 2002 that the contribution has been made from legally declared and assessed source of income.

4.3.2 Bank Account Details

It is mandatory to provide bank account details while opening a Tier I account in the NPS. This includes the account type, account number, bank's name, branch details and address and MICR code and IFS code. A cancelled cheque has to be submitted with the application form for verification of the details provided.

If the subscriber is an NRI, then the NRE/ NRO account details have to be provided through a cancelled cheque with pre-printed name, account number and IFS code or banker's certificate giving the details in case of electronic transfers.

4.4 Investing in the NPS

4.4.1 Eligibility requirements

Any citizen of India, whether resident or non-resident, between 18 years-70 years of age can apply to become a subscriber in the NPS. Overseas Citizens of India (OCI) are also permitted to enroll in NPS on par with non-resident investors. The subscribers are eligible to continue in NPS upto the age of 70 years and during this period the subscriber may continue to contribute.

- 1. A person can hold only one NPS account. The subscriber's account can shift between private, government and corporate models, depending upon the employment status of the subscriber.
- 2. Being a member of any other social security program or pension fund, such as the Provident Fund, whether government sponsored or private, does not preclude an individual from subscribing to the NPS.
- 3. NRIs and OCIs are also eligible to open an NPS Tier I account, however Tier II account is not permitted. The NPS account can be opened through a PoP/PoP-SP. Most banks are registered PoPs. The NRIs/OCIs can open the account through the bank in which they hold their NRI account. The application has to be accompanied by a copy of the passport, proof of address if the local address is different from the address mentioned in the passport. The contributions can be made from the NRE account or NRO account of the NRI subscriber. At the time of exit or withdrawal, the annuity will be paid in INR, as will the lump sum amount. Repatriation is allowed, subject to the rules in force. An NRI/OCI subscriber's contributions and withdrawals from the NPS will be subject to the regulatory norms subscribed by the RBI and the Foreign Exchange Management Act (FEMA). All other features will remain the same for the NRI and Resident subscriber. The NSRF1 form is provided as Annexure 3.

4.4.2 Application for PRAN

Physical

Eligible investors may approach a Retirement Adviser/Point of Presence (PoP)/Point of Presence-Service Provider (PoP-SP) to apply for registering with NPS. In case of government employees, the application is submitted to the prescribed authority (Pay and Accounts office/Drawing and Disbursing Office) and for corporate subscribers the application is routed through the PoP/PoP-SP with which the company has tied up. On successful registration, a 12-digit Permanent Retirement Account Number (PRAN) will be allotted by the CRA based on the information provided in the application form. The PRAN is unique to each subscriber and is portable across CRA's and different models offered on the NPS platform. Once the PRAN is allotted the subscriber may choose to receive either a physical PRAN card or an e-PRAN received through email. The choice made can be changed subsequently at applicable charges.

The application that should be used for registering with the NPS is the Combined Subscriber Registration Form (CSRF) 1 and the additional details required for the Tier II account is provided in the *Annexure 1* to CSRF1.

The subscriber has to provide CRA, pension fund, investment choices in the application form both for Tier I and Tier II where applicable. The choices to be made are:

- Choose the CRA
- Choose whether the Tier II account has to be opened. If yes, the details for Tier II has to be provided in Annexure 1 to the CSRF1.

- Choose whether the PRAN should be printed in Hindi. Annexure 2 to the CSRF1 has to be submitted for this.
- Select the pension fund for Tier I and Tier II accounts. The pension funds need not be the same for both the accounts
 - If the subscriber does not select a pension fund, the application will be rejected.
 - For the government model, LIC Pension Fund Ltd., SBI Pension Funds Pvt. Ltd. and UTI Retirement Solutions Ltd., act as default PFMs. However, the employees have the option of selecting the PFM of their choice.
 - Corporate subscribers may select the pension fund in consultation with the respective employer
- Select the investment option: Auto or Active. Under the Auto option, the subscriber has to select from among the three lifecycle options provided: LC25, LC50, and LC75.
 - In the Auto option, the asset allocation is pre-defined and shifts from growth orientation to income-orientation according to the age of the subscriber and the lifecycle option chosen. If the subscriber mentions the asset allocation in the application form despite choosing the auto option, the same will be ignored and the Auto option will apply. If no lifecycle option is selected despite selecting the Auto option, the LC 50 option will be the default option applicable.
 - In the Active option the subscriber has to indicate the allocation between the four asset classes available: E, C, G, A.
 - The sum of the allocated percentages must total 100 percent.
 - The allocation to equity cannot exceed 75 percent and that to alternative investments cannot exceed 5 percent.
 - If the subscriber has joined the NPS beyond the age of 65 years then the maximum equity exposure can only be 15% and 50% under Auto and Active choice respectively.
 - If no investment option is indicated, then the Auto option with the LC 50 lifecycle option will be applied.

The subscriber must sign a self-declaration in the application that the information provided in the application form is correct and the account will be updated for any changes. They should also declare that they are not an existing member of the NPS and declare the legality of the income from which the contribution has been made.

The application must be dated and signed (thumb impression) by the subscriber and submitted to the CRA/PoP/PoP-SP. The authorized personnel will issue an acknowledgement after confirming compliance with the KYC requirements and checking the completion of the application form. The PoP-SP through whom the registration form is submitted is mapped to the PRAN generated for the subscriber, and all future transactions should be routed only through this PoP-SP. The subscriber can apply to get the mapped PoP/PoP-SP changed.

Where a subscriber who already has a Tier I account wants to activate the Tier II account, the form S10 has to be used. The form requires the PRAN allotted to be provided along with the bank details, choice of pension fund, investment option and asset allocation. The subscriber has the option to make nominations, of up to three nominees, for the Tier II account. The nominations made in the Tier I account will not automatically apply to the Tier II account. A copy of the PRAN card and a cancelled cheque has to accompany the application form.

Government employees seeking to open a Tier II account can submit form S10 to any PoP/PoP-SP of their choice. Other subscribers have to submit the application form only to the PoP/PoP-SP through which they have registered with the CRA for their Tier I account or can exercise the option online after login to their account using their PRAN.

The application forms can also be downloaded from the websites of the CRAs or Points of Presence.

Online/eNPS

An eligible individual can open an online NPS account through the e-NPS platform on the websites of the CRAs.

Registration using PAN (KYC verification will be done by an empanelled bank)

- Individual must have a PAN card
- Individual must have a bank account with an empanelled bank who will complete the KYC process
- Mandatory information needs to be filled in the online form
- Photograph and signature have to be scanned and uploaded
- Initial subscription can be made using debit or credit card or internet banking'

Registration using Aadhar

- Individual must have an Aadhar number or 16 digit virtual id number issued by UIDAI
- Individual must have an Aadhar-registered mobile number
- Subscribers have to select 'Aadhar online/offline KYC' option during registration and provide the Aadhar number/Virtual id number.
- An OTP will be generated and sent to the registered mobile number and this is used to complete eKYC and make the subscription and complete the digital registration.

The subscriber should print the auto-populated form, sign it and send it to the CRA within 30 days of generation of PRAN.

A PRAN is allotted to the individual once the registration process is complete and initial contribution is made and the welcome kit containing the PRAN card, IPIN/TPIN, booklet is sent to the individual's address.

The eNPS can be used by all subscribers, whether registered online or physically, to make their contributions to their Tier I and Tier II accounts. There will be an OTP sent to the registered

mobile number for authentication. Once that is done, the contribution can be made through debit or credit card or internet banking. Other facilities available on the eNPS portal include applying for change in scheme preference, updating email id/mobile number, viewing account details and resetting I-PIN.

Reasons for Rejection of Subscriber Application

- Application form is printed back to back
- Mandatory fields in the application form are not filled-in
- Self-attested supporting documents are not provided
- Age of the applicant on the date of submission of form at PoP/PoP-SP does not meet the requirements
- The photograph on the application form is not clear
- Bank account details are not provided alongwith a cancelled cheque.
- If multiple PFs are selected by the applicant, however, different PFs can be selected for Tier-I and Tier-II accounts
- If the asset allocation in the active choice does not add up to 100 percent or if the asset allocation is not provided
- In case of active choice, if the allocation to Equity (E) category exceeds 75 percent and/or Alternative Investment products (A) category exceeds 5 percent, the application shall be rejected

Once the subscriber's account is opened, the CRA sends a "Welcome Kit" consisting of the Permanent Retirement Account Number (PRAN) that has been allotted and an information booklet within 20 days of the receipt of the duly filled registration form at the office of the CRA. The PRAN card is a document with the 12-digit PRAN, subscriber's name, father's name and subscriber's photograph and signature/thumb impression. The PRAN is the primary means of identifying the retirement account. The subscriber will also separately receive T-PIN and I-PIN numbers to access the account on telephone and internet respectively.

4.4.3 NPS transactions

The subscriber's transactions with the NPS may be financial and non-financial in nature. The transactions will be conducted through the PoP/PoP-SP or online.

Financial Transactions

The financial transactions that a subscriber conducts are typically those related to investing funds, shifting between schemes or fund managers and withdrawing funds. All financial transactions are linked to the Net Asset Value of the scheme.

Contribution

Each contribution made to the NPS account has to be accompanied by the NPS Contribution

Instruction Slip (NCIS). The information required are:

- The PRAN (unless it is the initial subscription that accompanies the application form),
- Name of the subscriber and contact details,
- Payment details including:
 - Mode of payment: cash/cheque/demand draft
 - For payments made in cash for more than Rs. 50,000 the subscriber has to provide the PAN card
 - Third party cheques are not allowed for making contributions to the retirement account.
 - Cheque/DD No.
 - Bank name, branch and city
 - Amount to be invested in Tier I and Tier II accounts and the total amount to be invested

There will be a one-time PoP registration charge and transaction charges for each contribution (contribution to Tier I and Tier II will be treated as separate transactions and transaction charges will apply on each) and tax as applicable. This will be deducted from the amount paid by the subscriber before investing the balance. The contributions made by the subscriber is transferred to the trustee bank and the contribution details are provided to the CRA.

Subscription

The first subscription to the NPS scheme will be made while submitting the application form for registering with the NPS. The minimum amount per contribution is Rs.500/- for the Tier I account. The minimum contribution in the financial year is Rs.1000/- and this can be made in multiple transactions as the subscriber chooses. However, there will be a cost associated with each transaction. There is no upper limit on the contribution that can be made. For the Tier II account the minimum contribution at the time of opening the account is Rs.1000 and Rs.250 for subsequent contributions. There is no limit on the minimum or maximum number of contributions that can be made in the Tier II account.

Subscription to the NPS accounts can be made through cash, local cheque or Demand Draft and online transfer of funds. Cheque and DD should be drawn in favour of "PoP (name of PoP) collection Account- NPS Trust" and crossed "A/C Payee" only. The PRAN should be mentioned on the reverse of the cheque/DD or mention "New Application" if it is the first subscription along with the application form. Subscription can be paid by cash too. If the cash contribution exceeds Rs.50,000 then the copy of the PAN card should be enclosed. For online transfer, the subscriber can utilise the e-NPS platform or contact a PoP/PoP-SP offering the service for details. The contribution can be made through any PoP/PoP-SP even if the subscriber is not registered through them.

Direct Remittance or D-Remit, is a facility that has been launched as mode for subscribers to

make voluntary contributions to their NPS account. Under this facility, investors create a virtual id linked to their PRAN and add this virtual id as a beneficiary for transfer of funds from their bank account. Separate virtual ids are created for Tier I and Tier II accounts. To be able to use this facility the subscriber has to be an active NPS subscriber and have access to net banking facility. Once the virtual id is added to the beneficiary list, the subscriber can enable a systematic investment plan (SIP) by setting up standing instructions for auto debit of desired investment amount on chosen dates and periodicity. The minimum amount that can be remitted using this facility is Rs.500. IMPS mode has also been enabled for D-remit.

NRI-NPS subscribers can use the D-Remit facility to contribute to the NPS account from their NRO/NRE accounts. Also, at the time of withdrawal/exit, the proceeds of NPS shall be credited into NRO/NRE account of the NRI Subscribers and repatriation would be as per the FEMA guidelines.

Units will be credited to the subscriber's account on the day contribution is invested by the PFM (Pension Fund Manager). It takes T+2 days to get unit credited in subscriber account, wherein T being the date of fund receipt at Trustee bank. If the subscriber does not contribute at least Rs.1000 per year to the NPS account, then the account would become dormant. A dormant account will be closed when the account value falls to zero.

Transferring funds from Tier II to Tier I

Subscribers who have a Tier II account can transfer funds into the Tier I account. A transfer of funds from the Tier I account to the Tier II account is not allowed. Subscribers to the All Citizen and Corporate models are allowed to request the switch of funds. The request has to be made in the prescribed format (UOS-S13). The PRAN and name of the subscribers has to be provided in the request form for identifying the account and the amount in rupees to be switched or transferred has to be clearly mentioned. The transfer request has to be routed through the PoP/PoP-SP to the CRA for execution instructions.

Withdrawal of Funds

Exit under the National Pension System will be through a subscriber having superannuated or retired from employment or on the death of the subscriber or voluntary closure of the NPS account by the subscriber before retirement or reaching the age of 60. The rules governing exit from the NPS are discussed in 4.2.4 and in chapter 9.

The withdrawal request has to be made in the prescribed format and registered on the online withdrawal module offered on the CRA platform. With effect from April 1, 2016 all withdrawal requests have been made online.

Through Nodal Officers: When the requests are being forwarded through nodal officer/PoP, the physical documents along with a covering letter should be provided, who in turn would file for the withdrawal on the online system. It is to be noted that in event of subscriber's

death, the withdrawal request needs to be initiated by the Nodal office only.

For Subscribers: Subscribers can themselves initiate the withdrawal request in the online CRA system, which shall subsequently be verified by the Nodal Office before it is considered and finally disposed of by the NPS Trust.

The subscriber's personal details such as the PRAN, full name, address and date of birth have to be provided. The withdrawal details have to be provided, such as the percentage share to be withdrawn as lump sum and that to be used for purchasing the annuity. The mode of withdrawal of the lump sum, whether one-time or phased, and if phased the percentage to withdraw in the first year (minimum 10 percent) has to be provided. The amount left in the NPS account for phased withdrawal will be subject to fluctuations in the NAV. This may be a gain or loss to the subscriber. CRA charges will also be applicable. The bank details have to be provided for ECS/NEFT/RTGS/Electronic transfer, and a cancelled cheque should accompany the application for exit. The Annuity Service Provider and the Annuity scheme selected should be indicated in the form. The form allows the subscriber to make nominations to receive the outstanding wealth if the subscriber dies before the entire proceeds are withdrawn.

The documents that must accompany the withdrawal form are:

- Covering Letter from the associated Nodal Office to be submitted along with the Withdrawal form.
- Advanced stamped receipt needs to be duly filled and cross-signed on the Revenue stamp by the nominee/legal heir.
- Copy of PRAN card
- KYC documents (address and photo-id proof) attested by mapped Nodal Office.
- 'Cancelled Cheque' (having subscriber's Name, Bank Account Number and IFS Code) or 'Bank Certificate' on Bank Letterhead having subscriber's name, Bank Account Number and IFS Code are required to be submitted as bank proof. 'Copy of Bank Passbook' can be accepted, however, it should have Subscriber's photograph on it and should be selfattested by the Subscriber.

eNPS subscribers with a corpus of upto Rs.10 lakhs can now self-authorize exit requests by furnishing their off-line aadhaar details for the purpose of exit. To execute this, subscribers login to the online system provided by the CRA and provide required information and upload documents for verification. If the corpus is below Rs.10 lakhs the self-authorization option is provided to subscribers. If the subscriber opts for this facility then they have to download the offline aadhaar XML file from UIDAI website. This has to be uploaded to the CRA's online system along with the Aadhaar share code, mobile number of the subscriber and the email id. On successful validation the self-authorization withdrawal request will be accepted in the CRA system for execution.

For eNPS subscribers with corpus of more than Rs.10 lakhs and for subscribers associated with PoPs the new online platform has been enabled to facilitate exits. The PoPs will verify the exits

of subscribers in the All Citizens/Corporate models and for eNPS subscribers their respective banks that are registered as PoPs will verify the exit requests.

Subscribers have the option to submit the scanned withdrawal documents online along with the KYC and authenticate the withdrawal request online by using OTP/esign. The subscriber has to initiate the exit process on the CRA online system using their login credentials and once the online exit request is successfully submitted the exit request along with the scanned documents will be made available to the PoP associated with their login id. The PoP will verify the bank account and the beneficiary details by carrying out 'Instant bank account verification by penny drop'. Once the PoP authorizes the exit request it will get executed in the CRA system.

Upon death of the subscriber, the following documents are needed for withdrawal:

- Covering Letter from the associated Nodal Office to be submitted along with the Withdrawal form.
- Advanced stamped receipt need to be duly filled and cross-signed on the Revenue stamp by the nominee/legal heir.
- Original PRAN card OR affidavit in case of Non submission of PRAN card
- KYC documents (address and photo-id proof) attested by mapped Nodal Office.
- 'Cancelled Cheque' (having subscriber's Name, Bank Account Number and IFS Code) or 'Bank Certificate' on Bank Letterhead having claimant's name, Bank Account Number and IFS Code required to be submitted as bank proof. 'Copy of Bank Passbook' can be accepted, however, it should have claimant's photograph on it and should be self-attested by the claimant.
- Original Death Certificate issued by the Local Authority.
- In case of Nominees, details are not available in the CRA system. Therefore, a legal heir certificate OR a certified copy of family member's certificate issued by Executive Magistrate is required indicating the relationship of the claimant with the deceased as well as supporting documents are required to be provided. If all the legal heirs are not claiming the pension funds, relinquishment deed has to be submitted from all the legal heirs (except the Claimant) on a Stamp paper of Rs. 100/-along with the KYC documents (Photo ID proof and Address proof) of all the legal heirs duly attested by the mapped Nodal Office. Also an Indemnity bond needs to be obtained from the claimant stating the responsibility for claiming on behalf of all the legal heirs.
- Nodal Office has to submit the Death IRA compliance certificate if the subscriber's PRAN is Non-IRA compliant.

NPS Claim Processing Cell

The CRA has set up an NPS Claim Processing Cell for processing all claims under the NPS. The CRA generates a claim ID six months before the subscriber reaches the age of superannuation and intimates the subscriber and PoP. In case of an early withdrawal or death, the claim id

will be generated on receiving the withdrawal request. On receipt of the online withdrawal request on the CRA system, the units under the PRAN will be redeemed. The lump sum amount will be credited to the subscriber's bank account and the portion for annuity will be credited to the annuity service provider's account. The annuity form will be forwarded to the annuity service provider.

Withdrawal from Tier II account

For withdrawal from the Tier II account the subscriber has to submit the request online or the Annexure S12 to the PoP/PoP-SP. The PRAN and name of the subscriber has to be mentioned to identify the account. The withdrawal can be partial or complete. If partial, the amount has to be mentioned. The amount withdrawn will be credited to the bank account of the subscriber.

In case of Tier-II account for withdrawals the funds are transferred from the trustee bank account to the subscriber's bank account on T+3 day basis.

Conditions for Partial Withdrawal from Tier I account

The NPS allows partial withdrawals by the subscriber from their individual pension account subject to the following conditions:

- The withdrawal shall be for the purpose of higher education of children, marriage of children, construction of house, treatment of specified illnesses such as cancer, multiple sclerosis and Covid-19, meeting expenses for skill development and selfdevelopment, meeting the expenses of starting own venture.
- The amount that can be withdrawn will be capped at 25 percent of the contribution made by the subscriber and excluding any contribution made by the employer and any returns earned.
- The subscriber should have been in the NPS for at least 3 years.
- The subscriber will be allowed to withdraw only a maximum of three times during the entire subscription period in the NPS. No minimum time is required between two withdrawals.
- The withdrawal request may be made online on the CRA system based on a selfdeclaration provided by the subscriber. No authorization of the request at the nodal office/PoP level is required.

Where the subscriber who has submitted a request for exit from Tier I account has a Tier II account, then the Tier II account balance will also be redeemed along with the Tier I balance and credited to the bank account provided in the withdrawal form.

The monetisation policy of the NPS, in the event the withdrawal process is not initiated by the subscriber, has been discussed in section 4.2.4.

Non-Financial Transactions

Shifting Between Options

Subscribers can apply for making the following changes in the investment choices they have made:

- Choice of investment option: Active or Auto
- Choice of Asset Allocation between E, C, G, A if the Active option is selected
- Choice of Pension Fund

Each change, except a change in Pension Fund, can be requested four times in a financial year by filling up the relevant request form (UOS-S3) and submitting it online or to the PoP/PoP-SP associated with the account for onward submission to the CRA for processing. A request for change in Pension Fund can be made only once a year. The PRAN and name of the subscriber has to be provided for identifying the account. Separate forms have to be submitted for Tier I and Tier II account. There will be a transaction fee for any change requested. Government employees can submit a change of request only for Tier II account.

• Freezing and Unfreezing Accounts

The subscribers account can be frozen if the minimum contribution requirement in the year is not met. If the Tier I account of a PRAN is frozen, the Tier II account will also be frozen. To unfreeze the account, the subscriber is required to make a minimum contribution of Rs.500.

For all service requests subscribers get a 17digit acknowledgement from the PoP/PoP-SP. Once the change is made the CRA will send intimation of the same by email/SMS to the contact details provided.

• Other Transactions

The subscriber may need changes made in the account that do not have a financial implication but are essential for the maintenance of the account.

• Changes to Account Details

The subscriber should approach the PoP/PoP-SP mapped to the PRAN to get the following information updated.

- Change in personal details
- Change in bank details
- Change in nomination details
- Reprint of PRAN card
- Reissue of IPIN or TPIN
- Change of photograph or signature

The request should be made using the appropriate change request form.

The subscribers now also have an e sign- based online facility to change their nomination. For this they need to login in to their CRA system and select the option to update nomination. The details of nomination has to be provided and saved and the subscriber has to authenticate the changes by selecting the e sign option. The subscriber will be directed to the e signature service provider's page where they have to provide the Aadhaar and virtual id details. An OTP will be sent to the subscriber and on providing this the nomination change will be updated in the records of the NPS.

• Subscriber Shifting

A subscriber may choose to shift between the CRAs and the request has to be placed to the CRA with whom the subscriber intends to shift. The subscribers under the All Citizens Model can choose to change the CRA up to twice in a year. This change can exceed two times for subscribers under the Government or Corporate model if the employer chooses to change the CRA, or if subscribers under the All Citizens Model who have already exercised the right to change the CRA twice subsequently come under the corporate or government model, this too may result in a further change in the CRA chosen.

A subscriber may choose to shift from the PoP/PoP-SP mapped to their account to another for reasons such as services provided or change in employment. The requisite form needs to be submitted to the existing PoP or new PoP. A subscriber who is part of a corporate model shifts employment to an employer who does not provide the NPS benefit can continue making contribution under the PRAN as a voluntary contributor under the all citizens model and shift to a new PoP. The subscriber has to submit an Inter-sector shifting form to the PoP with whom he wants to be associated.

Nominations

The application form provides for filling upto three nominations. If there is more than one nominee, then the percentage allocation to each has to be specified. If the total allocation does not add up to 100 percent, the nomination will be rejected. A subscriber can make nominations at the time of making the registration without any additional charges. Nominations can be made subsequently too, or make changes to an existing nomination by approaching the PoP. There will be a fee of Rs.20 for each service request.

4.4.4 Impact of subscriber actions—discontinuing and stopping contribution

The NPS allows the flexibility to subscribers to take decisions about the extent of their contributions, making withdrawals to meet essential expenses and to even discontinue making contributions to the retirement account. However, any decision on stopping or withdrawing funds from the retirement account has a significant impact on the final retirement corpus and its adequacy for a comfortable retirement. Here are a few scenarios and their impact.

1. Discontinuing contribution for a period

A subscriber begins making contributions to her NPS account at the age of 25 years and continues till the age of 30 years. At 30 she takes a break from work and stops contributing till the age of 40. She restarts contribution at 40 and continues making contributions till retirement at the age of 60. She makes a monthly contribution of Rs.5000/- and the pension fund gives a return of 10% (compounded annually).

-	3,90,412 Applying formula: =FV(r,nper,pmt,pv,1) =FV(0.1/12,60,- 5000,0,1) 10,12,628	Rs.5,000 5x12=60 Rs.5,000 x 120=6,00,000	3,90,412
	Applying formula: =FV(r,nper,pmt,pv,1) =FV(0.1/12,60,- 5000,0,1)		3,90,412
	Applying formula: =FV(r,nper,pmt,pv,1) =FV(0.1/12,60,- 5000,0,1)		3,90,412
-	Applying formula: =FV(r,nper,pmt,pv,1) =FV(0.1/12,60,- 5000,0,1)	Rs.5,000 x 120=6,00,000	3,90,412
-	Applying formula: =FV(r,nper,pmt,pv,1) =FV(0.1/12,60,- 5000,0,1)	Rs.5,000 x 120=6,00,000	3,90,412
-	=FV(r,nper,pmt,pv,1) =FV(0.1/12,60,- 5000,0,1)	Rs.5,000 x 120=6,00,000	
-	=FV(r,nper,pmt,pv,1) =FV(0.1/12,60,- 5000,0,1)	Rs.5,000 x 120=6,00,000	
-	=FV(0.1/12,60,- 5000,0,1)	Rs.5,000 x 120=6,00,000	
	5000,0,1)	Rs.5,000 x 120=6,00,000	
	10 12 628	Rs.5,000 x 120=6,00,000	
	10 12 628		
	10,12,020		20,89,621
,	Applying formula:		Applying formula:
:	=FV(r,nper,pmt,pv,1)		=FV(r,nper,pmt,pv,1)
1	FV(0.1,10,0,-390412,1)		FV(0.1/12,15*12,- 5000,0,1)
:	1,12,49,098		1,91,41,383
=	=FV(r,nper,pmt,pv ,1)		=FV(r,nper,pmt,pv ,0)
-	=FV(0.1/12,20*12,-		FV(0.1/12,35*12,-
!	5000, -1012628,1)		5000,0,1)
1,41,383 - 1,12	2,49,098 = 78,92,285		
1		FV(0.1,10,0,-390412,1) FV(0.1,10,0,-390412,1) 1,12,49,098 =FV(r,nper,pmt,pv,1) =FV(0.1/12,20*12,- 5000, -1012628,1) ,41,383 - 1,12,49,098 = 78,92,285	FV(0.1,10,0,-390412,1) 1,12,49,098 =FV(r,nper,pmt,pv ,1) =FV(0.1/12,20*12,- 5000, -1012628,1)

There is a difference of nearly Rs.78 lakhs between the two corpus just because the subscriber chose to discontinue temporarily. To catch up for the 10 years of not contributing the subscriber has to more than triple the monthly contribution from age 40 onwards [=FV(0.1/12,20*12,-15,307,-10,12,628,1)].

2. Partially withdrawing to meet expenses

A subscriber has the facility to withdraw a portion of their contribution to the retirement corpus to meet specified expenses. This brings down the corpus available and the compounding benefits to come down. Let us assume a subscriber contributes Rs.5000 per month to the retirement fund earning 10% for a period of 15 years. At this stage he has to withdraw 25%. He continues to contribute to the retirement corpus

Does Partial	Withdrawal		Difference	Does Not do Partial Withdrawal
Corpus	FV(0.1/12,15*12,-	20,89,621		18,34,204
accumulated in	5000,0,1)			
15 years				
Amount	=15*12*5000	9,00,000		
contributed in				
15 years				
Amount	=0.25*9,00,000	2,25,000		0
withdrawn				
(25% of				
contribution is				
allowed for				
withdrawal)				
Corpus	=20,89,621-2,25,000	18,64,621		18,34,204
remaining				
Corpus	FV(0.1/12,20*12,-	1,74,92,567		1,91,41,384
accumulated at	5000,- 18,64,621,1)			
60 years				FV(0.1/12,12*35,-
				5000,,1)
Difference			16,48,817	

The final corpus is lower by Rs.16.49 lakhs if the option to withdraw is utilized. Subscribers can protect their retirement corpus by increasing the contribution to the corpus when they are able to do so.

4.4.5 Investor Grievance Redressal Mechanism

PFRDA (Redressal of Subscriber Grievance) Regulations, 2015 provides for a mechanism to deal with the grievances of NPS subscribers. According to the regulations all intermediaries in the NPS shall have a senior management level officer designated as grievance redressal officer. Each branch or office shall also have an officer so designated. Each intermediary shall have a clearly laid out grievance policy and procedure to receive, register, acknowledge and handle any grievance raised by a subscriber. The policies laid down should meet with the standards laid down by the PFRDA.

The PFRDA has appointed an Ombudsman to facilitate resolution of grievances. A

complainant may escalate a grievance against the NPS Trust or any intermediary to the ombudsman if their complaint is not redressed within the specified time period. The ombudsman will work for a settlement between the parties concerned or adjudicate the dispute if a settlement is not possible and seek information from all parties concerned as they deem fit. The complainant or their authorized representative has to file the appeal in the prescribed format. The appeal has to be filed within 45 days of receiving a response from the NPS Trust with which the complainant is dissatisfied or if the Trust does not respond within the period that they are required to do so. The decision of the ombudsman is binding on all parties. However, a party to the dispute can appeal to the Ombudsman for a review within 15 days of the award and to the PFRDA within 30 days of the Ombudsman's decision. If a party to the dispute does not abide by the ruling of the ombudsman it may lead to suspension and even cancelation of registration.

The details of this regulation are covered in Section 9.6 of Chapter 9 of this workbook.

4.4.6 NPS online facilities

The NPS Trust provides online facilities for new and existing subscribers to conduct transaction related to the NPS through their website npstrust.org.in. The "Online Services" tab on the website allows the prospective and existing investors to conduct their NPS related transactions online. This includes the following:

- Open an NPS pension account (Permanent Retirement Account Number (PRAN)
- Contribute to PRAN
- Activate Tier II account
- Change Personal Details
- Change Investment Pattern
- Change Pension Fund
- Download SOT
- Print ePRAN
- Exit/Withdrawal from NPS
- Lodge a grievance

Steps to use the online facilities

1. Open the NPS account

Open an NPS pension account (Permanent Retirement Account Number (PRAN)) under the All citizens model by going onto http://www.npstrust.org.in/content/open-your-nps-account-online.

- a. Choose the Central Recordkeeping Agency.
- b. Individuals have the option to select from the empanelled bank/non-bank PoP with which their KYC verification can be completed. This may be a bank with which they have a savings bank account or current account or with a

depository participant, mutual fund, insurance company with which the individual has an account based relationship.

An individual can open an individual pension account under the All Citizens Model where the KYC verification will be done by an empaneled bank or by a non-bank PoP selected by the individual. The name, address and other details provided during registration should match the records of the bank/non-PoP, failing which the request is liable to be rejected.

The investor should keep the following documents ready to complete the registration process:

Scanned copy of the following documents

- 1. Scanned copy of cancelled cheque or bank passbook. Permissible size of the document for upload is 4KB-2MB.
- 2. Scanned copy of color photo. Permissible size of the document for upload is 4KB-50KB.
- 3. Scanned copy of signature. Permissible size of the document for upload is 4KB-50KB.
- 4. Scanned copy of PAN card (for opening tier-II account). Permissible size of the document for upload is 4KB-1MB.
- 5. Internet Banking credentials like the XXXXXXX, of empaneled bank for uploading payment details.

The following information provided should be the same as available in the bank records for KYC confirmation:

- 1. Bank account number
- 2. IFS code
- 3. Name of applicant
- 4. Date of birth
- 5. Address details

Once the mandatory personal details, contact details, bank information, selection of pension fund, selection of investment option, whether auto or active and if active the proportion in each asset class for both the tier 1 and 2 accounts and the nominations for both accounts are filled online and the documents uploaded in *.jpeg/*.jpg format the system will direct you to the payment gateway to make payment for the NPS account.

NRI investors additionally have to provide additional information such as the type of bank account, whether NRE or NRO account, whether the account is repatriable or not and upload the scanned copy of the passport. The individual should also select the preferred address for communication, whether overseas or permanent address.

After the Permanent Retirement Account Number (PRAN) is allotted, the subscriber should select the option to print the form, paste photograph and sign. This has to be couriered to the CRA within 30 days of the allotment of the PRAN. In case the subscribers opt to e-sign the application through Aadhar, the sending of physical application to CRA is not necessary.

2. Making Subsequent Contributions

The eNPS can be used to make subsequent contributions to the PRAN, either for the Tier I or Tier II account. The amount will be credited to the PRAN on T+2 basis.

Investors need to provide the PRAN and authenticate the PRAN using the OTP which will be sent to the registered mobile number or e-mail ID.

Once the account is verified, the investor has to select the amount and payment gateway. Contributions can be through Debit / Credit card or use Internet Banking option of any of the empanelled Banks.

If PRAN was allotted through a Point Of Presence (PoP), PoP Service Charges will be applicable on the contribution amount 0.10% plus applicable GST (subject to minimum of Rs.10 and maximum of Rs. 10,000 per transaction).

3. Activate Tier II account

Subscribers who have a Tier I account can use the eNPS to activate Tier II account online using their PAN.

The PRAN, Date of Birth and PAN are required to initiate the account opening. On providing these an OTP will be sent to the mobile number registered with the CRA. Once the account is verified the subscriber needs to fill up all the mandatory details (Bank, Nomination, Scheme Preference etc.) online and upload copy of PRAN Card and copy of cancelled cheque.

The amount of investment has to be entered upon which the subscriber is routed to a payment gateway for making the payment. The options available are debit/credit card or internet banking.

A printout of the form after activation of Tier II account along with a copy of PAN card and cancelled cheque should be sent within 30 days from the date of activation of Tier II account to the CRA. In case, the subscribers opt to e-sign the application through Aadhar, the sending of physical application to CRA is not necessary.

4. Other Services

Subscribers can also use the eNPS to avail a number of services such as updating contact details, reprinting the PRAN card, changing in scheme preference, viewing account details and transaction statement, withdrawing from Tier II account.

Mobile App

The Protean e-gov Technologies CRA mobile App allows subscribers the ease of conducting certain transactions from their mobile phone. The app can be downloaded from Google Play Store/ Iphone AppStore.

The screen gives the options to log in or to contribute. To log in the subscriber has to provide the PRAN and the IPIN. Once logged in the investor can see the details of their account such as total holding, scheme invested in, subscriber details and other such details. They can also make contribution to their account for which they need to provide their PRAN and date of birth. An OTP will be generated using which the contributions can be made. Other functions that can be conducted include updating scheme preference including pension fund, scheme and allocations percentage for non-government subscribers, updating contact details, viewing transaction statement, withdraw from tier 2 account and registering a grievance.

Video Based Customer Identification Process (VCIP) for NPS

Intermediaries registered with PFRDA can use VCIP for on-boarding, exit or any other service request related to NPS. PoPs may implement their own mobile application for undertaking VCIP. It can be used for taking photographs, scanning and uploading documents and capturing signature during VCIP in live environment for onboarding. During exit the withdrawal document along with KYC needs to be uploaded for issuing annuity by the annuity service providers. A non-mobile application based VCIP may be done through a video call from the domain of the PoP by an authorized official specially trained for this. The process should follow the steps laid down for clear identification of the subscriber and the documents and forms necessary to support the activity. The photo/signature is to be uploaded during the VCIP for onboarding and the withdrawal document along with the KYC needs to be uploaded for the purpose of issuing annuity on exit. The soft copies of the CSRF needs to be generated and shared with the CRA and subscribers. For other services the subscribers can upload the required documents for verifications by PoPs through VCIP.

4.5 Tax aspects of subscribing to the NPS

The NPS comes under EEE tax regime. This refers to the tax implications at the stage of making a subscription to the NPS, earning returns on the contribution and withdrawing the accumulated wealth.

- The subscriber receives tax benefits at the time of making the investment (E).
- There is no taxation when the income or return is earned on the contributions made (E).
- At the stage of exit, there is no tax on the accumulated corpus utilised for purchasing an annuity (minimum 40 percent) and the maximum of 60 percent withdrawn as lumpsum For more details, refer to section 4.5.3.

4.5.1 Investment Stage

Contributions made by the subscriber in the individual pension account is exempt from tax under Sec 80 CCD (1) upto a limit of Rs.1.5 lakhs. This limit covers the deductions available under section 80C, 80CCC and 80CCD(1). This deduction is limited to 20% of gross annual income for a non-salaried individual and 10% of basic and DA for salaried employees. The

employer's contribution up to a limit of 10 percent of the basic salary and dearness allowance (14% for Central government employees) is also allowed as deduction under section 80 CCD(2) to the employee. Additionally, since FY 2015-16 an additional deduction on investment up to the extent of Rs.50,000 is allowed under a new section 80 CCD (1B). Central Government Employees contributing to the Tier II account can now claim benefits under section 80 C.

Example: Consider the case of a person investing in different financial products eligible for tax deduction. Assume he contributes Rs.1 lakh in Provident Fund, Rs. 50,000/- in PPF, Rs.50,000 as repayment of housing loan and Rs. 60,000 in NPS. The best use of tax benefits available shall be as follows:

- Rs.1.50 lakhs for products included under Section 80 C
- Rs.50,000 in Section 80CCD(1B) for the NPS contribution

In another scenario, a subscriber is investing Rs. 1.50 lakhs in NPS and Rs.50,000 in PPF. In such a case, he can avail of the benefit as under:

- Rs.1.50 lakh (Part of NPS contribution (Rs. 1 lakh) and PPF (Rs.50,000)) under section 80 C
- Rs.50,000/- under Section 80 CCD (1B).

4.5.2 Returns/Earnings Stage

There is no tax implication for the subscriber in the accumulation stage where the contributions earn returns in the schemes in which they are invested. The returns earned are reflected in the change in the Net Asset Value of the Schemes.

4.5.3 Exit Stage

At the exit stage:

a) 60 percent of the accumulated pension corpus withdrawn as a lumpsum is tax exempt.

b) Further, 40 percent of the accumulated pension corpus which has to be mandatorily used to buy annuity, shall also not attract any tax at the time of buying the annuity.¹¹

c) The annuity income received will be taxable.

For example: A subscriber has the total accumulated pension corpus of Rs.10 lakh (including contribution and returns) at the time of exiting NPS.

- a) 60 percent of the total corpus (Rs. 10 lakh) i.e. Rs. 6 lakh shall be tax exempt.
- b) Further, 40 percent of the accumulated pension corpus i.e. Rs. 4 lakh has to be mandatorily

¹¹ However, it should be noted that when the annuity starts generating the income at the future date then the annuity income will be taxable.

used to buy annuity. This shall not attract any tax at the time of buying the annuity.

c) If the subscriber gets an annuity of Rs. 3000 from the Annuity Service Provider (ASP), then this Rs. 3000 will be treated as income as is the case for other pension receipt.

Taxation on Partial Withdrawal

NPS subscribers can make partial withdrawal from their tier I account for specified needs if they have been in the NPS for a minimum of 3 years. The withdrawal is limited to 25% of the subscriber's contribution to the accumulated corpus and the same is exempt from tax under section 10(12B) of the Income Tax Act, 1961.

Taxation on Early Exit

If an NPS subscriber exits before the age of 60 or the prescribed retirement age, as applicable, 80% of the accumulated corpus has to be used to purchase an annuity and this portion is exempt from tax.

Tax implications on Tier II contributions

Contributions made to the tier II account only by government employees will be eligible for deduction under the limits prescribed for section 80C.

Gains arising out of Tier II are taxable at the hands of the subscriber at the applicable tax slab rates in which the subscriber is assessed for the purpose of taxation.

Benefits to the Subscriber

The benefit of the NPS as a retirement savings vehicle comes from the way the scheme is structured.

The scheme is cost efficient and transparent in all aspects that affect the subscriber. The contributions are invested at the declared NAV. The portfolios are disclosed for the subscribers to scrutinize, and the cost structure is clearly defined. The returns from each scheme are calculated based on the NAV, which is also publicly available.

The NPS provides the flexibility of making investments depending upon each subscriber's ability, invest it according to their risk and return preferences, shift between models, schemes and pension fund, recordkeeper (CRA) and PoPs, all of which help tailor the investment to the subscriber's needs.

The NPS is closely regulated by the PFRDA to ensure protection of the subscriber's savings. The structure of the NPS is such that each constituent such as the trust to hold the subscribers' investments, the Central Recordkeeping Agency that provides the infrastructure that links the functions of the entities, the points of presence that interface with the subscriber, the trustee bank that holds and transfers the funds and the pension funds who actually manage the schemes are all independent of each other. This provides a check to each constituent's function and reduces the risk to the investor of collusion amongst the constituents to their detriment. Even if one entity fails, its functions can be transferred to an alternate without the

entire system collapsing. For each function there is more than one entity appointed to give options to the investors and avoid the inefficiencies that comes from one entity having the entire control. All the entities are appointed after careful selection based on the eligibility norms laid down. The investments are made according to the investment regulations laid down by PFRDA. The PFs have internal monitoring mechanisms and they are overseen by the NPS Trust. The PFRDA monitors the activities of all the entities in the NPS system.

The NPS provides all the advantages of a professionally managed mutual fund to the subscriber at a low cost.

Sample Questions

- 1. The National Pension System provides what type of retirement benefit to its subscribers?
- a. Defined contribution
- b. Guaranteed pension
- c. Defined benefit
- d. Voluntary pension
- 2. Who defines the eligibility norms of the intermediaries in the NPS?
- a. Ministry of Finance
- b. SEBI
- c. PFRDA
- d. NPS Trust
- 3. In which of the following models of the NPS is the contribution always solely by the subscriber?
- a. Government model
- b. State government model
- c. Corporate model
- d. All citizens model
- 4. A subscriber to the NPS receives the pension for income in retirement from ______.
- a. An Annuity purchased on retirement
- b. The Corporate employer
- c. PFRDA
- *d.* the government

CHAPTER 5: EVALUATING FUND PERFORMANCE AND FUND SELECTION

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Return on Investment
- Different types of return calculations
- Different measures of risk and their interpretation
- Evaluating Performance of the Fund
- Steps in matching investor's retirement needs to product
- Suggesting funds based on investor's needs and profile

5.1 Return on Investment

An investment product is defined by its return and risk, liquidity and other characteristics. The pre-investment checklist for an investor should evaluate these features for suitability before including the investment product in their portfolio. Some of the questions that will help determine the suitability to the investor includes:

- What is the type of return that the product generates?
 - Periodic return like interest and dividend
 - Appreciation in the value of the investment
 - A combination of the two
- Are the returns fixed or guaranteed?
- Is there a term or period for which the investment will earn the returns?
- How will the principal invested be returned to the investor?
- Are the level of returns known at the time of investment?
- What are the risks of investing in the product?
 - Is there a risk of default in receiving the fixed periodic income?
 - Is there a risk of not receiving the principal invested?
 - Is there a risk of the return being different from what was expected?
 - \circ $\;$ Is there a risk of the return received being insufficient to meet needs?
 - Is there a risk of the return earned being inadequate to beat the effects of inflation?
- Can the capital invested be easily accessed if the investor needs the funds invested?

In order to be able to answer these questions that are pertinent to evaluating an investment for its suitability, it is important to understand the concepts related to returns and risk from investments.

The performance of an investment is evaluated on the basis of the return earned for its investors and the risk taken to generate it. The risk and return in a portfolio depends upon the asset class in which the portfolio invests in, the type of securities held and the way the portfolio is managed. In case of equity portfolios, the extent of diversification or concentration in the portfolio, the market capitalization of the stocks held, the stock picking strategies, all affect the risk and return. In debt portfolios, the credit rating of securities held and the tenor of the securities will determine the coupon income earned and the benefits to the portfolio from an increase in value as well as the risk of default and volatility in the portfolio.

The return on investment (RoI) is calculated by relating the earnings from an investment to the cost paid to acquire the investment. The returns from an investment will be in the form of:

- ✓ Periodic income such as interest or dividend
- \checkmark Gains or losses in the value of the investment

Periodic income may be fixed and known in advance, like interest on debt securities. Or it may not be fixed or known at the time of investment, like dividends. The gains or losses from an increase or decrease in the value of the investment are, again, not known in advance. The gains and losses may be realized by selling the investment, or unrealized or notional and represented by the increase/decrease in the values. Either way they form part of the return calculations.

For example, X invests in a mutual fund when the NAV of the fund is Rs.12. He receives a dividend of Re.0.80. One year later the NAV is Rs. 12.50.

The return to the investor from this investment is the dividend received of Re.0.80 as well as the increase in the NAV of Re. 0.50. The total return to the investor is Rs.1.30.

The total return from the investment can be positive or negative. In the above example, if the NAV at the end of the year is Rs.11, then the total return from the investment is Re.-0.20 (Re 0.80 + (-1.00)).

All investments need not have both components of returns contributing to the total return from an investment. For example, a debt product like a fixed deposit may have only periodic interest income as return from the investment. In case of some products, like the public provident fund (PPF), the periodic income guaranteed but variable because the interest payable on products like PPF is reset every quarter.

5.2 Different types of return calculations

5.2.1 Absolute Returns

The Return on investment is computed in many ways. The absolute return in rupees simply compares the amount earned in the form of interest or dividend and capital gain or loss with the investment made to earn it.

X invests Rs.10,000 in a fixed deposit and earns an interest income of Rs.900 and Y invests Rs. 5000 in a fixed deposit and earns interest of Rs.500 in a year. Which investment gave the better return?

The absolute or rupee return earned by X at Rs.900 is higher than the absolute or rupee return earned by Y at Rs.500. But this calculation does not consider the amount invested to earn the return, Rs.10,000 by X and Rs.5000 by Y.

Calculating the percentage returns eliminates this problem. The rate of return in percentage is calculated as Return on Investment/Original Investment x 100. This converts all investments to a base of Rs.100 and thus makes it easy to compare between investments where the principal invested is different.

In the above example, the return earned by X is 9 percent (900/10,000*100) and Y is 10 percent (500/5000*100). The return earned by Y is higher than that of X, though in absolute terms the return earned by X (Rs.900) is higher than that earned by Y (Rs.500).

5.2.2 Annualized Returns

Just as all principal amounts invested are not the same, similarly the period over which the absolute returns were earned may not be the same. For example, an equity investment may have earned 40 percent over a 6- year period while a fixed deposit may have earned 8.5 percent per annum. The returns from the two investments cannot be compared because the time horizon over which they were earned is different.

In order to ensure that returns from investments with different holding periods are comparable, the returns are annualized or converted to a one year holding period i.e. returns per annum. To annualize the returns, multiply the absolute rate of return by the appropriate factor depending upon how the holding period is represented. The factor to be used is 365/number of days held, 12/number of months held, 1/number of years held, if the holding period is given in days, months or years, respectively.

In the above example, the return from the fixed deposit is per annum. The return from the equity investment can be annualized by multiplying 40 percent by the factor 1/6 for the

holding period of 6 years to calculate the annualized return. The annualized return is 6.67 percent. This is comparable with the 8.5 percent return from the fixed deposit.

5.2.3 Compounded Annual Growth

The compounded annual growth rate (CAGR) is the accepted measure of return for investments with investment horizons of over one year. CAGR considers the compounding of returns and time value of money in its calculation. It is the average return at which the investment grew from the initial investment value to the end value.

CAGR is calculated using the formula: ((End Value of Investment/Beginning Value of Investment) $^1/n$)-1, where n is the holding period in years.

X invests in a mutual fund scheme when the NAV was Rs.12.45. The NAV goes up to Rs.16.18 after 3 years. What is the CAGR of the investment?

CAGR= ((16.18/12.45)^1/3)-1 =9.12 percent

CAGR is the average annual rate at which the investment grew over this 3 year period. It may not represent the return earned in any one year sub-period during this term. This means that any investor who held the investment for the same holding period as the period of calculation would have earned this return. But investors who held it for other holding periods, say 1 year, may not have earned the same rate of return. The actual underlying return may be volatile, and that volatility represents the risk in the investment.

5.2.4 XIRR

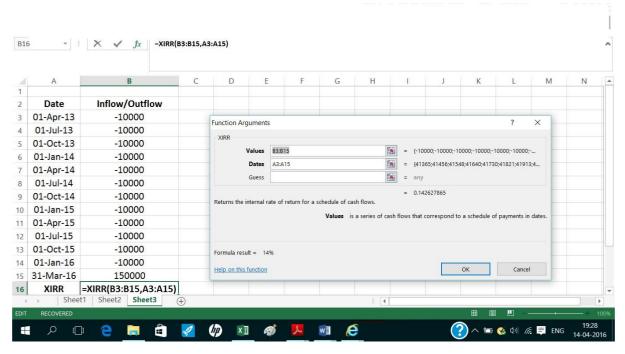
The XIRR function in MS Excel can be used to calculate the internal rate of return of an investment with volatile returns and multiple cash flows to account for. Consider the following example:

X invests Rs.10,000/- every three months in a mutual fund scheme beginning April 1, 2013. The last investment was made on 1st January 2016. The value of the investment on March 31, 2016 was Rs.1,50,000. What is the rate of return earned on this investment?

The following inputs are required in the XIRR calculation:

- i. Cash outflows (investment value at the time of investment)
- ii. Cash inflows (in the form of income (dividends or interest) and sale value at the end of the investment term)
- iii. Corresponding dates

The cash outflows will be indicated with a '-' sign before it while putting in the values for the XIRR calculations. The IRR calculation using XIRR function in excel is illustrated in Box 5.1



Box 5.1: Calculating Periodic Returns using XIRR Function in Excel

As the box shows the return on the investment is 14.26 percent.

5.3 Measures of risk in an investment

An investment is seen as risky when the actual return earned is different from the expected return. In investments where the returns are not known ahead, the average historical return is taken as the proxy for expected return. The risk in an investment is measured by the fluctuations in its returns. The actual returns from an investment is calculated and compared against the average return to measure the volatility or deviation. Higher the deviation observed, greater is the risk in the investment. An investment is considered risky if there is a variation in the actual returns from the average return, irrespective of whether the variation is on the higher side or lower side. Investors however consider only variation to the downside as risky. For example, if an equity mutual fund with an average return of 12 percent generates a 21 percent return in one period, 13 percent in the next and 16percent in the subsequent period is seen as a risky investment because the returns were varied. However, investors will see this investment as risky only if the returns are lower than 12 percent.

In estimating the risk in an investment based on the fluctuation in its returns, the actual returns may be compared to the average return from the investment itself. Or, the fluctuations in the return from the investments may be compared to a market index, such as the NIFTY 50 or Sensex. Accordingly, the following risk measures are commonly used:

5.3.1 Standard Deviation

Standard deviation is a statistical measure that can be used to gauge the risk in an investment by quantifying how much an investment's actual returns fluctuate relative to its average return. It describes the volatility in returns of an investment with a single number: higher this number higher is the range that its returns can take and therefore greater is the volatility in the investment's returns. The mean return and standard deviation can be used to determine the range that the actual returns may fall in. Comparing the standard deviation of an investment with that of other similar investments help investors evaluate the level of risk in the investment. It can also be compared relative to the standard deviation of a relevant market benchmark to gauge the extent of additional risk taken by the investment to generate excess returns, if any.

5.3.2 Beta

The total risk in an investment is a combination of systematic and unsystematic risks. Unsystematic risks are risks specific to the investments. For example, the risk of cyclicality in demand of the products of a company and its impact on revenues and thus share values can be offset by diversifying into defensive stocks.¹² Unsystematic risks can be reduced or eliminated from a portfolio through diversification. Systematic risks refer to risks that apply across the board to all sectors and companies, such as risks of inflation, political risk, etc. Beta measures the extent of volatility in an equity investment attributable to the systematic risks, relative to the volatility in a stock index which has a beta of 1. An investment with beta greater than 1 is seen to be more risky than the market and vice versa.

A stock with a beta of 1.1 is expected to see a rise in its prices by10 percent more than the index when markets rise, but in a falling market the price of the stock is expected to fall 10 percent more than the index. If the markets went up 10 percent, the price of a stock with a beta of 1.1 is likely to go upto 11 percent. Similarly, if markets fell 10 percent, the price of this stock is likely to fall by 11 percent. Stocks with higher beta have a greater volatility in prices and thus are seen as risky.

5.3.3 Sharpe Ratio

An investment is evaluated both for its risk and return. A higher risk in an investment has to be justified by higher returns, and lower returns in an investment has to be with lower risk. Risk adjusted return measures the return that an investment is generating for each unit of risk taken. Sharpe ratio is a measure of risk adjusted return. It is calculated as:

Sharpe Ratio = (Investment Return- Risk Free rate of Return)/Standard Deviation

For example, if the risk free rate of return is 5 percent and a scheme's return is 14 percent and standard deviation is 4 percent, the Sharpe ratio is calculated as (14 percent-5 percent)/4 percent = 2.25.

¹² Defensive stocks are stocks of those companies whose product demand and revenues are less influenced by economic cycles. For example, the demand for medicines and health services are typically insulated from contraction and expansion in the economy and individual incomes.

From a group of comparable schemes, investors ought to prefer the scheme with the highest Sharpe ratio since it indicates that the scheme is able to generate a higher return for each unit of risk taken.

5.4 Benchmarks

The performance of an asset class is gauged and tracked overtime using a benchmark index. To be relevant the benchmark must reflect the features of the asset class it is tracking. Typically, a market index such as a stock market index, is used as a benchmark. The return from the index for a period of time represents the return from the asset class. The benchmark represents the returns from the asset class, and is typically an index. This may be market index such as the NSE's Nifty 50 or BSE's S&P Sensex to benchmark the performance of portfolios that invest in equity markets, or it may be an index created by an agency appointed to do so, such as Crisil's indices for the bond market.

5.5 Performance Evaluation

The performance of a managed portfolio such as a mutual fund will depend upon the following factors:

- The investment objective of the portfolio or fund, which will determine the asset class in which the fund will invest
 - A fund seeking to provide growth typically will invest in equity markets, a fund seeking to provide income will primarily invest in debt securities.
- The strategy adopted to manage the portfolio or fund
 - Portfolios may be actively managed, with the portfolio manager making decisions on asset allocation and security selection; or the portfolio may be passively managed with the portfolio replicating a market index, with no selection being made by the portfolio manager.
 - An actively managed portfolio may be aggressively managed or conservatively managed. For example, a portfolio manager may decide to hold a portfolio with a concentrated portfolio. This is an aggressive strategy because the exposure of the portfolio to each security will be high and a poor performance by any security in the portfolio will significantly affect the overall performance of the portfolio or fund. A conservative approach will be to have a well-diversified portfolio, so that the poor performance of any one or few securities will not significantly impact the performance of the portfolio.
- The investment style adopted by the portfolio or fund manager
 - A debt portfolio may select securities that have certain credit qualities, or interest rate sensitivity. An equity fund may choose to invest in the mid-cap securities that generate better returns when markets are in momentum, but which also see a greater fall when markets decline.

- The risk and return of the fund or portfolio will be determined by these investment choices made in managing it. The return and risk from a fund can be calculated using any of the methods discussed earlier. An investor evaluating funds for investment may want to take the evaluation to the next step by evaluating the performance relative to:
 - o Benchmark performance
 - Peer group performance

5.5.1 Performance of Portfolio Relative to Benchmark

Apart from evaluating the performance of an asset class, benchmarks are important evaluation parameters based on which investors gauge the performance of managed investment portfolios. The returns from a portfolio have to be validated against the returns from a suitable benchmark to decide whether the returns are adequate. For example, a 12 percent return from an equity fund may seem to be strong. But if the returns from the benchmark in the same period is 14 percent, then the fund has fallen short of the goal of an active fund to outdo the benchmark. Investments like mutual funds which invest in a portfolio of securities, will only be able to generate a return that is in line with the asset class in which the fund invests. For example, an equity fund is unlikely to consistently post positive returns when the equity markets are in a decline mode, since the portfolio of the equity fund comprises stocks listed on the equity markets. The returns from investments such as mutual funds will always be relative to the performance of the asset class in which the fund invests.

While selecting a benchmark, the asset allocation of the benchmark must be representative of the portfolio being evaluated. For example, while the Nifty50 may be a suitable benchmark for a diversified, large cap fund, it may not be a suitable benchmark for a midcap fund or a sector fund such as a technology fund. Similarly, the Crisil STBEX is suitable for a Short-term Bond fund, but a gilt fund is better benchmarked against the ICICI Securities' Sovereign Bond Indices.

A mutual fund is an actively managed portfolio, unlike a benchmark which is not managed. An actively managed fund is therefore expected to do better than the benchmark market index, both when markets are rising and when they are falling, i.e. the fund's return is expected to rise more than the market index in a rising market and fall less than the index in a declining market.

5.5.2 Performance of Portfolio Relative to Peer Group Performance

Measuring excess return using the peer group as the benchmark is very popular. Peer group returns represents other similar portfolios or funds which are also actively managed. However, there may be dissimilarities in the way the funds are managed. While comparing the performance these differences have to be kept in mind. In comparing peer group funds following similar strategies and styles of investing, it is good to consider the return as well as

the risk of the funds. A fund may outperform its peer funds, but it may have taken significantly higher risks to generate the returns. The level of risk may be unacceptable to some investors.

Understanding the risk and return that a portfolio has generated and measuring it against benchmarks helps investors decide whether their money is earning as well as it can and within the limits of risk that they are willing to bear.

5.6 Matching Investor's Retirement Needs to Product

5.6.1 Advantages of Investing through a Fund versus Direct Investing

Creating wealth is a long-term process of investing and managing savings. It requires decisions to be made at multiple levels:

- What is the asset class to invest in?
- What are the investments to select?
- What are the parameters for evaluating the investments?
- How will the investments be managed for return and risk?
- How will the performance be evaluated?

Some of these questions are specific to the investor's risk and return preferences which only the investor can decide, either on their own or with the help of their advisers. Creating and managing a portfolio of investments that meet these risks and return requirements require skill, knowledge and time to manage, which not all investors may have. Investors can take advantage of publicly offered managed portfolios that allows them to benefit from the expertise of professional fund managers.

The advantages to the investor in investing through a managed portfolio are:

Expertise: Funds are managed by experienced portfolio managers, supported by research teams and advisers that help in constructing the portfolio and managing it. They have access to information and analysis on the expected performance of stocks and their valuation, as well as economic and market trends. Selection of stocks and buy and sell decisions are thus made on the basis of information rather than emotions.

Diversification: Diversifying investments across asset classes and sub asset classes, and at the level of securities is an efficient way of managing risks in a portfolio. All asset classes: equity, debt and others, do not perform the same way over each period. Depending upon the prevailing economic conditions the performance of different asset classes vary. Inflationary conditions favour investment in gold but is relatively unfavourable for debt and equity investments. Most asset classes respond positively to momentum in the economy and low interest rates. Even within asset classes the sub-categories respond differently. For example, short term debt instruments earn higher coupon income when interest rates go up, but long term debt securities take a hit on total returns as the values of long-term debt securities fall

in a scenario of rising interest rates. Understanding the nuances of changes in economic conditions and rebalancing the portfolios accordingly is essential to make sure that the portfolio has assets that balance out losses in one or the other. If a portfolio is not effectively diversified, a fall in one asset or investment category will see a steep fall in its value. It is difficult for investors to build and maintain an effectively diversified portfolio, given the constraints on funds available for investing and the skills for managing it. Instead, investing in a mutual fund which aggregates investable amounts from a large number of investors with similar needs from their investment or investment objective, will allow investors to participate in a well-diversified portfolio instead of building an inefficient one themselves.

Costs, Fee, Expenses: Building an investment portfolio involves costs. If the investor chooses to do it themselves, then there are costs of procuring research reports, executing transactions and others. These costs can be high. For example, investing through mutual funds provide investors the same benefits at much lower costs since the expenses incurred are borne by a large number of investors in the fund. However, investing through mutual funds comes with a fund management cost and investors need to find low cost funds that are able to provide the same benefits at reasonable costs. For example, the NPS has a limit of 0.01 percent on fund management costs, which is among the lowest available.

Access and Liquidity: Some investment products may not be available to retail investors or the minimum investment required may be very high effectively putting it out of their reach. Privately placed securities are an example of products that are typically not available to retail investors. In other cases, such as listed debt securities, the product may be illiquid making it difficult for the investor to sell the investment and access the funds when they need it. Some debt instruments, such as deposits, are typically locked-in for a fixed period and there may be a penalty for early withdrawal. A managed portfolio, such as a mutual fund, allows access to such instruments that may be out of reach of retail investors or are illiquid. The portfolio of an open-ended mutual fund is managed to provide liquidity so that investors can withdraw their investments at current NAV even if a portion of the underlying securities in the portfolio are illiquid.

Taxation: Investing directly means taxes have to be paid on any income earned and any capital gains realized. The tax rates can be high depending upon the nature of income or capital gains and the tax bracket of the investor. For example, mutual funds provide tax arbitrage opportunities because the fund is exempt from tax on its earnings and this is passed on to investors as tax-free dividends (dividend distribution tax is applicable on dividends from debt-oriented funds) and capital gains. Long-term capital gains are either tax free in case of equity funds, or taxed after indexation in case of debt-oriented funds which lowers tax payable.

Automatic Rebalancing: An actively managed portfolio will be rebalanced across securities, sectors and asset classes, depending upon the expected performance. Portfolios also need to be rebalanced when there is a need to calibrate the risk either in response to market

conditions or change in the investor's circumstances. It must be possible to increase exposure to growth assets, like equity, if economic conditions are favourable or to other assets such as debt instruments if conditions so demand. As investors' needs change it is necessary to change exposure to different asset classes like equity and debt to reflect the need for growth, income and liquidity. Investors who have the ability to assess the economic factors and execute changes may do so directly if they have the time and knowledge. Others may need the assistance of professional fund managers.

The Lifecycle model under the NPS allows for automatic rebalancing of the portfolio from the maximum equity exposure initially which is based on the equity exposure chosen and the age of the subscriber and a gradual reduction of equity exposure as investors come closer to retirement. This is suitable for investors who are unable to make portfolio rebalancing decisions on their own.

Total Returns from Investments

As discussed in an earlier section, the returns from an investment can be in the form of periodic income such as interest and dividend, gains in the value of the investment, or a combination of the two. Total returns from an investment is a combination of periodic income received and the gains in the value of the investment over a period of time.

- Total returns in debt investments will comprise interest income and changes in the value of the securities
- Total returns in equity investments will comprise dividends and changes in the value of the shares
- Total returns in real estate investments will comprise rental income and changes in the value of the asset
- Total returns in investment in gold and other commodities are typically only from appreciation in the value of the asset.

Change in the value of the investment may be negative, which may lead to depreciation in the value of the investment. This will pull down the total return from an investment.

For example, an investor earns an interest income of 9 percent on a debenture with a face value of Rs.100. The price of the bond in the market falls to Rs.98.

The interest income earned is Rs.9 (9 percent of Rs.100) The capital loss suffered is Rs.2 (Rs.100-Rs.98) The Total Returns earned is Rs.7 (Rs.9-Rs.2)

In this example, the loss of Rs.2 has pulled down the return from the investment. But without the capital loss, the returns from the investment would have been Rs. 9 (interest income).

Thus, the component of capital gain or loss in total returns makes the total returns from an investment volatile. The extent of volatility will depend upon the contribution of each

component (periodic income and gain/loss in value) to the total returns. In case of equity investments, the dividend income forms a small proportion of the total return, while the capital appreciation in the value of shares contribute the major portion of returns. This makes the returns from equity volatile. However, this also means that they have greater potential for growth as the value appreciates.

In case of debt investments, interest income forms the primary source of returns and depending upon the type of investment, gains in values may form some portion of the total returns. The returns from debt investment see lower volatility. Debt investments such as deposits earn only interest income. There is no contribution from capital gains to the total returns. In periods of low interest rates, deposit holders have to manage with the low interest income, which in some cases may not even be adequate to beat inflation. Investments in debt securities, such as debentures and bonds, earn interest income at the coupon rate, and gains/losses from changes in the value. The extent of change in the value will depend upon the duration of the bond: higher the duration higher will be the gain or loss in value, and vice versa. In periods of low interest rate, the coupon income may be low, but the low interest rates pushes up the prices of bonds in the markets. The total return goes up despite the low interest income because of the contribution from capital gains. Investment in debt securities are thus able to generate good returns even when interest rates are down. However, this comes with the risk of capital loss eating into interest income earned if security values were to decline in a rising interest rate scenario.

Tax-Adjusted Returns

Tax-adjusted return is the return earned after taxes have been paid by the investor. The pretax returns need to be adjusted for the tax payable since taxes actually reduce the money in the hands for an investor. Considering the post-tax returns gives clarity to the investor of what is the income that will be available to meet expenses and needs.

Consider the following example:

Suppose an investor earns an interest of 10 percent on an investment of Rs.1000. If this interest is taxed at 20 percent, then we calculate tax adjusted return as follows:

Nominal interest rate = 10 percent

Interest received = 10 percent of 1000 = 100

Tax payable = 20 percent of 100 = 20

Net interest received= 100- 20 = 80 Post tax return = 80/1000 = 8 percent Financial markets factor in the significance of tax by adjusting market rates for tax implications. For example, the bond market has both tax-free and taxable bonds. Tax-free bonds are issued by public sector units in the infrastructure sector. Since the interest paid on tax-free bonds is not taxed in the hands of the investor, the bonds are issued at a lower interest rate as compared to taxable bonds of similar credit quality and tenor.

An investor is considering a tax-free bond that pays 8 percent p.a. and a taxable bank deposit that pays 9 percent p.a. The tax bracket of the investor is 20 percent.

The two investments can be compared by bringing them both to the same platform: either pre-tax or post-tax returns.

Post tax return

Interest on tax-free bond = 8 percent

Effective return on the bank deposit is = 9 percent x (1-0.2) = 7.2 percent

Pre-Tax or Nominal return

Bank deposit = 9 percent

Tax free bond = 8 percent / (1-0.2) = 10 percent

In this example, the tax free bond is a better choice, since it pays a better return of 8 percent after tax, compared to the taxable bank deposit. The tax free bond's 8 percent return is equivalent to a taxable rate of 10 percent. Or, the bank deposit should pay 10 percent pre-tax to be equivalent to the tax free bond paying 8 percent.

Tax adjusted returns are used to compare two investments that may have a different tax treatment. However, the effective return to the investors depends on their tax status and tax rates applicable to them.

5.6.2 Matching Investment to Investor Needs

The investor's needs from the investment will define its suitability for investment. The needs will vary depending on investor specific factors.

Stage of Goal: Accumulation or Distribution

In the accumulation stage of a goal, investors seek growth in their investment. With a long investment horizon investors are able to take some risk for better returns. Investments such as equity are suitable for this stage. Investors who would like lower risk in their investment portfolio should consider portfolios with a blend of equity and debt or debt portfolios that

are geared to earn higher returns from taking on some risk. Growth and not income should be the goal of the investments. Compounding of returns over the long investment horizon also helps in accumulation.

As the goal comes closer to maturity, the need from the investment moves from growth to lower risk accumulation, it is important for the portfolio to be rebalanced with more lower risk investments such as debt. At the distribution stage the portfolio should have low risk debt instruments that can be easily withdrawn to meet the needs of the goal.

Return and Risk Preferences

The return and risk preferences of investors are defined by their particular situation, apart from the demands of the goals. An investor unwilling to take risks may seek a lower risk investments even if they have an adequately long investment horizon that allows considering investments that provide higher returns, albeit with higher risk. The long investment horizon is expected to smooth out the short-term volatility in returns. Such investors will seek predominantly debt investments. Some investors may be willing to take higher risk for better returns even if the time available to accumulate the corpus is low. The risk in such a strategy is that in the short-term investment values may show declines and this will affect the investor's ability to accumulate the funds for their needs. A better option for such investors is a balanced portfolio with exposure to equity and debt that will give better returns from the equity exposure and some stability in returns from the debt exposure.

Assessing the return needs and risk preferences of the investor, matching them to available investment options, and evaluating the performance of specific products are the steps that precedes an investment decision.

5.6.3 Sources of Information

The information required by the subscriber to evaluate the return and risk in their portfolio is available on the websites of the pension fund, NPS Trust and the CRAs. This includes the NAVs of the schemes, portfolios and other information.

http://www.npstrust.org.in/ https://npscra.nsdl.co.in/ https://nps.kfintech.com/ https://www.hdfcpension.com https://www.iciciprupensionfund.com/NPS/ https://www.kotakpensionfund.com/ http://www.licpensionfund.in/ https://www.utimf.com/retirement-solutions/nps-schemes https://pensionfund.adityabirlacapital.com/ https://www.sbipensionfunds.com

Sample Questions

- 1. CAGR considers which of the following in the calculation
- a. Compounding of returns
- b. Volatility in returns
- c. Composition of the returns
- d. Holding period of the investment

2. Which of the following risks is a systematic risk affecting an investment?

- a. Increasing costs of production
- b. Fall in demand for goods or services
- c. Increase in inflation
- d. Management issues
- 3. The risk and return in a fund can be explained by _____
- a. Asset class in which the fund invests
- b. The investment strategy used to manage the fund
- c. The investment style of the fund
- d. All the options given here
- 4. Which of the following are features of investments suitable in the distribution stage?
- a. Income orientation
- b. Protection from inflation
- c. Stable returns
- d. All the options given here

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- The features and scope of mandatory retirement savings products
- The features of the voluntary retirement savings products suitable for the accumulation stage in retirement
- The features of the voluntary retirement savings products suitable for the distribution stage in retirement
- The features of the Reverse Mortgage Scheme

6.1 Mandatory Retirement Benefit Schemes

The Employees' Provident Fund and Miscellaneous Provisions (EPF & MP) Act of 1952 requires employers covered under the act to offer the following schemes to the workers.

Employee Provident Fund Scheme

Under this scheme, the employee and the employer each contribute 12 percent (10 percent in some special cases) of the basic emoluments and allowances to the employee's EPF account. Employees can contribute over and above the statutory rate of 12 percent/ 10 percent as applicable. However, employer's contribution is fixed at 12 percent/10 percent. Contributions are credited to individual employee accounts. Each year the government declares the rate of interest applicable to the scheme. Annual statements which give information on the opening balance, contributions during the year, interest credited at the end of the period, withdrawals if any and closing balance is sent to each account holder through his/her employer. Partial withdrawals are allowed to members for specified purposes, including housing, education, health considerations and marriage. The balance in the employee's account is paid out as a lump sum on retirement, or total and permanent disablement or death in service or early retirement. Contributions made by the employer and employee are eligible for deduction from total income under section 80C (up to 12 percent of applicable salary). The interest credited on the employee's contribution in excess of Rs.250000 (Rs.500000 in case there is no contribution from the employer to the provident fund account) in a year is taxable from 1st April, 2021. Contributions made by the employer in a recognized provident fund, National Pension Scheme of the Central Government and in an approved superannuation fund in excess of Rs.750000 and earnings on such contributions is treated and taxed as perquisite. Accumulated funds received at the time of retirement are also exempt from tax. Withdrawal from the EPF before the completion of 5 years of continuous service is liable to TDS at the rate of 10 percent.

Employee Pension Scheme

This scheme is run by the Employees Provident Fund Organization (EPFO) and is guaranteed by the government. 8.33 percent (subject to limits) from the employer's contribution to the Employee Provident Fund (EPF) is diverted to the EPS. The scheme provides pensions for life to members or their family upon retirement at the age of 58. The central government also contributes 1.16 percent of the wages to this scheme.

Employee Deposit-Linked Insurance Scheme

Employer contributes 0.5 percent of the total wages. No contribution is made by the employee. The benefit provided under the Employees' Deposit Linked Insurance Scheme is called assurance benefit. On the death of the member while in service, the nominee or any other person entitled to receive the provident fund benefits will, in addition to the provident fund, receive the assurance benefit under Employees' Deposit Linked Insurance Scheme.

Gratuity

The Payment of Gratuity Act, 1972 requires gratuity to be paid to an employee at the time of termination of employment where the employee has been in continuous service for not less than five years. The condition of completion of five years' continuous service is not applicable where termination is due to death or disablement. The benefit is paid in lump-sum. Section 4(3) of Payment of Gratuity Act, 1972, deals with the limit on gratuity payable to an employee.

For government employees, all retirement and gratuity benefits received is exempt from tax u/s 10(10). For non-government employees, any gratuity received by such employees is exempt from tax to the extent of the least of the following:

- a) Half month's average salary for each completed year of service.
- b) Rs. 20,00,000
- c) Actual Gratuity received

The exemption is, however, not available for payment of gratuity when the employee is still in service.

Superannuation Benefit

The existing mandatory retirement benefits are very often found to be insufficient to meet the income replacement required at retirement. Employers provide superannuation plans to augment the benefits available by contributing to a superannuation fund. The company has to appoint trustees to administer the scheme and get the scheme approved by the Commissioner of Income Tax.

A company can offer a group superannuation scheme in two ways:

• Through the constitution of a trust fund where fund managers are appointed by the

trustees to manage the fund.

• Through investment in a superannuation scheme from a life insurance company.

On retirement the employee is allowed to take one third of the accumulation in his account as commutation. Commutation refers to the exercise of the facility of taking a portion of the annuity corpus in a lump sum. The balance in the corpus is used to purchase an annuity. Apart from LIC, all other life insurance companies allow its customers to purchase annuity from any annuity provider. Income Tax rules restrict the employer's contribution, whether to the PF or superannuation fund or a combination of both, to 27percent of the employee's earnings. Payments received at the time of retirement or death from an approved Superannuation Fund is exempt from tax.

National Pension System (NPS) for Government Employees

All central government employees (except armed forces) and central autonomous bodies who joined service on or after January 1, 2004, are enrolled into the NPS which is a defined contribution pension plan. Also, various state governments and state autonomous bodies have implemented NPS for their employees with effect from various dates. Every month 10 percent of salary (Basic+DA) will be contributed by the employee and 14 percent of salary by the government to the individual retirement account of the subscriber. Details of the NPS have been discussed in Chapter 4.

6.2 Voluntary Retirement Products

The mandatory retirement benefits are available only to employees of covered establishments as defined in the respective regulations. This leaves people in other establishments, self-employed persons and others out of the coverage of the benefits. There are products available that individuals can voluntarily subscribe to create their retirement corpus and to augment existing benefits.

As discussed in chapter 2, it is important to align the need of the investor from the investment to the features of the product. Typically, the investor's need is expressed in terms of the risk and return preferences, their need for liquidity and the investment horizon. The investor's preferences will depend upon the goal for which the investments are being made. The retirement goal has two distinct stages. In the accumulation stage of the retirement goal there is an adequately long investment horizon which allows investors to take higher risk for better returns. In the pre-retirement stage, the corpus has to be soon used to generate the income required in retirement. Accordingly, the retirement investments are moved to investments with low volatility so that there is reduced risk of depreciation in the value of the corpus accumulated over time. In the distribution stage, the products should be primarily incomeoriented with low volatility.

6.2.1 Accumulation Stage Products

The investment products available for retirement investments can be broadly categorized as those suitable for the accumulation stage and those suitable for the distribution stage. The products for the accumulation stage are typically growth-oriented investments such as equity, and real estate. Since the accumulation stage implies that the requirements of funds are not immediate, it gives investments the time to iron-out shorter term volatilities and benefit from growth. Including gold in a long-term accumulation portfolio brings in benefits of diversification and protects from downside risks in times of financial uncertainties. Debt investments are also used for accumulation by investors with lower risk preferences. However, care should be taken to reinvest the income from such debt investments and benefit from compounding. Other important features of products in accumulation stage that will help investors accumulate wealth include long and flexible investment tenor, flexibility to invest periodically, option to choose growth and compounding, ease of tracking performance and shifting investments with minimum costs, among others. Tax benefits, where available, for investments made towards retirement funds enhance the returns from such products. The list of accumulation stage products include:

- Voluntary Provident Fund
- Public Provident Fund
- National Savings Certificates
- Kisan Vikas Patra
- Post Office Deposits
- Bank Deposits
- Government Securities
- Corporate Bonds
- Direct Equity Investments
- Mutual Fund Schemes
- Gold
- Real Estate

Voluntary Provident Fund

Persons covered under the Employee Provident Fund (EPF) can choose to contribute over and above the mandatory 12 percent of the basic and dearness allowance, to their EPF account under the Voluntary Provident Fund. There will be no employer contribution to match any contribution made by the employee under the VPF.

Nature of Investment: The contributions will be invested in the EPF account of the employee. Like the primary account, the investments will be predominantly in debt investments, particularly government securities.

Return: The return on the investment will be declared each year by the government.

Risks: The risks in the VPF is low because the returns and principal is guaranteed by the government.

Tenor: The VPF is open-ended and subscribers can contribute till the time of retirement. Withdrawal of funds is possible according to the rules of EPF.

Investment limits: The subscriber can invest any percentage of the basic salary into the VPF, going up to 100 percent of basic salary.

Flexibility: The amount of investment can be decided by the subscriber and discontinued with prescribed notice. Transfer of funds, in case of change of employment, is simplified with the Universal Account Number (UAN) which links the subscriber across employers.

Taxability: All contributions are eligible for tax benefits under section 80C of the Income Tax Act. Interest earned are tax-free and withdrawals made after a period of five years are exempt from tax.

Suitability for the accumulation stage: The interest earned on the VPF is credited to the individual's account and provides annual compounding. The withdrawal is limited by rules. If the subscriber continues to contribute to the VPF till retirement, then a considerable corpus can be accumulated.

National Pension System (NPS)

Details of the NPS have been discussed in Chapter 4.

Public Provident Fund (PPF)

The PPF is a long term saving product that can be used to accumulate funds for retirement and other goals. It can be opened with prescribed banks and post offices by individuals only. Each individual can have only one PPF account and one account can be opened in the name of minor. HUFs and NRIs cannot open a PPF account.

Nature of Investment: The PPF is a debt-oriented investment and pays periodic interest.

Returns: The interest on PPF is announced by the government every quarter. The interest earned is not paid out and compounds in the investment.

Risk: The risk is low since the interest and principal is guaranteed by the government.

Tenor: The PPF is a 15 year deposit. The account may be closed and funds withdrawn on the completion of at least five years for specific needs such as medical expenses or education of dependents.

Investment Limits: Minimum amount that needs to be deposited in this account is Rs. 500 per year. The maximum limit is Rs. 1,50,000 per year. Subscription should be in multiples of Rs. 5 and can be paid in one lump sum or in any number of instalments in a financial year.

Liquidity: One withdrawal in a financial year is permissible from seventh financial year up to

permissible limits. Account holders can avail of a loan facility in the 4th to 6th year out of the amount standing to the credit in the account between the third financial year to the fifth financial year.

Taxability: The contribution made each year to the PPF has tax benefits under section 80 C. The interest earned each year is exempt from tax and the maturity value is also tax free.

Suitability for accumulation: The interest is not paid out but credited to the individual's PPF account. This allows for compounding benefits. The withdrawals from the account are limited and this allows accumulation of corpus if there is discipline maintained in contribution.

National Savings Certificates (NSC)

National Savings Certificates are issued by the government and available for purchase at the post office. The certificates can be bought by individuals on their own account or on behalf of minors.

Nature of Investment: NSCs are debt investments.

Tenor: NSCs are issued with tenor of 5 years.

Return: Interest is compounded annually and accumulated and paid on maturity.

Risk: Risk is low since the interest and principal is guaranteed by the government of India

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

Liquidity: NSCs can be transferred from one person to another with the consent of a designated official of the post office under specific situations such as transfers to heirs or transfer to institutions where the certificates have been offered as security for loans. Premature encashment is allowed only in case of death of the holder, forfeiture by a pledgee, or under orders of court of law.

Taxability: Investments made in the NSC enjoy tax benefits under section 80C of Income Tax Act, 1961. Accrued interest is taxable, but it is deemed to be reinvested and therefore the interest becomes eligible for Section 80C benefits.

Suitability for the accumulation stage: There is no periodic interest paid out. The maturity value of the certificate includes the interest. This makes it suitable for accumulation. The limited liquidity further makes the product suitable for accumulation. The maximum tenor of the NSC is only 5 years. However, they are available for purchase easily. Investors should have the discipline to reinvest the proceeds on maturity.

Post Office Time Deposits

Post Office Time Deposits (POTD) are similar to fixed deposits of commercial banks. The account can be held singly in individual capacity or jointly by a maximum of two holders. An individual can hold any number of deposits.

Nature of Investment: POTD are debt oriented investments.

Tenor: The post office deposits with terms of one year, two years, three years and five years.

Returns: The interest on the deposits is reset each year by the government. Interest rates are compounded quarterly.

Risk: Risk is low since the interest and principal are guaranteed by the Government of India. *Investment Details*: The minimum deposit amount is Rs. 200. There is no maximum limit.

Liquidity: The POTD can be transferred from one post office to another. Early withdrawal will entail penalty in the form of lower interest.

Taxability: The 5-year deposit alone qualifies for tax benefit under section 80 C of the Income Tax Act. The interest earned is taxable.

Post Office Recurring Deposits

Post Office Recurring Deposit (RD) accounts can be opened by resident individuals, and a maximum of two people can hold an account jointly or on either or survivor basis. An individual can hold any number of RD accounts, singly or jointly.

Nature of Investment: Post Office Recurring Deposit is a debt oriented investment.

Tenor: The RD has a tenor of 5 years.

Returns: The investment earns interest at rates fixed by the government for each quarter. The interest is compounded quarterly and paid out only at maturity.

Risk: The risk is low since the interest and principal is guaranteed by the government.

Investment limits: Deposits can be made at a minimum amount of Rs. 10 per month and in multiples of Rs. 5 thereafter for every calendar month. There is no maximum limit. Deposits have to be made regularly on a monthly basis, and penalties apply for non-payment of instalment.

Liquidity: The RD can be transferred from one post office to another. One withdrawal up to 50percent of the balance is allowed after one year. The account can be closed after three years, and in cases of such pre-mature closure only the savings bank interest rate is payable.

Taxability: There are no tax benefits on the amount invested or the returns earned.

Suitability for the accumulation stage: There is no upper limit on the amount that can be invested. On maturity the funds would be credited to the investment account and may be reinvested again to earn interest.

Kisan Vikas Patra (KVP)

The KVP can be purchased by an adult for self or by two adults for a minor investor. NRIs HUFs and other entities are not eligible to invest in the KVP. It can be purchased from any departmental post office or bank through cash, local cheque or DD.

Nature of Investment: The KVP is a debt-oriented investment.

Tenor: The amount invested doubles in 124 months.¹³

Returns: The interest earned compounds and is reflected in the maturity value of the certificate.

Risk: The KVP is issued by the government and therefore has the guarantee of the government for the returns and principal.

Investment details: KVP is available in denomination of Rs.1000, Rs.5000, Rs.10,000 and Rs.50,000. The minimum investment is Rs.1000 and there is no maximum investment.

Liquidity: KVP can be prematurely encashed 2 ½ years from the date of issue. The certificate can be transferred from one person to another and one post office to another by endorsement and delivery.

Taxability: There is no tax incentive for the investment made and the interest earned is taxed on accrual basis. There is no tax deducted at source on the investment.

Suitability for the accumulation stage: There is no interest paid out to the investors and instead it is compounded in the investment and reflects in the maturity value. Since the products have a fixed tenor, the proceeds have to be reinvested on maturity so that the funds grow till retirement.

Fixed Income Investments

The following are bonds and deposits available to retail investors:

- Government securities
- Corporate bonds
- Company deposits

Government securities (G-secs) are issued by the RBI on behalf of the government. G-secs represent the borrowing of the government. Retail investors can participate in the auctions conducted to issue these securities in the primary markets. The securities are listed on stock

¹³ This is calculated as per the rate of interest of 7.7 percent.

exchanges and investors can trade these on the stock markets, though liquidity is low. G-secs tend to offer a lower interest rate compared to other borrowers for the same tenor because there is no credit risk or risk of default in a G-sec.

Nature of Investment: G-secs are debt securities issued by the government.

Tenor: The government issues securities for tenors ranging from a month to over 30 years.

Returns: The interest on G-secs is determined in the auction. There is no cumulative option in a G-sec. Interest is paid out on pre-specified dates into the designated bank account of the investor.

Risk: There is no default risk in government securities. However, the price of the securities are subject to market risk. The price of the bonds in the secondary market will respond to changes in interest rates. An increase in interest rates sees the price of existing bonds depreciate and vice versa.

Investment details: In order to buy G-secs, retail investors have to open a constituent SGL (CSGL) account with their bank or any other holder of SGL (Securities General Ledger) accounts. The G-secs are held as electronic entries in demat form. Investors can also transfer the G-secs to their normal demat account, after buying them. The minimum investment amount is Rs. 10000. Another option is for investors to use RBI's Retail Direct Scheme to buy Gsecs in the primary and secondary markets.

Taxability: Interest is not subject to TDS but is fully taxable. Redemption proceeds are also paid into the bank account.

Inflation Indexed Bonds (IIB) are a category of government securities issued by the RBI which provides inflation protected returns to the investors. These bonds have a fixed real coupon rate which is applied to the inflation adjusted principal on each interest payment date. On maturity, the higher of the face value and inflation adjusted principal is paid out to the investor. Thus, the coupon income as well as the principal is adjusted for inflation.

Another category of inflation-indexed instruments issued by the RBI for retail investors is the Inflation-Indexed National Saving Securities-Cumulative 2013. These are bonds of 10-year tenor. The bond carries a fixed interest of 1.5 percent and an inflation rate calculated on the basis of the Consumer Price Index (CPI). The interest is compounded every six months and cumulated and paid with the principal on maturity. The fixed rate of interest will be the floor and will be paid even if there is deflation. The interest is taxable according to the tax status of the investor. The minimum investment was Rs. 5000 and the maximum Rs. 5,00,000 per applicant.

RBI Bonds

The RBI Floating Rate Savings Bonds, 2020 are 7-year bonds issued by the Government of India. The tenor of the bonds is 7 years but senior citizens can encash prematurely at the end

of 4 years for holders 80 years and older, 5 years for holders in the 70- 80 years age bracket and 6 years for holders in the 60 -70 years age bracket. There will be a penalty imposed for early encashment. The bonds are not tradable in the secondary market. The interest payable is determined as the base rate on the National Savings Certificate + 35 bps and it will be reset every 6 months. The interest income is taxable. The bonds have a face value of Rs.1000. The minimum investment is Rs.1000 and there is no maximum limit. Resident investors and HUFs can invest in the bonds.

Corporate Bonds

Corporate bonds are debt instruments issued by private and public sector companies. Companies may also raise funds from the public by making a public issue of bonds where retail investors are called upon to invest. Bonds of all non-government issuers come under the regulatory purview of SEBI. They have to be compulsorily credit-rated and issued in the demat form. All public issues of bonds have to be mandatorily listed on a stock exchange. Investors can invest in bonds either in the public issue or by buying bonds in the secondary market.

Nature of Investment: Corporate bonds are debt-oriented investments.

Investment Details: Public issue of bonds typically requires a minimum subscription of 5 bonds (Rs.5000). In the secondary markets bonds can be bought in multiples of 1 (lot size).

Tenor: They are issued for tenors ranging from two years to 15 years. The more popular tenors are 5-year and 7-year bonds.

Return: The coupon interest depends on the tenor and credit rating of the bond. Bonds with the highest credit rating of AAA, for example, are considered to have the highest level of safety with respect to repayment of principal and periodic interest. Such bonds tend to pay a lower rate of interest than those that have a lower credit rating such as BBB which are seen as having a high credit or default risk. The listed bonds may also earn capital gains/loss when their prices change in response to interest rate changes in the market.

Risk: The bonds have a degree of credit risk in them which is measured by the credit rating. The listed bonds will also have market risk from changes in prices in response to interest rate movements.

Liquidity: The bonds can be traded on the market where it is listed. But liquidity is typically low.

Taxability: Interest earned is fully taxable. Some bonds may have tax-free interest. Capital gains earned will also be taxed. The government announces from time to time, a list of infrastructure bonds, investment in which is eligible for deduction under Section 80C of the Income Tax Act. Bonds issued by financial institutions like the Industrial Development Bank of India (IDBI), India Infrastructure Finance Company Ltd. (IIFCL) and National Bank for

Agriculture and Rural Development (NABARD) are eligible for such deduction.

Suitability for the accumulation stage: Government securities pay out the coupon every half year. Some corporate bonds and company fixed deposits may provide the facility of cumulating the interest in the investment itself. While the government securities may have a long tenor, the others are of 5-10 years' tenor. To make the products suitable for accumulation, have a designated investment account into which all interest and maturity amounts will be credited. Set a schedule, say every three months, to invest the funds in the account in products that suits the investors' asset allocation and need for growth.

Bank Deposits

A bank fixed deposit (FD) is a deposit account with a bank for a fixed period of time. It entitles the investor to pre-determined interest payments and return of the deposited sum on maturity. Fixed bank deposits offer higher returns than savings accounts as the money is available for use by the bank for a longer period of time. A fixed deposit is created by opening an FD account with the bank which in turn issues an FD receipt.

Nature of Investment: Bank deposits are debt investments.

Investment details: The minimum deposit amount varies across banks.

Return: Interest rates depend on the duration of deposit, amount deposited and policies of the bank. In general, longer term deposits pay a higher rate than shorter term deposits. Interest on an FD can be paid into the depositor's savings bank account at a predefined frequency, or accumulated and paid at the end of the term.

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

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

Taxability: Interest income earned is taxable. Investment in specified 5-year bank FDs are eligible for tax deductions under Section 80C of the Income Tax Act.

Suitability for the accumulation stage: Bank deposits typically provide the cumulative option for interest that is suitable for compounding and accumulation. On maturity the deposits can be re-invested at the interest rates prevailing at that time, or moved to other suitable products.

Investment in Direct Equity

Investors can invest in equity instruments either in the primary market or in the secondary markets. In the primary market, investors can invest in Initial Public Offers (IPO) and Followon Public Offers (FPO) made by companies. These offerings will be available for a limited period during which investors have to evaluate and invest. Investors can also buy shares in the secondary market on the stock exchange where issued shares are listed and traded. Investing in equity requires knowledge and skills to identify and evaluate factors that would affect the performance of the company and the direction of stock markets.

Investment details: The minimum investment amount in an IPO/FPO may range from Rs.10,000 to Rs.15,000. To fall in the retail investor category the maximum investment should not exceed Rs.200000. In the secondary market the price of the stock will determine the minimum investment. Investors need a demat account to hold their equity investments. Transactions in the secondary markets are routed through a broker member of the stock exchange.

Tenor: Investment in equity are open-ended and investors can choose their investment horizon. Equity investments need a long-term investment horizon to smooth out short-term volatility in returns and allow the investment to realize its potential.

Returns: Returns is in the form of dividends declared by the company and the appreciation in the value of the shares in the secondary markets. Neither the expected dividend nor the capital gains or losses are known at the time of making the investment. The yield to the investor will depend upon the price paid for acquiring the shares. Dividends are received if the company declares it from distributable profits. Capital gains or losses are realized on selling the shares. Whether realized or not, the gains/losses form part of the returns to the investor.

Risk: The uncertainty in the returns is the primary risk in equity. There is no guarantee or security provided for investors in equity either on principal invested or on the returns. The value of the equity shares are affected by company-specific, industry factors and economic conditions.

Liquidity: Shares can be easily sold on the stock markets where they are listed at the prevailing market prices.

Taxability: Dividends are taxed at the applicable rates in the hands of the investors. Long term capital gains in excess of Rs.one lakh are taxed at 10% while short term capital gains are taxed at 15%. Securities Transaction Tax (STT) is applicable on transactions on the stock markets.

Suitability for the accumulation stage: The value of equity investments grow over time. The long investment period available for accumulation for retirement allows the time for companies to ride out economic cycles and grow revenues and profits that is reflected in the value of the shares. Dividends received from equity investments into a designated investment

account should be re-invested to a fixed schedule so that the funds do not lie idle. Equity investments require periodic review of the viability of the earnings and growth of the company and funds should be switched to other equity shares if the company's performance is not as expected. Equity shares can be bought easily on the stock markets and is best accumulated by investing periodically to average out the cost of acquisition in a volatile market.

Gold

In India, gold is seen as an asset that is suitable for long term wealth creation. It is also used as a collateral for loans and is therefore seen as an asset to fall back on when in need for funds. Investment in gold has the potential to beat inflation over a long period. It is a safe haven when economic growth is slow and when traditional asset classes such as equity and debt are underperforming. Including gold in a portfolio brings stability in returns in periods of financial crisis in the economy. As an investment, one can purchase it as coins including the Indian Gold Coins available at designated branches of MMTC, bars, jewellery, or through gold ETFs (Exchange Traded Funds) or gold fund and the gold bonds and gold deposit scheme (launched in November, 2015).

Digital gold is a mode of buying gold offered by sellers such as MMTC-PAMP India Pvt. Ltd., Digital Gold India Pvt. Ltd. and others. Investors can buy the gold online through distributors which may be banks, fintech companies such as Paytm, Google Pay and others, brokers and others. When a buyer makes a digital gold purchase, the equivalent physical gold is earmarked and stored in the vaults of the seller or the custodian appointed by them. The purchase of gold can be for as low as Re1. The buyer has to take possession of the physical gold within a specified period of time, typically 5 years ,or sell it back at the prevailing price. While this mode of buying gold is convenient for investors, it has a significant drawback of not being a product that works within the norms laid down by a regulator. There is no protection available to the investor and this may be risky.

ETFs and gold funds (mutual funds that invest in gold ETFs) remove the issues of storage, assurance of purity, liquidity and the facility for regular investment associated with physical holding in gold. Gold ETFs invest in 99.5 percent purity gold which is held with the custodians. Sovereign Gold bond issued by the Government of India is one more way to invest in gold without holding the physical asset. These bonds have a tenor of 8 years and the bonds are denominated in units of one gram of gold and multiples thereof. The interest rate payable on the bond is periodically notified by the RBI. The bonds will be redeemed at a price determined on the basis of the price of gold at the end of the tenor.

Investment Details: There is no prescribed minimum or maximum investment limits in gold. It would depend on the form in which gold is held. Investing in physical gold is denominated in grams or fraction of grams, investment in coins or bars will have a minimum number of grams, investment in ETFs or gold funds will have a minimum initial investment (typically Rs.5000). Sovereign gold bonds have a minimum (1 gm) and maximum (4 kg) limit.

Tenor: Investment in gold are open-ended and investors can choose their investment horizon. Gold prices tend to be volatile in the short-term and therefore risky as a short-term investment option.

Returns: Return from gold is in the form of appreciation in value. There is no periodic income from the investment. There is no assurance on the returns

Risk: The returns from gold can be volatile, responding to economic factors.

Liquidity: The form in which gold is held will determine its liquidity. Divisibility of the investment in ETF is high since even one unit of gold ETF can be liquidated or sold in the market. In the case of physical gold, while it is easy to sell gold, liquidating it for smaller values may be an issue, unless the investor is holding gold in the smallest physical denomination possible. Moreover, the deductions on account of wastage and making charges, among others, at the time of sale of gold jewellery can eat into the realisable value.

Suitability for the accumulation stage: Gold brings diversification to a portfolio and may improve the risk adjusted returns of the portfolio in times when there is financial turmoil in the economy. The return from gold is all in the form of growth in value, which makes it ideal for the accumulation stage. As an asset with volatile prices, it is best to acquire the asset periodically to average out the cost of acquisition.

Real Estate

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

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

Real estate mutual funds (REMFs) schemes and Real Estate Investment Trusts (REITs) provide additional vehicles for investor participation in real estate investments.¹⁴

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

¹⁴ *Real Estate Investment Trusts (REIT)* are trusts registered with SEBI that invest in commercial real estate assets. The REIT will raise funds through an initial offer and subsequently through follow-on offers, rights issue and institutional placements.

a hedge against inflation, as rentals rise with inflation.

Suitability for the accumulation stage: In India, the returns from real estate are primarily in the form of appreciation in value. Investment in land can also be considered since earning rental income is not a priority at this stage. Rental income, if available, need to be reinvested either in real estate linked mutual funds, or in other investments to benefit from compounded returns.

Mutual Funds

Mutual funds are collective investment vehicles that pool investors' contributions and invest the funds according to stated investment objectives. The asset class or combination of asset classes that the fund will invest in will depend upon the investment objective of the fund. Investors hold units in the scheme. The value of each unit (Net Asset Value) will depend upon the value of the underlying assets. The portfolios are managed by professional fund managers who charge a fee for their services.

Nature of Investment: The investment objective and the underlying asset class will determine the nature of the investment. Mutual funds can invest in equity, debt, gold, real estate or a combination of these assets.

Returns: The return from a scheme will depend upon the type of asset class and sub-asset class it invests in. Equity funds will generate higher returns as compared to debt funds. Short-term debt fund will generate lower returns than long-term debt funds. The returns to the investor from the fund will be in the form of dividends and appreciation in the value of the units.

Risk: The volatility in the returns and other types of risks will depend upon the type of fund. Liquid funds will have steady returns, long term debt funds will see a degree of volatility while equity funds will see the maximum volatility. There is no assurance on returns from any mutual fund scheme.

Tenor: Open-ended schemes allow investment holding according to the investor's needs. Closed-ended funds will have a fixed period after which the units will be redeemed at current NAV and funds returned to the investor.

Investment details: The minimum initial investment is typically Rs.5000. In some cases, it may even be Rs.1000. However, some fund houses allow a minimum initial investment of Rs.500. Additional investment including systematic investments will be lower at Rs.1000 or Rs.500. Other facilities provided to investors include systematic withdrawals, switch and others.

Liquidity: Units of open-ended funds can be redeemed at any time at current NAV from the mutual fund. Units of closed-ended funds cannot be redeemed before the completion of tenor. However, the units can be sold to other investors on the stock exchange where it is mandatorily listed.

Taxability: Dividends from mutual funds are taxed at the marginal rate of tax applicable to the investor. Long term capital gains over Rs. One lakh from equity funds are charged to tax at the rate of 10% while short term gains are taxed at 15 percent. Short term gains from debt funds taxed at the marginal rate of tax applicable to the investor while long term gains are taxed at 20 percent after indexation. Investment in Equity Linked Savings Schemes provides tax benefits under section 80C of the Income Tax Act, 1961.

Suitability for accumulation stage: Mutual funds offer investments in different asset classes. Investors can choose the growth option or dividend reinvestment option, depending upon the tax implications, to allow the returns to be reinvested and compound with time. Units in open-ended funds can be accumulated in a phased manner to benefit from averaging down the cost of acquisition. The appreciation in the value of units will be reflected in its NAV and can be redeemed when required. Units of closed-ended funds need to be re-invested on maturity to enable compounding of returns.

6.2.2 Distribution Products

In the accumulation stage of retirement the corpus required is created out of the savings and investments made over the working years. In the retirement years this corpus is used to generate income to meet expenses. The products that are suitable will be those which generate periodic income, where the returns are adequate for the investor's needs and have lower risk to income and principal invested. Protection of capital is important at this stage since the opportunity to add to the corpus after retirement is limited. The products used to generate income in the distribution stage include:

- Annuities
- Government Sponsored schemes
 - o Senior Citizens Savings Schemes
 - Post Office Monthly Income Scheme
 - o Post Office Time Deposits
- Bank Deposits
- Bonds and Debentures
- Mutual Fund Schemes
- Reverse Mortgage Scheme

Annuities

An annuity is a contract under which a corpus sum is created either as a lump sum or in instalments over a period of time, in return for which the insurance company undertakes to make a periodic payment to the purchaser of the annuity. The annuity provider may specify the minimum and maximum age of entry, minimum purchase price and the minimum annuity payable. An annuity is useful in income and retirement planning as it can generate a regular

income over a long period of time, on investment of a corpus amount. The annuity paid will depend upon the annuity rate applicable at the time of purchase of annuity. The annuity rate is guaranteed for the entire period. The annuity rates are reviewed periodically with the approval of IRDAI. The rates of different providers need to be compared before buying an annuity.

An annuity may be an immediate annuity or a deferred annuity. In an immediate annuity the annuity payments begin immediately on purchasing the annuity, depending upon the frequency of payment chosen. In a deferred annuity the vesting age is some time away. In the deferment period the corpus is built. The corpus is used to buy the annuity on the vesting age at the rates applicable at the time of buying the annuity.

Some of the annuity options that are popularly offered are:

- Annuity payable for life at uniform rate
- Annuity payable for 5/10/15/20 years and thereafter as long as the annuitant is alive
- Annuity for life with return of purchase price on death of the annuitant
- Annuity for life increasing at the simple rate of 3percent
- Annuity for life with option of 50percent of annuity for spouse for life on the death of the annuitant
- Annuity for life with option of 100percent of annuity for spouse for life on the death of the annuitant
- Annuity for life with option of 100percent of annuity for spouse for life on the death of the annuitant and return of purchase price on death of last survivor

Nature of Income: Income is guaranteed for the period agreed upon depending upon the terms of the contract. The rate of return on the annuity will depend upon the prevailing interest rates and the terms of the contract.

Flexibility: The holder of the annuity, called the annuitant, can decide the mode of annuity payment. The options available are monthly, quarterly, half-yearly or annual mode. The annuity once purchased is final, and the principal invested can neither be redeemed nor can a change be made in the type of annuity chosen.

Risks to Income: Fixed annuities, like any regular annuity, suffer from high surrender charges that cut into its returns. Plus, another disadvantage of fixed annuity is that it doesn't keep pace with inflation. As a result, the value of the money will decline over time.

Taxability: Income from annuities is taxable as income in the hands of the annuitant

Suitability for the distribution stage: The income from annuity is guaranteed for life or as contracted. This makes it suitable for the stage in retirement when income is required.

Pradhan Mantri Vaya Vandana Yojana

The Government of India has launched the Pradhan Mantri Vaya Vandana Yojana (PMVYY) to provide pension benefits for citizens 60 years in the private sector. The scheme is operated by LIC of India. This is a 10-year scheme. The minimum pension is Rs.1000 per month and the maximum is Rs. 10,000 per month or Rs.12,00,000 per year. For the minimum monthly pension of Rs.1000/month the purchase price or investment required is Rs.1,50,000 and for the maximum monthly pension of Rs. 10,000 the investment is Rs.15,00,000. The purchase price is marginally lower if the quarterly, half-yearly or annual mode of pension is chosen. The investment is returned on maturity. The ceiling on the maximum pension permitted under the scheme applies to the family comprising of the pensioner, spouse and dependents. 98 percent of the purchase price will be returned if the policy is surrendered for specified needs such as critical healthcare requirements. After the completion of three policy years, loan to the extent of 75 percent of the purchase price can be availed at the prevailing interest rates.

Nature of Income: Income is guaranteed for the period of 10 years.

Flexibility: The policy holder can decide the mode of pension payment. The options available are monthly, quarterly, half-yearly or annual mode.

Risks to Income: The income is guaranteed for the period. The income will not be responsive to changes in inflation. As a result, the value of the money will decline over time.

Taxability: Income from pension is taxable as income in the hands of the annuitant

Suitability for the distribution stage: The income is guaranteed for the period of 10 years. This makes it suitable for the stage in retirement when income is required.

Government Schemes offered through Post Office and Banks

Senior Citizens' Saving Scheme (SCSS)

The Senior Citizens' Saving Scheme is a savings product available to only senior citizens of age 60 years or above on the date of opening the account. The account can be opened at any post office undertaking savings bank work and a bank branch authorized to do so. The scheme can be held in individual capacity or jointly with the spouse. The age restrictions apply only to the first holder.

The term for the scheme is 5 years. A one-time extension of three years is allowed, if applied within one year of its maturity. Maximum limit of investment is Rs. 15 lakhs. An investor can open more than one account subject to the condition, that amount in all accounts taken together does not at any point of time exceed Rs. 15 Lakhs. The deposit can be made in cash if the amount is less than Rs. 1 lakh, or cheques or demand draft. Premature closure is allowed after expiry of one year.

Nature of Income: Guaranteed income over the period of the deposit

Flexibility: The interest is paid out every quarter and there are no choices for the investor to make

Risks to Income: The SCSS is a five year deposit. The rate of interest is announced on a quarterly basis by the Government of India to link it with the market dynamics. The upper limit on the investment that can be made limits the income that can be generated.

Taxability: The benefit of section 80C is available on investment made but interest is fully taxable.

Suitability for the distribution stage: The guaranteed income and the higher rates relative to comparable deposits make it attractive to generate a portion of the guaranteed income required in retirement.

Post Office Monthly Income Scheme (POMIS)

The Post Office Monthly Income Scheme provides a regular monthly income to the depositors. This scheme has a term of 5 years. Minimum amount of investment in the scheme is Rs. 1500, and the maximum amount is Rs. 4.5 lakhs for a singly held account and Rs. 9 lakhs if the account is held jointly. A depositor can have multiple accounts, but the aggregate amount held in the scheme across all post offices cannot exceed the maximum permissible limits. Premature withdrawal of the invested amount is allowed after 1 year of opening the account.

Nature of Income: Guaranteed income for the term of the deposit.

Flexibility: The interest is paid monthly for all investors.

Risk to Income: The POMIS is a 5-year deposit. The rate of interest is announced on a quarterly basis by the Government of India to link it with the market dynamics. On maturity, the money may have to be re-invested at a lower rate of interest. The upper ceiling on the investment that can be made limits the retirement income that can be generated from this product.

Taxability: There are no tax benefits on investments or income from the POMIS.

Post Office Time Deposits (POTD)

Post Office Time Deposits have terms of one year, two years, three years and five years. The account can be held singly in individual capacity or jointly by a maximum of two holders. The minimum deposit amount is Rs. 200. There is no maximum limit. The interest rates on these accounts are reset every quarter.

Nature of Income: The investment provides guaranteed income for the term of the deposit.

Flexibility: The interest is paid annually for all deposits.

Risks to income: The rate of interest is announced on a quarterly basis by the Government of India to link it with the market dynamics. The money has to be re-invested on maturity and the interest rates at that time may be lower.

Taxability: The interest earned is taxable as income. There is no tax deducted at source.

Suitability for the distribution stage: The guaranteed, periodic income makes it suitable for the income stage. Except for the POMIS, there is no upper limit on the amount that can be invested. The products are for specified terms. So care should be taken to reinvest the funds on maturity to ensure continued income at the prevalent rates at the time of reinvestment.

Bank Deposits

Banks offer deposits for different tenors of up to 10 years. The bank may specify the minimum amount to open a deposit account. There is no upper limit. Banks may allow depositors to withdraw or close the deposit before completion of the term, but there may be a penalty. Banks offer loans against the deposit, if depositors require funds.

Nature of income: Banks are typically seen as a safe investment avenue. Therefore, the risk of default on interest income or principal repayment is typically low.

Flexibility: Banks may give the option of receiving interest monthly or quarterly or other durations to the depositors

Risk to income: The need to re-invest the funds on maturity means there is a re-investment risk that the depositor has to bear. The inadequacy of fixed income to meet expenses on account of inflation is the other risk.

Taxability: The interest income is taxable at the rate of tax applicable to the depositor. Section 80 TTB allows a deduction of up to Rs. 50,000/- from gross total income on account of interest earned on bank, post office and deposits with cooperative society engaged in banking.

Suitability for the distribution stage: The periodic income makes it suitable for the income stage. There is no upper limit on the amount that can be invested. The deposits are for specified terms. So care should be taken to reinvest the funds on maturity to ensure continued income at the prevalent rates at the time of reinvestment.

Bonds and Debentures

Bonds and debentures issued by the Government and its agencies, companies including financial institutions and public sector enterprises, offer source of regular income in retirement. There may be a minimum limit on investment, depending upon the security and

a maximum limit if the bonds are being subscribed in an IPO. If bonds are being bought in the secondary markets, there will be no such upper limit. The tenor of the bonds will vary from 3 to 7 years for private companies, to 10-15 years for bonds issued by infrastructure linked companies to over 30 years for government securities. The interest on the bonds will depend upon the tenor and the credit risk of the issuer.

Nature of Income: The interest income is guaranteed if the issuer is the government or if it is an institution backed by the government. In case of other issuers, the risk of default would depend upon the credit rating of the bond.

Risk to Income: Depending upon the tenor, there may be a re-investment risk at the time of investing the bonds on maturity. Bonds with lower interest income may mean inadequate income to meet expenses on account of inflation. Bonds with high credit risk may put both income and principal at risk.

Taxability: The interest income from bonds is taxable, unless they are bonds with tax-free income. Some bonds may provide tax benefits under section 80 C of the Income Tax Act. Sale of bonds attract long or short term capital gains as applicable.

Suitability for the distribution stage: The periodic income makes it suitable for the income stage. There is no upper limit on the amount that can be invested and the bonds may be available for purchase in the secondary market also. Investors willing to take some credit risk can earn higher income by investing in lower credit rated bond. However, this should be done with caution since the risk of losing the principal invested also goes up. The products are for specified terms. So care should be taken to reinvest the funds on maturity to ensure continued income at the prevalent rates at the time of reinvestment.

Mutual Funds

Mutual funds can be used to generate income from investments in income-oriented schemes such as income funds, monthly income plans (MIP) and other debt-oriented hybrid funds. Mutual funds may prescribe a minimum investment amount but there is typically no maximum limit on investment that can be made. Open-ended funds have no term to maturity. Returns earned by mutual funds on securities held are a combination of the interest and dividend income as well as capital gains (or losses). A fall in interest income may be offset by a gain in market value. Or, a small exposure to equity may help improve the returns without significantly increasing risks.

Nature of Income: Income may be in the form of dividends or from redemption, if it is more tax-efficient. There is no guarantee on the income and it may vary from one period to the next.

Flexibility: The periodicity of dividend income and the flexibility to redeem units to generate income are the options that an investor can explore to maximize the returns from the investment and to save on tax.

Risks to Income: There is no guarantee on income from mutual funds. There may be volatility in the returns depending upon the underlying assets. However, investors can use systematic redemption as a means to generate periodic regular income.

Taxability: Dividend income from mutual funds is taxed at the marginal rate of tax applicable to the investor. Investors can maximise post-tax income by choosing periodic dividend or redemption of units depending upon which is more tax efficient: tax on dividends or long term capital gains.

Suitability for the distribution stage: Mutual funds with underlying assets that are oriented to income generations, such as bonds and debentures, are suitable for the distribution stage. Short-term debt funds, Monthly Income Plans are ideal for generating periodic income. Income funds and hybrid funds can be used by investors willing to take some risk for better returns. The dividend option and systematic withdrawal facility can be used to draw regular income from the schemes.

Real Estate

Rental income from real estate held provide a source of income that is adjusted for inflation. The income also has the advantages of being periodic and known in advance to plan and use. The high capital values of real estate in India, combined with high cost of loans, implies that most real estate investments have negative cash flows for the investor in the initial period of investment. That is, the cash inflow in the form of rent earned on the property is typically lower than cash outflow on the property on account of home loan repayments, property taxes and maintenance. Over a period of time, as rents go up and loan repayments cease, the cash flow from the investment turns positive. The high property values also mean that rental yields are low i.e. the rent earned relative to the price of the property. However, over time as rents go up on property purchased at a low price earlier, the yields improve.

Real estate can be one more asset class for generating income in retirement, provided the investor has adequate investments in financial assets that are liquid, provide regular income, and can also be redeemed if there is need for access to the capital.

Real Estate Investment Trusts (REIT) are investment products structured like mutual funds which invests predominantly in a portfolio of income-generating physical real estate investments. The income from rents and leases along with capital appreciation in the properties is distributed as income to the unit holders.

Infrastructure Investment Trusts invest the fund's corpus in infrastructure projects. The funds may choose to invest either in completed, revenue-generating projects or in a combination of completed and under-construction projects.

The self-occupied home can also become a source of income in the extreme situation of the retirement corpus being inadequate to fund a comfortable retirement. The reverse mortgage scheme is offered by housing finance companies and banks.

6.2.3 Reverse Mortgage Scheme

Rental income from real estate held provide a source of income that is adjusted for inflation. In periods of inflation which pushes up costs rental income also rises, thereby giving income that is adequate to meet expenses. The income also has the advantages of being periodic and known in advance, so that the investor can plan and use the income to meet their expenses. However, rental yield (rental income relative to the price of the property) in India is typically low, given the high property prices. If the property that was purchased at a lower price earlier is now generating good rental income, the yield may be comparable with other income generating investments. Real estate provides appreciation in value as well as inflation adjusted income. The drawback of real estate comes from the low liquidity in the investment. If there is an emergency and funds are required immediately, it will be difficult to liquidate the investment fast, though it is possible to get a loan against the property.

For many households the self-occupied property constitutes a large investment. The selfoccupied home can also become a source of income in the extreme situation if the income from the retirement corpus being insufficient to meet the needs in retirement. The reverse mortgage scheme is offered by housing finance companies and banks.

The important features of Reverse Mortgage are summarized below:

- a. In a mortgage, a lump sum is borrowed against the security of the property and this is paid back over a period of time using Equated Monthly Instalments (EMIs). In reverse mortgage, a property owned by the individual is pledged with the financial institution against which a periodic income is paid to the property owner.
- b. Eligibility Criteria
 - i. Indian citizen of 60 years or more,
 - Married couples will be eligible as joint borrowers for joint assistance. In such cases, the age criteria for the couple would be at the discretion of the RML lender, subject to at least one of them being above 60 years of age and the other not below 55 years of age.
 - ii. Should be the owner of a residential property (house or flat) located in India, with clear title indicating the prospective borrower's ownership of the property.
 - iv. The residential property should be free from any encumbrances.
 - v. The residual life of the property should be at least 20 years. There is no minimum period of ownership of property required.
 - vi. The prospective borrower(s) should use that residential property as permanent primary residence.
- c. The amount of loan available under RML depends on the age of the borrower, appraised value of the house and the prevalent interest rates of the lending institution.
- d. A reverse mortgage loan cannot be availed against commercial property.
- e. The maximum monthly payments under RML have been capped at Rs.50,000/-. The

maximum lump sum payment shall be restricted to 50percent of the total eligible amount of loan subject to a cap of Rs. 15 lakhs, to be used for medical treatment for self, spouse and dependants, if any. The balance loan amount would be eligible for periodic payments.

- f. All receipts under RML shall be exempt from income tax under Section 10(43) of the Income-Tax Act, 1961.
- g. The rate of interest and the nature of interest (fixed or floating) will be decided by the lender.
- h. The maximum tenure of an RML will be 20 years.
- i. The borrower can prepay the loan at any time without a penalty
- j. An RML will become due and payable only when the last surviving borrower dies or permanently moves out of the house. An RML will be settled by proceeds obtained from sale of the house property mortgaged. After the final settlement, the remaining amount (if any) will be given to the borrower or his/her heirs/beneficiary. However, the borrower or his/her heirs may repay the loan from other resources without bringing the property to sale.
- k. The borrower will remain the owner of the house property and need not service the loan during his/her lifetime as long as the property is used as primary residence. Periodic payments under RML will cease after the conclusion of the loan tenure. Interest will accrue until repayment.
- I. The Reverse Mortgage loan can be prepaid at any time during the currency of the loan. On clearance of all the dues, all the title deeds will be returned by the lender.
- m. The borrower can opt for the frequency of EMI pay out (a monthly, quarterly, and annual or lump sum payments) at any point, as per his discretion.
- n. The Reverse Mortgage Loan Enabled Annuity (RMLEA) is an extension of the reverse mortgage scheme. The scheme ensures a life time pay-out to the senior citizens through an annuity bought from an insurance company using the reverse mortgage loan amount disbursed by the primary lending institutions.
 - The scheme will be available to senior citizens of India over 60 years of age who are the owners of the property-. In case of married couples applying as joint borrowers at least one of the borrowers should be above 60 years and the other 55 years.
 - The primary lending institutions (housing companies and scheduled commercial banks) will be the interface for the individual. They will assess the property for the eligible loan, disburse it and source a life time annuity with the loan amount from eligible insurance companies.
 - The operational guidelines of the National Housing Bank (NHB) define the loan to value (LTV) ratio to determine the quantum of loan. It starts at 60percent between the age of 60 years and 70 years and goes up to 75percent for age 80 years and above.
 - The borrowing individual has to choose between a lifetime annuity without return of purchase price and a life time annuity with return of purchase price.

The scheme also provides for an annuity cover for the spouse of the primary borrower.

- The amount of annuity received will be a function of the loan value and type of annuity chosen. The borrower can decide on the periodicity of the annuity payment from the options provided such as monthly, quarterly or annual.
- The annuity received is exempt from tax in the hands of the borrower.

Sample Questions

- 1. How is the Gratuity due paid to the employee?
- a. As an annuity
- b. In a lump sum
- c. 1/3rd is commuted and the rest used to purchase an annuity
- d. It is credited to the EPFO account each year
- 2. Which of the following needs to assessed before investing in a corporate bond for retirement savings?
- a. Risk of low returns
- b. Inflation risk
- c. Market risk
- d. Credit risk
- 3. What is the maximum tenure of the Reverse Mortgage Scheme?
- a. 30 years
- b. 25 years
- c. 20 years
- d. For the life of the borrower
- 4. Which of the following features make Government securities suitable for accumulation of the retirement corpus?
- a. Interest is not paid out but cumulated till maturity
- b. Long tenor
- c. High guaranteed returns
- d. All the options given here

CHAPTER 7: RETIREMENT PLANNING STRATEGIES

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Strategies to bridge income gap
- Periodic investments
- Ways of generating retirement income from multiple sources
- Demarcating post-retirement investments
- Strategies to take tax advantages in different stages of investment
- Automate investments

Planning for retirement involves accumulating the funds out of the savings from income earned in the working years and investing the savings to create the retirement corpus. This corpus is then used to generate the income that will be used to meet expenses in the retirement period. There are strategies that can be used to deal with the financial aspects of retirement in an efficient way.

7.1 Bridging Shortfall in Retirement Corpus

Retirement is a financial goal with many distinctive features such as the goal with the longest tenor, both in the accumulation and in the distribution stage. The long tenor has many implications for the individual saving for the goal.

- The funding requirement for the goal is large. A major portion of the saving and investment of the individual has to be assigned to it.
- The goal value will undergo change over time as needs change and become more specific.
- The assumptions made in making the calculation of the retirement corpus on inflation rate and investment rate is likely to change over the period.
- The goal requires periodic review and updation. The change in needs, the period available for accumulating the corpus and the retirement period for which income has to be provided, all imply a change in the saving and investment activities of the individual.

Given the dynamic nature of the retirement goal, it is possible that the corpus that has been accumulated may fall short of the sum of money necessary generate the income required to meet expenses in retirement. Loans or debt is not an option to meet expenses in retirement because a loan imposes repayment obligation which the retiree's already insufficient income may be unable to meet. There are different strategies that the retiree may adopt to manage the shortfall.

Prevention Strategy

It is very difficult to estimate the expenses in retirement early on in the working years. The thumb rules, such as 70 percent of pre-retirement income, based on which retirement corpus calculations are made in the initial earning years may not truly reflect the actual needs. The needs and expenses, including lifestyle expectations in retirement, medical situation and other large expenses may be clearer closer to retirement, and the corpus estimated at this stage may be more accurate to meet the income required. To enable adjustments in the factors estimated for calculation of the retirement corpus it is important to periodically review the assumptions made. The 5 to 10 years before retirement is the stage in life when other important goals have been met, incomes are likely to be high and expenses have stagnated. This is the ideal time to ramp up retirement savings to bridge the expected shortfall, if any. A budget may come in handy to realize the higher savings possible at this stage. Another way to pre-empt shortfalls is to rework the retirement corpus target every time there is a life event that has an impact on income or expenses in retirement. For example, an increase in income that will change lifestyle, or a medical condition that means more health costs, death of a spouse are all situations that will alter the expenses in retirement and hence the corpus required to generate the income. The advantage of reworking the corpus requirement periodically in this way is that it gives the individual a longer time period to make adjustments to the corpus. There is a longer time to accumulate the required money and for the compounding benefits to add to the corpus. If the need to change the targeted corpus is realized only closer to retirement then the advantage that time brings to bridging the shortfall is lost.

Adjusting expectation

Assessing the adequacy of the corpus periodically also prepares the retiree for adjusting their expectations from retirement. While essential expenses and costs have to necessarily be met, if the corpus is falling short then the retiree has the time to adjust their other expenses to fit in to what is available. If increasing the corpus is not a viable option, then the other option is to bring down expenses in retirement.

Delaying retirement and Second career

If the corpus is seen to be falling short and the additional savings and investments are not adequate to bridge the gap, then delaying retirement is an option to consider. This is particularly true for people who are considering early retirement. Delayed retirement benefits the corpus in two ways: on one hand there is longer time to add to the corpus, and on the other hand drawing from the corpus is delayed. If postponing retirement is not an option, then a second career to earn income in the early years of retirement should be considered. This need not necessarily be a continuation of the employment in the pre- retirement working years. Instead, it can be in any area of interest that the retiree may want to pursue in retirement. The income may be large enough to meet all the expenses in the early retirement years, or it may be enough to limit the amount drawn from the corpus. Depending upon the extent of shortfall in the corpus the retiree can decide on the income requirements from the second career and the period for which it has to continue.

Protection Strategies

Longevity, or increased life expectancy, is the biggest risk to the retirement goal. The corpus may seem inadequate if there are long years in retirement to provide for. The second risk that needs close attention is inflation. Most guaranteed and fixed retirement income remains fixed through the retirement period. However, the expenses keep rising through the years because of inflation and unless this is factored in to the calculation of the corpus, there may be a gap between the income that the available corpus can generate and what is actually required. One way of protecting against these risks is to include growth investments in the retirement portfolio both in the accumulation stage and in the distribution stage. In the early accumulation stage the exposure to growth investments such as equity, should be much higher and this can come down as the distribution comes closer. In the distribution stage, the entire corpus is not required all at once. Some portion of the corpus is required as far in the future as 20 to 25 years from the date of retirement. Therefore, there is scope for growth and inflation protected investments even in the distribution stage. The higher returns help the corpus grow and provide income that can keep pace with inflation. Another way of protecting the corpus from being drawn down early is to postpone the vesting date of any annuity purchased to the middle retirement years, if there is an alternate income source such as second career, to take care of expenses, either wholly or partially, in the early retirement years. This way there is an assurance of income in the later stages of retirement when the dependence on the corpus is the highest. Expenses related to health can be one of the biggest drains on retirement income. Preparing ahead with adequate health insurance with lifelong renewability, even if there is premium escalation, is one way of protecting income from high health-related expenses.

7.2 Periodic Investments

Building a retirement corpus is done over the working life by saving and investing in different assets. It is not possible to generate the large corpus required for retirement in a short period of time. Given the long investment horizon the asset allocation can have growth investments such as equity to enhance returns. The long investment horizon gives the equity portfolio the time to recover from any short-term volatility inherent in equity prices. The best way to accumulate equity assets, given the volatile prices, is to build the portfolio in smaller, regular instalments over a period of time instead of trying to buy at the lowest prices. Each instalment will be invested at the prevailing prices. When the prices are low the number of units of the security added to the portfolio will be higher than when the prices are high. Thus, the average cost of acquisition is likely to come down in a volatile market. This strategy can be applied to all investments that have volatile prices. Consider the following example of acquiring mutual fund units.

Month	Amount	NAV (Price)	Units Purchased
Jan	Rs.1000	Rs.12	83.33
Feb	Rs.1000	Rs.14	71.43
Mar	Rs.1000	Rs.15	66.67
April	Rs.1000	Rs.13	76.92
May	Rs.1000	Rs.16	62.5
June	Rs.1000	Rs.16.5	60.60
July	Rs.1000	Rs.18	55.55
	Total Amount Invested: Rs.7000	Average Cost: Rs. 14.67	Total Units: 477.01
	Value of holding in July	Rs.8586.23	

The average cost of acquisition is not the lowest price in the period. Nevertheless, the strategy of periodic investing adopted has brought down the cost for the investor without trying to time the market and buying at the lowest price. Investing periodically and consistently in a volatile market helps get a good average price over the investment period. Trying to identify the lowest point to enter the market is difficult to execute. The markets may begin to rise before the investor can enter into the investment. The strategy requires skill and information which investors may not have. Moreover, in the time that the investor takes to identify the right time to invest, the funds will be lying idle instead of earning returns for the investor.

In a falling market too periodic investing can be of advantage to a long-term portfolio. The investor would accumulate more units when prices fall. When markets turn up subsequently, the larger number of units acquired will translate into a higher portfolio value.

When buying securities in the secondary markets, say to create a portfolio of bonds and debentures to generate fixed income in retirement years, planning periodic investments into the bonds over a period of time can help investors get a better yield on their portfolio since they will be buying the bonds at different prices.

One way for investors to give a boost to the corpus for which they are saving is to step up the periodic savings each year to keep pace with the increase in income. This requires discipline and if the investor sticks with the plan there is a much larger corpus at the end. For example, if the investor gets a salary hike of 10 percent then the attempt should be to increase the savings also by 10 percent over the previous year. It is a more effective way to keep savings moving up with income rather than stay at a fixed amount.

Systematically Monetizing Retirement Assets

Just as disciplined periodic investments into products whose prices are volatile help investors make the volatility work to their advantage, similarly a calibrated withdrawal strategy can help investors avoid the risk of exiting when markets are down. The strategy can be used in multiple ways in managing the retirement portfolio:

- Rebalancing the portfolio to reduce exposure to more volatile asset classes such as equity as retirement comes closer.
- Monetizing the retirement assets as the individual moves from accumulation to distribution stage of retirement.

As the stage of investment moves from accumulation to distribution, the invested funds should ideally move from growth assets to less volatile investments first, and then to investments that will generate income in retirement. Just as investing into volatile assets is best spread over time to make the volatility work in the investor's favour, similarly withdrawing funds from such investments is also best done over time. Withdrawing in a lump sum in one transaction may mean that the investment may be withdrawn at a point when the values are low and this affects the corpus realized.

Consider the example of Mr. X who has accumulated 10,000 units in LCP Equity Fund over the last 5 years. He now wants to redeem the units. If the NAV of the scheme is Rs.40, then Mr.X will be able to realize Rs.4,00,000. Instead, if the units were withdrawn in a phased manner the investor could benefit from any appreciation in the value.

Units	NAV	Amount (Rs.)
1000	40	40,000
1000	40.8	40,800
1000	42.43	42,430
1000	42.01	42,010
1000	42.85	42,850
1000	41.99	41,990
1000	43.25	43,250
1000	44.55	44,550
1000	45.88	45,880
1000	46.34	46,340
Amo	430,100	

If 1000 units each were redeemed each month over 10 months, the investor's total realized amount would be 7.5 percent higher at Rs.4,30,100. The risk is that the realization could be lower if the NAVs were to decline. The investor should make this decision based on expected market conditions.

The pre-defined withdrawal plan, like a Systematic Withdrawal Plans (SWP) offered by mutual funds, can be effectively used to generate income too in the income stage of retirement. For

example, dividends from mutual funds are not definite. A fund pays dividend only if there is adequate realized earnings in the portfolio. Unitholders can set up an SWP to redeem units for a fixed amount each period. For example, consider the case of Mr. X who holds 5000 units in a Monthly Income Plan (MIP) of a mutual fund and wishes to draw Rs.10,000/- from the investment each month.

Amount (Rs.)	NAV (Rs.)	Units Withdrawn	Unit Balance
A	В	C=(A/B)	
10000	40.00	250.00	4750.00
10000	40.80	245.10	4504.90
10000	42.43	235.67	4269.23
10000	42.01	238.05	4031.18
10000	42.85	233.38	3797.80
10000	41.99	238.15	3559.65
10000	43.25	231.21	3328.44
10000	44.55	224.48	3103.96
10000	45.88	217.94	2886.02
10000	46.34	215.78	2670.24

Fewer units are redeemed when the NAV is high. If Rs.100,000 is redeemed at one shot when the NAV is Rs.40, then 2500 units are used up. By phasing out the withdrawal the same amount is withdrawn by redeeming only 2330 units. If the NAV was to drop in the SWP period, then the number of units required to withdraw the same amount will go up. Either way, after each withdrawal the remaining funds remain invested and earn returns till they are withdrawn too.

Using periodic withdrawals requires planning ahead. The investor has to have a plan on when to start the withdrawal, the periodicity of the withdrawal and the number of instalments over which the rebalancing or redemption will be done. In case the entire corpus is being realized to transition from accumulation to distribution stage, then there should be a clear plan on how the funds will be invested to generate income. To benefit from tax advantages of long-term capital gains, the investment in debt instruments, such as debt-oriented mutual funds, from which the withdrawals will be made have to be held for at least 36 months. The plan for

distribution must consider this and either move money into investments to an appropriate time schedule or withdraw when the benefit becomes available.

7.3 Retirement Income from Multiple Sources

A retiree looks for multiple features from retirement income and the retirement portfolio. Primary among them are:

- Adequacy to meet expenses in retirement with inflation protection
- Income security and protection from longevity
- Stability and certainty of quantum of income
- Transparency and Simplicity in understanding
- Costs& Fees
- Tax advantages
- Flexibility: Draw additional funds/change investments/change options
- Access to capital

Many of these features are inherently at conflict with each other. For example, the higher return that would make it comfortable to meet expenses in retirement will not come with stability and certainty. Similarly, protection from inflation will mean higher risks of volatility in the portfolio. Simple products may be inflexible and with lower returns. The importance of any of these features while structuring the retirement income portfolio will depend upon individual circumstances. Adequacy and sustainability through retirement, however, will rank right at the top for all retirees.

There can be no one product that meets the multiple requirements that retirees expect from their retirement income. The pros and cons of the more popular income products are:

Annuities meet the primary retirement requirement for guaranteed lifetime income, depending upon the choice made from amongst the annuity options available.

Pros: The annuitant is assured of a fixed income for the contracted period. There are a few options provided for the buyer of the annuity to structure the payout, such as income for life, income for life for both annuitant and spouse, and so on.

Cons: The returns are very low from an annuity. To generate an adequate retirement income only from annuities will require a very large corpus. The costs are high and opaque. There is no flexibility to change options once selected. The capital is no longer accessible to the annuity buyer once it is purchased, unless the annuity provides for return of purchase price on the death of the annuitant. As a fixed income stream, annuities are subject to inflation risk.

Bank and Post Office Deposits provide fixed income for the tenor of the deposit with negligible risk of default. There is stability of income for the period. The product is simple to understand and transact for individuals and there is a high degree of comfort and familiarity.

Deposits allow flexibility on choosing the periodicity of receiving interest income, withdrawing the deposit, albeit at a cost, taking a loan against the deposit.

Cons: As a fixed income product there is a risk of the income being subject to the effects of inflation. In a low interest phase, investor incomes will be affected and they will be tied to the lower rates till the deposit matures even if interest rates rise subsequently. Given the nature of the product there is no scope to earn any capital appreciation on the principal invested. Since deposits are for a fixed tenor, the deposits have to be reinvested on maturity and will be subject to re-investment risk. If interest rates are lower at the time of re-investment, then the investor will have to manage with lower interest income.

Post Office Monthly Income Scheme & Senior Citizens Savings Schemes are structured to provide periodic income at rates prescribed by the government from time to time. The income and principal are guaranteed by the government and thus has no risks of default. The SCSS feature higher interest rates as they are for the benefit of senior citizens. Scheme subscribers have certainty in the quantum of income that will be received by them. The products are simple to understand and execute and feature no specific costs of managing the scheme. The capital invested can be withdrawn at any time, although there will be a penalty. The SCSS provides tax benefits under section 80C at the time of investment.

Cons: The scheme is subject to inflation risks as the fixed income may be inadequate to meet expenses as costs go up. There is an upper limit on the amount that can be invested in each of these schemes. As such they may be insufficient to be the sole income source in retirement. Since the schemes are for a fixed tenor, there is a risk of having to reinvest at lower interest rates when the schemes mature. The schemes do not allow for flexibility to tailor to an investor's needs.

Bonds and Debentures are debt securities issued to investors by entities such as the government and government sponsored public enterprises, financial situations and private companies, among others. They typically provide a fixed interest income over the tenor of the security. Interest income will depend upon the tenor and credit quality. Higher the tenor, greater will be the interest income. Government guaranteed securities will pay lower interest since there is no default risk. Private companies will pay a higher interest income relative to government securities of the same tenor on account of the credit risk in them. Investors can trade-off some credit risk for higher interest income which can protect against the effect of inflation on fixed income. As listed instruments, bonds and debentures are capable of generating total return from interest rates. Some bonds issued by infrastructure related public enterprises provide tax free income, while others provide section 80 C benefits at the time of investment. Bonds can be sold in the market at anytime to realize the capital if investor needs to access it. Loans are typically available against the security of the bonds.

Cons: Bonds and debentures are not available regularly in the primary markets. Moreover, there may be a cap on the number of bonds that investors can be allotted in a public issue. In

the secondary markets liquidity is low which may make it difficult to build a bond portfolio easily. Like all securities listed on the stock markets, investors need to have a demat account and trading account to transact in them and there are costs attached to them. Investors need skill and knowledge, or good advisers, to help them build the portfolio. Investors have to monitor any deterioration in credit risk in the bonds they hold and take action to exit the product. There is market risk in the listed bonds and there may be a fall in the capital invested if interest rates rise. But this will not affect the interest income earned from the bonds held. The bonds have re-investment risks since the bonds are for a fixed tenor and the interest at the time of re-investment may be lower.

Mutual Funds offer lower risk debt and hybrid products that can be used by investors to generate regular income in retirement. Products such as short-term debt funds, Hybrid funds and even income funds, use different strategies with varying levels of risk and return to generate income. The professional fund management allows better selection and monitoring of securities to generate income according to the investment objectives. Mutual funds generate total returns from interest income and capital appreciation. In periods of low interest rates the total returns is boosted by capital gains. The higher returns help combat the effects of inflation. The product is flexible and investors can structure the returns to suit their need for income and change it without any difficulty. The product allows them to take the payout as dividends or by redeeming units, depending upon which option gives them better tax benefits on the income. They can access their capital without difficulty any time they need it.

Cons: There is no guarantee or stability or certainty to the income from mutual funds. The product has market risk and a fall in prices may even eat into the principal invested. Mutual funds are not easy products to understand and selection and monitoring may require the assistance of an adviser. They are transparent in providing all information on the portfolio to the investors. There are costs and fees associated with mutual funds that will reduce the returns.

Real Estate is used to generate rental income. The primary advantage of rental income is that it is protected from inflation i.e. the income goes up with inflation. It is a familiar asset for most individuals. Income from rent can be adjusted for maintenance and other specified expenses related to the property that reduces the tax implications. The asset will continue to earn income as long as it is held. There is no risk of running out of income. The appreciation in the value of the asset adds to the total return from it. It is easy to get a loan against the property in case of need.

Cons: Real estate is a large investment and it ties up a large portion of the capital of the individual. It is important to compare the yield (Annual rental income earned relative to the capital invested) from this asset with the yield from other options to ensure best use of available capital. Managing the lease and other maintenance issues may require assistance

from brokers, and this implies costs. There may be periods when the property is vacant and will not earn an income. Selling real estate to access the capital is a long drawn process.

Diversified Income Strategy

As seen in the previous section, different income sources cater to different needs of the retiree from the retirement income. Therefore, relying on only one source may not be the most efficient use of the accumulated corpus to generate retirement income. The different sources of income should be brought together to create a portfolio of diverse incomes, each of which caters to different demands from income in retirement. There is no one combination that will work for all retirees. While income security for life will be the top priority for most retirees, the other features will get importance in varying degrees. The combination of assets in the income portfolio should also consider the skill and knowledge of the individual to understand and operate the product.

Some points that can help in constructing income streams in retirement are:

- Earmark guaranteed payouts like pension and annuity payments to meet mandatory and essential living expenses such as taxes, insurance and living costs. Limit the use of annuity to only these expenses since it is a low yield product.
- Use POMIS, SCSS, bank deposits and rental income, if any, to meet the next category of regular expenses.
- Investments in bonds and debentures can be used to accumulate funds for medium term goals such as travel in retirement.
- Mutual funds can be used to bring that element of growth assets to the portfolio with the portion of the corpus that is not immediately required for generating income.
- Defer annuity payments to the middle and later retirement years when retirement income is not supported by income from a second career.

7.4 Bucket Strategy

Financial planners use the strategy of demarcating the investments in the post-retirement portfolio based on when the funds will be required to meet retirement expenses. The strategy (commonly called the bucket strategy) envisages three buckets into which the investor's retirement corpus will be divided:

The first bucket will hold the funds required to meet the immediate 3-5 years of the retiree's expenses. Depending upon how safe the individual wants to be, this can be 3 years or five years or even more. The idea is that the retiree must be assured of having adequate ready funds to meet their expenses in this period. The bucket will therefore hold very low risk products. This may include the pension that the retiree is likely to get, if any, augmented by investments such as cash and equivalents for the first year, fixed deposits with banks each maturing in the 2nd year to 5th year so that the income is protected from inflation, interest income for a government guaranteed scheme such as the SCSS up to the maximum

permissible limits which provides higher interest income along with tax benefits at the time of investing, interest income from the Post Office Monthly Income Scheme, and, if necessary to bridge any shortfall in income, a single premium immediate annuity that pays income for five years may be considered if the rates are competitive. Apart from the income required for 3 years to 5 years, the first bucket should also hold emergency funds that may be needed to meet a large and unplanned expense.

The second bucket is the safety cushion bucket and it will hold the funds required in the next 10 to 15 years of retirement. Since the first bucket takes care of income and emergency needs for the first 5 years in retirement there is no risk of the second bucket of investments being drawn upon early to meet the needs of the investor. Hence there is scope for investment into assets that can earn better returns albeit with some risk. Long term income funds and FMP, bonds and debentures, real estate assets, gold and lower risk equities exposure not exceeding 20 percent of the portfolio, are all investments that can find a place in the second bucket.

The third bucket consists of funds that are required 20 years away from the start of the retirement period. This bucket has the potential to take higher risks in growth assets since the funds in this bucket are not expected to be used for the next 20 years. Balanced funds that invest in equity and debt, large cap equity funds and ETFs, long term income funds, real estate investments, gold, are all assets that can bring growth to the long- term portfolio.

Maintenance of the Buckets

Each bucket has a role to play. Bucket 1 is the drawing down bucket and the funds are used to meet expenses. Bucket 2 will refill bucket 1 periodically and bucket 3 will refill bucket 2. Overtime, as the retirement progresses towards the later years, the riskier bucket 3 will slowly empty into the safer bucket 2.

There are different ways in which the buckets can be replenished. This can be done on a prefixed schedule, say annual or it can be done whenever the funds fall below a pre-defined level or on an ad hoc basis. The buckets can be refilled in different ways. For example, whenever an investment in the second bucket matures it can be used to refill bucket 1. Or, bucket 1 can be refilled from any dividends or interests received in bucket 2 and 3, and then redeem capital from bucket 2 only to the extent required to bridge the difference. Or, bucket 1 and bucket 2 may be refilled only by redeeming investments from bucket 2 and bucket 3, respectively, as required. Bucket 2 will be refilled from bucket 3 as and when there is any reduction from the targeted amount in bucket 2. Bucket 3 will be drawn down over time and eventually empty out. The lower risk bucket will be refilled from a higher risk bucket and never the other way. For example, if there is a stock market crash then the fall in value in bucket 3 will not be made up from the safer assets in bucket 2. Since the funds in bucket 3 are required 15 to 20 years in the future, if not more, there is sufficient time for the funds to benefit from a market recovery and an upturn.

It is prudent to be conservative with the riskier assets held, whether in bucket 2 or 3, and book profits periodically. One way to do it is to set a target return, say 12 percent per annum, and if there is a higher return then book profits and move it to the second bucket or from the

second bucket to the first bucket so that the risky asset does not grow to become a large component of the portfolio. The drawback of this strategy is that the growth assets will lose out on compounding from reinvestment. But in the retirement stage retirees typically prefer that their portfolios should be managed to minimize risk rather than maximizing returns.

While filling the buckets can be done at the start of the retirement period, it may be a good idea to have the plan ready ahead and start filling the bucket in the pre-retirement stage to lock in on any high interest opportunities and take advantage of good entry prices into other assets.

The bucket strategy can be used in many ways to structure the retirement portfolio. Typically, 3 buckets are used to demarcate investor funds. More buckets can be used, say 6 buckets of 5 years each with the risk going up marginally from one bucket to the next. Another way to use the bucket strategy is to take care of mandatory and essential expenses using the pension, if any, and annuities. For the other expenses use the buckets to fund the expenses.

7.5 Tax Advantages in Different Stages of Retirement

The investments made and returns earned in the portfolio of investments created to accumulate the retirement corpus in the accumulation stage and subsequently, to generate retirement income in the distribution stage are subject to tax. There may be tax benefits available at the time of making the investment, or on the returns earned, or on the value of the investment at the time of redemption or sale. These tax implications impact the actual return earned by the investor and should be considered to maximize the returns from the investments.

In the accumulation stage look for avenues to contribute retirement savings that give tax benefits that contribute to the corpus' growth. There are three stages of the investment at which tax benefits may be available: Contribution, Earnings and Maturity.

Stage of Contribution

There are some investments that provide tax benefits at the time of investments. Investments covered under section 80 C including contributions to Employee Provident Fund, Public Provident Fund, Equity Linked Savings Schemes, NSC, SCSS, bonds with tax benefits, and others provide tax benefit in the form of deductions up to the specified limit (currently Rs.1.5 lakhs) from the total income. Additionally, contributions made to specified pension plans, such as the National Pension System also gets benefits of deduction under Sec 80CCD(1) within the limit of Rs.1.5 lakh mentioned above. Contributions to the NPS also gets an additional tax benefit in the form of deduction to the extent of Rs.50,000 under section 80CCD(1B). Contributions made by the employer under NPS to the extent of 10 percent of basic salary plus DA of the employee is also available as deduction under section 80CCD (2).

The benefit of tax deductions available on investments made is that it reduces the outgo of income on account tax. The income saved is available for consumption or saving. In the early

working years there may be many claims on the money so saved. But as far as possible try to save and invest this money so that the money accumulated for goals get a boost. For example, assuming an average return of 10 percent from the tax saving portfolio, investing Rs.1,50,000 over 25 years will accumulate a corpus of Rs.1.5 crores. If the additional Rs.45,000 of the tax saved (assuming a 30 percent tax bracket for the investor) was also invested, then the corpus will go up by an additional Rs.44 lakhs over the 25 year period.

Stage of Earning

The investments made for accumulating the required corpus will earn returns through the investment years. Some investments, such as PPF, NPS, bonds issued with tax free interest income earn returns that are not charged to tax when they are earned. Investment with returns that are not taxed implies growth and compounding at higher rates relative to investments where a portion of the returns are paid as taxes. Products whose interest are taxable should ideally have a post-tax returns comparable with the tax-free products to be considered for the accumulation portfolio.

Stage of Maturity

The maturity value of some investments are not taxed, and the entire amount is available for meeting the goals. Investments such as the PPF, 60 percent of the accumulated value in the NPS is tax exempt, in addition to the 40 percent of the corpus that is used to purchase an annuity; maturity value of the EPF, are examples of products that are not taxed on their maturity value. The strategy should be to utilize these investments as far as possible, subject to limits if any. However, this should be done keeping the needs from the portfolio in mind. For example, even though accumulating a retirement corpus is a long-term investment activity, the tax-free returns and compounding benefits from the PPF makes it a suitable product to consider.

Strategies to Benefit from Tax in the Distribution Stage

In the withdrawal stage, the focus of the distribution strategies should be to maximise income from the corpus with minimum drain from taxation and costs. However, there are multiple imperatives from retirement income, such as assured income, adequacy to meet expenses and combat inflation and stability of income. Taking advantage of tax benefits available has to be considered within the framework of these demands from the retirement income.

It is desirable to have a sequence in which the various sources of retirement income will be tapped so that the various demands from retirement income are met along with maximizing post-tax income. To execute this, draw income from diversified sources that have different tax treatments: taxable, tax-exempt and income that can be managed for tax benefits.

The place to start is with the fixed pension from the employer, if any. A guaranteed pension is essential to meet the mandatory expenses in retirement. To the extent that the employer pension falls short, seek annuity payments to cover it. This is taxable income but has the advantage of certainty for life.

For other essential living expenses in retirement which is not covered by the first level of income, look for sources of income that may offer some tax benefits. Some investments provide tax free income such as interest from tax free bonds. Other tax- free income include any sum received under a Reverse Mortgage Scheme. Whether or not to choose an investment for the tax- free nature of returns will depend upon the returns expected and the tax bracket of the investor. For example, consider the case of a bond which pays a tax-free interest of 7 percent. An investor whose income is in the 5percent tax bracket will compare this bond with other investments of similar risk and tenor with a pre-tax income of at least 7.37 percent (approximately). The post-tax return of this investment will also be 7 percent. If there are investments that give a pre-tax return of more than 7.37 percent then the post-tax return will be higher than that of the tax- free bond and investors may prefer to invest in the investments with the higher return over the tax-free bond. For an investor in the 20 percent tax bracket the cut-off pre-tax return that a comparable investment has to provide beyond which they will choose not to invest in tax free bond of 7 percent return is 8.75 percent, and for an investor in the 30percent tax bracket the level is 10percent. Another way in which taxfree income can be used is to prevent the retiree from being tipped over to the next tax bracket. For example, if the taxable income of a retiree after considering all deductions available stands at Rs.10,50,000 then it pushes the retiree from the 20 percent tax bracket into the 30 percent tax bracket. If the retiree had access to tax-free income, say interest from tax free bonds, then this can be used to bridge the last Rs.50, 000 income required and still stay in the 20 percent tax bracket.

At the next level, use income on which adjustments are allowed that can reduce the income charged to tax. For example, rental income earned is adjusted for municipal taxes paid. From this net annual value there is a standard deduction of 30 percent allowed and interest on loan to buy the property. The net rental income after these adjustments is added to income from salary and taxed at the applicable IT slab rates. The income that is charged to tax is therefore lower than what is actually earned and available to meet expenses in retirement.

Other sources of income that can be managed for tax includes investment returns that can be drawn and taxed as long-term capital gains instead of income in the form of interest or dividend that may be charged to tax at the marginal rate of tax applicable to the investor which may be higher. The gains on sale is treated as long term capital gains if the asset was held for more than 36 months (one year, for equity investments) before transfer. This is likely to be taxed at a lower rate and provides the benefit of indexation, as compared to income that is taxed at the income tax slab rates.

For example, assume Rs.1 lakh each was invested in a bank FD and a Conservative hybrid fund of a mutual fund and both investments earn a 3 year compounded annual growth rate (CAGR) of 10 percent.

The interest earned on bank FD is Rs.33100 (at a CAGR of 10 percent). Let us assume that the interest is over and above the Rs.50,000 available as deduction under section 80TTB. This interest income is added to the total income and taxed at the income tax slab rates. Assume the marginal rate of tax is 20 percent, then the tax payable will be Rs.6620.

In case of the mutual fund, the investment was made at an NAV of Rs.10 and is now valued at Rs.13.31 (10 percent CAGR). Long term capital gain is taxed at 20 percent after indexation. Indexation is done based on the cost of inflation index (CII) in the year of acquisition and year of sale. Assume the CII in the year of acquisition was 711 and in the year of sale 1024. The purchase price is indexed as Rs.10 x 1024/711= Rs.14.40. The NAV at redemption is Rs.13.31. There is no capital gain to be taxed and the entire gain of Rs.33100 is available for use by the investor. The capital loss calculated can be set off against other capital gains and carried forward for 8 years.

Though both the FD and mutual fund earned the same CAGR, the returns from the mutual fund is tax-efficient and generates higher post-tax income for the investor.

The returns from some investments can be structured in a way that gives better post-tax returns to the investor. For example, investors in the lower tax brackets may find it more tax efficient to use the dividend option since they will be taxed at a lower rate as compared to capital gains on units redeemed. However, the indexation benefits available on long-term capital gains from debt-oriented mutual funds should be kept in mind while making this choice because given the long-term nature of retirement savings, the capital gains subject to tax after indexation will be very low. It is important therefore to keep the tax aspects in focus while structuring the investment as well as the returns.

All tax benefits available that can help save taxes should be used as far as possible. The basic level of income exempt from tax is higher for people over 60 years of age and for those over 80 years. Currently, this stands at Rs.3, 00,000 and Rs.5, 00,000 respectively. There are deductions available from taxable income for investments made under Section 80 C upto a limit of Rs.1,50,000, additional tax benefits for contributions to notified pension schemes such as the NPS to the extent of Rs.50,000 and deductions for premiums paid on Health policies under section 80D to the extent of Rs.30,000. Section 80TTB provides a Rs.50,000 deduction from gross total income on account of income earned as interest on deposits. Other deductions available that are pertinent to the retirement stage include deductions for disabilities and specific diseases up to specified limits for self and dependents and deductions for donations made to eligible charities. All of these can be used to reduce the income taxed.

Other tax benefits such as setting off loses against gains, and carrying forward losses to be set off against gains in the subsequent years should also be considered to reduce tax outgo.

7.6 Automating Investments

Once a retirement plan is made the process for executing it should also be set in place. Living by a budget to realize the savings is just the first step. The retirement goal will benefit only when the savings are invested. Similarly, having a schedule for evaluating the portfolio annually and rebalancing the portfolio will help manage the risks in the portfolio. Many of these essential activities get ignored or postponed for want of time to execute them. Using facilities offered by bank and investment providers many of these activities can be put on auto mode. Managing the hygiene factors related to the retirement portfolio can go a long way in meeting the goals in retirement. These include:

- Have a regular schedule for investing surpluses, say every quarter. For some investments, such as the NPS and mutual funds it is possible to do the same every month. The quicker the savings are invested the longer the funds have to compound and grow.
- Use bank account facilities such as sweep and standing instructions to move the targeted savings each month to identified products, or to an investment account and invest the same in short-term deposits so that the money does not lie idle till such time it is invested according to the approved asset allocation for the portfolio.
- Sign on for automatic investment options where available, such as Systematic Investment Plans (SIP), to bring discipline in investments.
- Select the options to receive returns in investment in a way that meets the requirements of the stage in retirement. For example, use the growth option or cumulative option to reinvest returns and earn compounding benefits in the accumulation stage. If the payout option is chosen with a view to diversify or reduce exposure to a particular investment, then move the payout to a designated investment account from which it should be invested without delay. This will eliminate the risk of the returns lying un-invested and losing on compounding benefits.
- Link investment accounts, broking accounts and demat accounts to a designated bank account and do the investments and transactions online. A one-time detailed procedure is involved in setting up online investment facilities.
- Use a standing instruction with the salary account to move money first to the bank account designated for investments so that you don't miss out on your investments targets.
- Use the bank account designated for investments to receive all periodic income such as dividends and interest and to receive redemption proceeds of investments. Sign up for direct credit facilities so that the money is immediately available for investment and there is no delay in presenting cheques and other payment instruments for credit.
- Use the automatic rebalancing facilities offered by some investments to manage the risk in investments. For example, the lifecycle fund of the NPS calibrates the exposure to equity with reference to the age of the investor. Mutual funds provide trigger facilities to rebalance the portfolio based on factors such as the level of an equity market index or the returns earned on a portfolio or appreciation/depreciation in the NAV. On the trigger being activated the funds will be redeemed from the scheme or switched out to another specified fund.
- Schedule periodic monitoring of the portfolio is mandatory both in the accumulation and in the distribution stages. The monitoring is important to enable:
 - Performance evaluation of the investments held
 - Rebalancing the portfolio to align to current asset allocation requirements
 - Booking profits periodically to manage risks

The strategies used in retirement planning are not always targeted to earn the highest return. Retirees are less concerned with maximizing returns than with managing the primary risks in retirement, namely longevity and adequacy of income. The strategies in retirement will therefore target these needs.

Sample Questions

- 1. The retirement goal value will be affected by which of the following changes in the individual's life?
- a. Early retirement
- *b.* Increased expenses
- c. Reduced savings
- d. All the options given here
- 2. What are the decisions that the individual has to make while signing up for a systematic investment or withdrawal plan?
- *a*. Fixed amount to be invested each period
- b. The periodicity of the installments
- c. The number of installments
- d. All the options given here
- 3. What is the maximum holding period that a risk averse investor is likely invest his funds in the first bucket under the 'Bucket Strategy'?
- a. 5 years
- b. 4 Years
- c. 3 years
- d. 2 Years
- 4. Which of the following facilities bring discipline to the investing activities of individuals?
- a. Online Investment
- b. Standing Instructions
- c. Systematic Investment Plans
- d. All the options given here

CHAPTER 8: SPECIAL SITUATIONS IN RETIREMENT

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Dealing with specific situations in retirement such as dealing with debt, health conditions and estate planning
- Maintaining important documents relevant for retirement

8.1 Debt Obligations in Retirement

An essential activity in the pre-retirement stage is to assess the debt situation of the prospective retiree. One way to do this is to track the debt to income ratio over the years and ensure that it is tending to zero as retirement approaches. This is an important parameter to assess retirement readiness because debt can erode retirement security and financial freedom. If there is a loan obligation then it must be provided for in retirement along with essential expenses from guaranteed income. Other expenses will have to be postponed till these debt are repaid. This may mean that the retiree may have to commit more funds to a low return product like an annuity that guarantees a fixed income. Moreover, the portion of the corpus to be kept in highly liquid, safe investments to meet 3 to 5 years of the individual's expenses will be higher. Servicing the debt will affect the corpus' ability to generate returns that will ensure a comfortable retirement.

The priority therefore should be to pay-off the debt before retirement. The debt assessment should include the following steps:

- Make a list of the outstanding debt. Details to be listed include amount outstanding, interest rate and nature of debt, among others
- Rank the debt for repayment in order of highest cost to lowest
- Make a plan to pay down the debt.

8.1.1 Loans

The types of debt that is likely to be on the individual's balance sheet include mortgage, credit card debt and student loans and personal loans. Paying of the high cost debt such as credit card and personal loan should be done first so that it stops draining the available income. Attention should also be paid to the outstanding mortgage, though typically it is a low cost loan. If repayment of the outstanding loan at the time of retirement was part of the original financial plan, then there will be funds accumulated to pay it off. Else, in the pre-retirement stage it is better to increase repayment from additional savings so that the individual is debt-free in retirement.

Even though mortgages have tax benefits on repayment of principal and interest on the home loan, it is important to assess how much of tax benefits will be available before considering carrying the mortgage into retirement for the tax benefits. As the loan tenure comes closer to completion, the component of principal in the EMI is higher than that of the principal. Currently the tax benefit available on principal repayment is limited to Rs.1.5 lakhs under section 80 C. Assuming the retiree has taxable income in retirement, the saving on tax may be Rs.7,500 or Rs.30,000 (5 percent or 20 percent tax bracket assuming a lower level of income in retirement). There may be other investments such as Bank FDs and SCSS, held by the individual in retirement that may also be eligible for Sec 80 C benefits, and it may be to the investor's detriment if they are not able to claim the tax benefits if the home loan principal repayment took up the amount eligible under this section.

If there is a plan to down-size in retirement and sell the house and move to a smaller home, then the sale realization can be used to repay the amount outstanding on the loan before buying the new house. The amount of income freed up such that there is no longer any mortgage payments to be made can then be invested to earn returns or used to meet other needs in retirement.

Repaying loans should ideally be made from additional savings in the pre-retirement stage as far as possible rather than from redeeming or selling investments accumulated for other goals, particularly retirement. For example, using funds accumulated in the NPS account for retirement and which can be withdrawn and used to buy an annuity without having to pay any tax, will become taxable if the funds were used to repay loans or other expenses.

The ability to use the home as an asset against which funds can be generated through loans or a reverse mortgage is possible if the property is free of any claim by other lenders.

In the event that paying off the loans completely before retirement is not possible, then options like extending work life and a second career should be considered so that there is additional income to deal with the debt. If the retirement corpus has to provide the income for repayment then it must be budgeted for along with the essential expenses and met first since these are mandatory obligations and not meeting these can have consequences that affect the financial security of the individual. If debt is being carried into retirement and the intent is to pay off from income earned from employment or second career in retirement, then it is advisable to continue life insurance cover to the extent required till the debt is paid off. This will protect the dependents and the retirement corpus from the liability of repaying the debt in the event of the death of the person before the debt is paid off.

Using debt in retirement must be done with caution. Only that much debt that can be comfortably met out of available income should be considered. Taking too much debt, especially for wants rather than needs, will prove financially risky at a time in life when there are limited options to increase income.

8.1.2 Employment in retirement

Seeking employment post retirement can be a necessity or an option. If the retirement corpus is inadequate then employment may become an imperative to protect against the risk of longevity, or the risk of outliving the corpus. The income from the employment will reduce the number of years in retirement that the corpus will have to fund. An assessment in the pre-retirement years will give a good indication of the need for the second income. This should cover:

- Expected value of the corpus at retirement
- Expected expenses in retirement
- Health condition of the retiree and expected health costs and long-term care costs
- Loans and other mandatory obligations that have to be met
- Likely income that can be generated from the corpus given the level of interest
- Adequacy of income to meet the expenses in retirement

In the pre-retirement stage, there is greater clarity on the corpus, income and expenses than there was in the earlier stages of accumulation. An income gap in retirement can be the result of a shortfall in the corpus and therefore a lower income, a lower interest rate regime leading to lower income from the corpus or a high level of mandatory and essential expenses that is more than what the income can meet. One way of trying to bridge the gap is to increase the saving and investment in the last few years to give a boost to the corpus. Another way will be to have an alternate income stream, such as from a part-time employment, to augment the retirement income.

The income from a second career will protect the corpus in the initial years from withdrawals and this in the long run will be an important factor in shielding the retiree from the risk of running out of funds. The level of income required and the period for which the second income has to be earned will depend upon each individual's situation. Lower the corpus and/or the income and higher the expenses then the retiree may have to hold a second career for much of the early retirement years to earn a consistent income. For example, if a regular income from a second career is assured then the annuity payments can be deferred to the middle and later retirement years. This will assure the retiree of a regular and adequate income at the stage when they are unable to bring in additional income. If the annuity was used from the early retirement years then the income will be much lower and therefore inadequate to meet the expenses.

If continuing employment in the same organisation is an option, such as for self-employed people or persons employed in organisations which provide that option, then the individual may choose to continue. This may be a good option for people for whom the second income is necessary and a degree of certainty in the income is required. Or, they may choose to use their expertise to build their own business or consultancy. This may require some groundwork

to be done in the pre-retirement stage so that there is no time lost once they retire. This will allow them to make their expertise work for them with the advantage of doing it on their own terms. Where the retirement income is seen as adequate, retirees may still want to pursue a passion or hobby and make an income from it too.

8.1.3 Planning for Medical Costs

One of the biggest expenses in retirement is likely to be the costs related to health. Unfortunately, it is also the expense that is most difficult to estimate and provide for. The expenses an individual is likely to face will depend upon the state of their health, which in turn will depend upon their gender, lifestyle choices and hereditary factors. Given the variables, it may not be possible to have a definite plan. However, even a rough plan that will consider the important factors will be useful in making sure that health costs don't catch a retiree unprepared. The stages in health cost planning are:

- Understand the health risks and assess current health
- Consider the impact of hereditary factors
- Take the average of the immediately preceding 3-5 years' health costs as the starting point and adjust it for expectations on health.
- Estimate the cost in retirement after considering the years involved and the rate of inflation. Inflation applicable to health expenses are typically much higher than that related to other consumer costs.

Medical costs are not limited to hospitalisation expenses alone. There are out of pocket expenses for medicines, doctors' visits and tests, apart from long-term care costs that have to be accounted for and provided for. Most people are covered by employer medical benefits while employed. But these cease on retirement unless the individual works with the government and related agencies, in which case medical cover is provided in retirement too.

Building a health portfolio includes deciding on the type of insurance cover to buy and the amount of cover to take. However, health insurance policies in India cover only hospitalisation and related expenses. It is important to build a medical corpus to take care of the other expenses. Despite the employer insurance available during the employed years, it is better to buy insurance early so that the premiums are low and the health complications have not yet set in either to push up the premiums or to fall under the exclusions. For example, the premium for a Rs.5 lakh cover at age 45 will be around Rs.10,000. This more than doubles to Rs.22000 if the cover is taken at age 60. There will be additional costs for any health issues that may develop in this intervening period. Many diseases are covered after a waiting period of 2 to 4 years. So taking cover before retirement starts will help because the cover will be available by the time the person retires. Once a policy is taken the regulations require that the insurers provide mandatory lifetime renewal. The premium costs may go up over time, though by regulation this cannot be linked to claims being made. Increase the sum assured every time the policy is renewed so that the health cover is adequate as age progresses. The premiums paid on health policies provide tax benefits under Sec 80D of the Income Tax Act.

On retirement, the medical corpus created to meet health expenses not covered by insurance has to be moved to liquid assets for at least 3 years of expenses, while the rest can be held in products with better returns though not very risky.

8.1.4 Providing for the Spouse

Retirement planning has to take both spouses into consideration. The corpus may be created by both spouses, if both are employed, or by one spouse only. The death of one partner may not significantly reduce expenses in retirement since the fixed costs still have to be met. The primary reduction in expenses may come from lower health expenses. Either way the corpus has to be adequate to take care of expenses in the lifetime of the surviving spouse or dependent.

Any pension that is received is likely to have a family benefit for spouse and dependent child, in the event of the primary pension drawer's death. This will be available to the spouse and dependents. The amount is likely to be lower than what was drawn in the lifetime of the retiree. The annuity bought out of the accruals in a pension fund such as the NPS or EPF can be for the option that includes the spouse. Given the low returns this should be limited only to the essential expenses, atleast in the early years of retirement. Investments used to generate income in retirement such as bank fixed deposits, Senior Citizens Saving Scheme (SCSS), Post Office Monthly Income Scheme (POMIS) and other may provide joint holding or nomination facilities. This will ensure that the investments move to the surviving spouse in the event of the death of the other.

If a major portion of the retirement income and benefits is likely to cease with the death of the retiree then it may be necessary to consider a life insurance policy so that the spouse or dependent will have the insurance pay-out to meet their retirement needs in the event of the death of the retiree.

A designated bank account into which all the income from the retirement portfolio will be credited is an efficient way to manage the income flow. It gives an immediate idea of the available income and also makes it simple to track the receipt of income from the different sources. Both spouses may be joint holders in this account, with the facility to both holders to operate the account. This will ensure that neither spouse is constrained by lack of access to the available retirement income.

8.1.5 Tax Impact of Retirement Benefits and Corpus

The tax implications of the retirement benefits received and the corpus created have already been discussed in chapter 4 and chapter 5.

8.1.6 Estate Planning

Estate planning refers to the process of organising an individual's wealth for distribution after their death according to their explicit intention and desire. The beneficiaries may be the legal heirs or others. The term 'estate' includes all assets and liabilities belonging to a person at the

time of their death such as real estate, investments, insurance policies, bank accounts, items of personal use that may have value such as motor vehicle, jewellery and collectibles. The benefits of estate planning include the following:

- Identify the person(s), charities and other causes that the individual desires to pass on their wealth to.
- Reduce conflicts and legal complications in transferring wealth to the intended sources.
- Minimize the time involved passing on the wealth.
- Reduce costs and taxes in the transfer.
- Arrange for how the individual wishes to deal with health related decisions in a situation when they are not able to make those decisions.

Estate planning is not only for the retired or elderly. It applies to all people who have any assets that can be of use to another after their death. If a person dies without making a will, he is said to have died "intestate" and in such case his property will be inherited by his heirs in accordance with laws of succession applicable to him. The distribution may not be what the person would have intended. Distribution of estate may also suffer due to lengthy legal procedures and administration costs. This could add both inconvenience and financial burden to the family. Succession is governed by personal laws such as The Hindu Succession Act, 1956 (*Applicable to Hindus, Buddhists, Jains and Sikhs*), Indian Succession Act, 1925 (*Applicable to Christians, Jews and Parsis*), Mohammedan Personal laws (*Governing inheritance of Muslims*).

Estate planning involves the following broad set of activities:

- Create a checklist of what the individual owns and what is owed. This should be comprehensive and updated periodically so that all the assets that have been accumulated are available for the beneficiaries and there are no unfounded claims being made on the estate.
- Identifying the beneficiaries and their claim to the estate
- Document wishes through a comprehensive documentation such as the legal will. Have nominees for investment accounts and insurance policies.
- Create tax-efficient structures such as trusts to manage the estate and make periodic payouts to beneficiaries.
- Create organizational structures including trustees, executors, guardians, power of attorney to perform identified functions in administering, protecting and managing the estate.

Tools for Estate Planning *Wills*

"Will" is defined in Section 2(h) of the Indian Succession Act 1925 to mean the "*legal declaration of the intention of the testator with respect to his property, which he desires to be carried into effect after his death.*"

The person making the will is the testator, and he can bequeath the assets that are legally his through a will. The will comes into effect only after the death of the testator.

The person who is named in a will to receive a portion of the deceased person's estate is known as a legatee.

The person named in the will to administer the estate of the deceased person is termed as an Executor.

A will has to be written and signed in the presence of two witnesses. It may be registered, though it is not mandatory to do so.

Nomination

Nomination is the right conferred upon the holder of an investment product to appoint the person entitled to receive the monies in case of death. Only an individual can nominate. Nomination can be done either at the time of making the investment or entering into an insurance contract or subsequently at any time. Nominations can be modified any number of times.

Nominee can be an individual, company or trust, depending on the terms of investment or asset. A minor can be a nominee, but a guardian will have to be named. Nominations to NRIs will be honoured subject to repatriation rules. Multiple nominees may be allowed, with percentage of interest defined for each nominee.

The purpose of nomination is simplification of payment process in the event of death of the holder and not the equitable distribution of estate.

Under the various rules that govern financial products in India payment to nominee is typically a valid discharge of all liabilities for the providers of the investment product. The provisions of a will supercedes a nomination, and a nominee is in the place of a trustee who holds the money received for the benefit of the legal heirs. In the absence of a Will the rights of the heirs under the applicable succession laws prevails over nomination for the same reason. The Companies Act and the Depositories Act mandates that the securities vests in the name of the nominee on the death of the holder. However, the legality of this position has been contested in the courts of law.

Gifts

A gift is a transfer of movable or immovable property made voluntarily and without consideration. The person making the gift is called donor; the person receiving a gift is called the donee. A gift is usually an irrevocable transfer, but it can however be revoked if the donee agrees to do so. Gifts are routinely used to transfer wealth from donor to donee to take advantage of exemptions from tax available on certain gifts received. This includes gifts received from relatives such as spouse, siblings of self and spouse, parents, grandparents, children, grandchildren, among others. Any gift received on the occasion of marriage or inherited under a will is exempt from tax.

Joint Holding

Joint holding can be used to enable access to assets by including the intended person as a joint holder of the investment or account. Joint holding means the property is held by more than one person and can be accessed by such joint holders, subject to the mode of operations. Bank accounts, property, demat accounts, shares, mutual funds and specific saving schemes can all be held jointly. The operation of a joint account can be carried out jointly, where all joint holders have to approve all transactions, or on either of survivor, or anyone or survivor basis. The specific procedural aspects for joint holding, with respect to how many joint holders are permitted, what kind of operational choices are available, and what type of transactions need all joint holders' assent, can vary across different types of assets. In the event of death of the first holder, the access passes to the joint holder. If there is a legal contest among the heirs, joint holder's right to the asset can be superseded by laws of succession.

Trusts

A trust is a legal entity that allows the owner of property to define how the property is to be used, for the benefit of identified beneficiaries of the trust. The trust is managed by trustees. The trustee holds the legal title and exercises control over the trust property in the interest of the beneficiaries. The trustees can be the settlor or creator of the trust, the beneficiaries, and any other persons they can depend on to give effect to the purpose of the trust. The trust deed defines the purpose of the trust, the beneficiaries, property of the trust and power of the trustees, among others. The property of the trust may be movable or immovable. The ownership of the property has to be transferred to the trust when the trust is created. An irrevocable trust is protected from the bankruptcy of the settlor. Thus, it is a structure that can be used to protect the interests of the dependents.

Power of Attorney

A Power of Attorney (POA) is an instrument by which a person may formally authorize another person to act on his behalf or as his agent on all matter or for a specific transaction or particular types of transactions. There are two parties to a POA – Donor or Principal and the Donee or Agent. Both the parties to the POA should have attained majority, be of sound mind and competent to contract. A POA needs to be mandatorily registered only if it creates interest in an immovable property.

- **General POA:** Enables the donee to act on all matters for the donor. The general list of matters covered in this category includes management of bank accounts, sale of property, attending dealings in court, etc.
- **Specific POA:** Restricts the donee's authority to act only on a specific transaction, e.g. POA granted to a person to deal with the renting out of an apartment only.

8.1.7 Retirement Planning for NRIs

Retirement planning is an important segment of financial planning for NRIs as it is for resident investors. While most aspects of retirement planning remain the same for both the categories of individuals there are some points of difference that needs to be kept in mind.

First, it is good to have some clarity on where the person intends to retire. This matters because factors like cost of living, inflation, health care services, taxation rules and others are different in different countries. Having this clarity is also important from the point of being able to make financial commitments in India or abroad as required by the financial goals, including retirement. In the absence of such clarity most NRIs end up investing heavily in real estate in India and this skews the portfolio from an asset allocation perspective. Similarly, having a large portion of the wealth created abroad tied up in the home or other property may make it difficult to liquidate and transfer if the plan is to retire in India.

As an NRI, the individual has more investment options and strategies to select from. A portfolio that has exposure to global as well as Indian securities has better diversification benefits. Indian equity may be positioned for better long-term growth as compared to more mature economies. Some asset classes, such as commodities, are more easily accessible by retail investors through products like ETFs. In India currently gold is the only commodity that is available for investment through an ETF. In debt products, the interest rates are better in India as compared to developed economies though investing in developed markets may give the investor exposure to fixed income strategies in a bond market with greater depth and options. Moreover, there are some products, such as the small savings schemes, that are not available for NRIs to invest. An important element in investment decisions by NRIs is the exchange rate and its impact on the returns. An investment may have given positive returns in India but on repatriation abroad the impact of currency depreciation will reduce the yield to the investor. On the other hand, currency depreciation will add to the returns if the investment proceeds are being brought into India. Currency appreciation will have the opposite impact on returns.

There are tax implications on investments made in India by NRIs. The nature of investments made and the source of funds will determine the taxability. For example, investments made in fixed deposits through NRE accounts are not taxable while those made through NRO accounts are taxable. There may be tax implications in the country of residence as well as the need to file taxes in India when investments are made in India. Investment by NRIs in mutual funds attract higher TDS on dividends and capital gains as compared to resident investors.

NRIs need to keep documentation such as KYC, Aadhaar and PAN along with hygiene factors such as bank accounts updated. Given the complexities of multiple regulators in more than one country and tax laws to be considered, it may be best to work with a retirement planner.

8.2 Documents for Effective Retirement Planning

The focus of retirement planning is typically on the financial aspects. Once the financial actions are set in motion there are certain hygiene factors that need to be taken care of to streamline the retirement process. Principal among these are finding and organizing the documents related to retirement. This may be related to the investments that have been made, the pension accounts, if any, details of the different accounts held, income tax returns and other relevant documents. Organizing documents is also important to enable easy access to information and documents to the spouse, dependents or heirs in the event of the death of the retiree.

8.2.1 Income Tax Returns

Filing of income tax returns is done in a prescribed format to communicate the details of income earned and taxes paid to the tax authorities. Even if no taxes were payable in a year, filing the tax return establishes credit worthiness with financial institutions and makes accessing credit at better terms in the retirement period. It is good to maintain the copies of income tax returns filed for as long as possible. Legal proceedings under the Income Tax Act can be initiated up to six years prior to the current financial year. However, in some cases it can be initiated on matters pertaining to earlier periods also. The e-filing facility has made it easy to preserve a copy of the tax return filed.

8.2.2 Investment Account Statements, Pass Books, Depository Receipts

Original certificates such as, National Savings Certificates, passbooks of bank accounts, small savings schemes held with the post office and banks, other small savings schemes, bond and debenture certificates if it is held in physical form, need to be maintained carefully. Losing the original certificate may mean that at the time of maturity or redemption there may be a delay and many formalities to be completed to establish ownership of the investment. Most financial securities can now be held in dematerialized form. Maintain the latest account statement, after due verification of its accuracy, as a record of the investments held in the demat account. Similarly, the latest statement of account from mutual funds or the Consolidated Account Statement of all mutual fund holdings need to be verified and maintained for records. The investment related documents will also have details of the nominations and joint holdings, which may become necessary to know in the event of the death of the holder.

8.2.3 Property Documents

In India real estate transactions involve a lot of permissions, agreements and legal formalities that result in a lot of documents. Some of the important documents related to property transactions that have to be maintained to establish clear ownership of the property are:

• Sale deed that establishes ownership on the title of property. It is required in original and has to be registered at the office of the sub-registrar. A sale agreement is entered

into first between the parties with the details of the transactions. The sale deed follows the sale agreement.

- Katha certificate that confirms that the apartment is constructed as per approved plan. It is required for registering a new property and transfer of property and to apply for water and electricity connection. It is issued to the owner and has to be maintained in original.
- Allotment letter from the builder/housing board which is essential for getting a housing loan.
- Sale agreement in original required to evidence the details of the sale such as the liability of the builder to construct according to the approved plan, tentative possession date, price agreed.
- Possession letter from the builder
- Original payment receipts from the builder
- Completion certificate and occupancy certificate from the local authorities
- If any loan has been taken against the property, then a list of the original property documents with the bank. If the loan has been closed, then the NOC issued by the lending institution
- Receipts of tax paid against the property
- An Encumbrance Certificate issued by the sub-registrar's office listing all the transactions that have happened on the property, including sales or purchase and mortgaging. It is used as a confirmation that the holder has the title to the property.
- Other documents such as NOC and No Dues from building association

Apart from these, property tax receipts, mortgage and home insurance documents are other important property related documents that need to be maintained in records.

8.2.4 Insurance Documents

The original policy document received when signing up for the insurance cover should be preserved. The document should be updated with the nominations as required. If there has been any assignment of the benefits of the policy, then it has to be registered. If the assignment has been reversed then that too should be endorsed on the back of the policy. If the reversal of assignment is not registered, then it may affect the rights of the nominees to receive the policy money on the death of the insured. Keep a record of the premiums paid as proof of the policy being in force so that it cannot be the basis for a claim being declined.

Where an annuity has been purchased, the policy document should be maintained carefully so that the terms of the annuity are known.

8.2.5 Power of Attorney, Nominations, Assignment

A Power of Attorney (PoA) is a legal document used to authorize another to legally act on behalf of the grantor. A PoA may be used to conduct transactions on behalf of the donor and to execute their wishes when they are unable to do so. For example, if the person controlling the finances in retirement becomes mentally incapacitated by illness or accident then they may be unable to manage their retirement income. This may block the funds needed for their own care and that of their dependents. A PoA already executed in favour of a person they trust can smoothly transition the decision making powers, and help avoid such a situation. If a PoA has been used in the past for specific transactions, it is important to maintain the documents so that it is not challenged in the future. For certain transactions, such as transfer of immovable property, a PoA has to be mandatorily registered. Getting a PoA registered precludes it from being challenged later.

Make nominations wherever the facility is provided so that the formalities and documentation required to get the investments realized is minimized in the event of the death of the holder. A nominee receives the assets of the deceased person in trust for the legal heirs. The nominee holds the assets till the persons who are entitled to the assets under the will of the deceased or according to the succession laws have been identified. If nominee in an asset is different from the person entitled to receive the assets under the will of the deceased then the rights of the heir under the will takes precedence over the nominee. Similarly, any assignment of benefits, marking of lien and their reversal should be clearly documented so that the dependents have clarity on the benefits due and the claims on them.

8.2.6 Health care insurance paperwork

Documents relating to health, such as health records, latest health check-up results, details of major procedures and illnesses, should be maintained for long-term reference. The health insurance policy should be accessible so that the coverage and other information is easily available even if the policy holder is unable to provide the information. Other documents such as proof of payment of premium, details of the healthcare provider should be maintained in a way that it can be easily referred to when required.

8.2.7 Wills, trusts and other documents linked to estate planning

Essential Features of a Will

A Will must contain the following to be considered valid:

- A will has to be in writing. However, subject to certain conditions, persons working in the armed forces can make an oral Will.
- Name and address of the testator.
- A statement that the will is being made voluntarily.
- The beneficiaries under the will must be clearly listed.
- The property that is being bequeathed has to be listed.
- It must be signed by the testator and attested by two witnesses.
- A residuary clause that leaves all assets that remain uncovered in the bequests to an identified beneficiary should be included in the will.
- A statement stating that the current will revokes all previous bequests of any nature should be included in the will.

It is not compulsory to register a will. However, it is usually a good practice to register a will. A Probate is defined to mean the copy of a will certified under the seal of a court or competent jurisdiction. A probate certifies that a particular will was proved on a certain date and is given attaching copy of the will of which probate has been granted.

It is good to periodically review the provisions made through the estate planning tools to ensure that they continue to reflect the way the individual intends to distribute their wealth. An annual review will be adequate for this purpose.

Trust Deed

A trust is created through a trust deed. The trust deed must clearly state the intention to create the trust with certainty. The property to be transferred to the trust must be clearly identified. It must identify the beneficiaries of the trust. The trustees of the trust should be listed and their acceptance of the responsibilities as trustee should be recorded. A private trust with only movable property does not require to be registered. But if there is immovable property then the trust has to be registered under the Registration Act, 1908.

Loan Documents

All the documents related to loans and credit used have to be kept handy for reference. If there is a dispute on the terms of the loans, then these documents become important. Where a loan, such as a mortgage, has been closed it is essential to get back all the original documents such as sale deeds. The lender should also give a No Objection Certificate to the effect that the hypothecation in their favour has been cleared and all dues have been met. This should be maintained for future reference, especially if there is an intent to sell. Also keep records of all the payments made towards a loan. Similarly, in the case of an Auto loan too it is important to have documentation to the effect that the hypothecation in favour of the lender has been cancelled.

Scanning all important documents and holding it electronically is an easy option to maintain a copy for easy reference. The original documents can be kept in a safe deposit locker. Digital lockers are one way to store important documents safely and securely digitally.

Understanding and organizing the documents linked to retirement will help in the smooth transition into retirement. Designate a trusted person, preferably the spouse/dependent, who will also know the details of the passwords and Personal Identification Numbers (PINs) used for different financial accounts and transactions so that there is no delay in accessing them in the event that the retiree is incapacitated or unable to take decisions.

Sample Questions

- 1. Which of the following ratio reflects the debt situation of the individual?
- a. Interest servicing ratio
- b. Current assets to Current liabilities ratio
- c. Debt to Income ratio
- d. Asset to Debt Ratio
- 2. Which of these factors is likely to affect the health situation of an individual in retirement?
- a. Hereditary factors
- b. Lifestyle choices
- c. Gender
- d. All the options given here
- 3. Which of the following documents is registered to establish ownership and title to a property?
- a. Katha certificate
- b. Sale Deed
- c. Sale Agreement
- d. Possession letter
- 4. In maintaining documents related to health, including health insurance, which of the following is of primary importance?
- a. Safety of the documents
- b. It should be maintained with the issuer/health care provider
- c. Easy access to the information
- d. All the documents should be registered

CHAPTER 9: REGULATIONS AND REGULATORS

LEARNING OBJECTIVES:

After studying this chapter, you should know about:

- Understand the Indian Regulatory System
- Role of Pension Fund Regulatory & Development Authority
- Role of other regulators
- Role of different Regulations for Retirement Advisers e.g. PFRDA Act, Retirement Advisers Regulations

9.1 Indian Regulatory System

The regulatory framework seeks to provide an environment for the orderly growth and development of financial markets, products and participants in the interests of the investors. It aims at creating an enabling ecosystem where businesses, government and other users of capital can make their claims for resources, investors can make informed choices on how to channelize their investible surpluses and product producers seek to match the two to ensure the best use of scarce resources. Regulations and regulators ensure that these capital transactions happen in an efficient way, with the interest of all parties being protected.

The retail investors who invest their own savings are the most vulnerable link in the chain. They are characterised by small investments, limited skill and knowledge and access to information. Regulations aim to neutralize these disadvantages by ensuring financial stability in the system, transparency and investor protection. There are many other issues, which warrant regulation. For example, deliberately engineered speculative activities in the stock market or insider trading are undesirable as they can hurt investors at large. Similarly, some mutual funds may take excessive risks, while some issuers of debt securities may not care to provide adequate collateral. Intermediaries may adopt questionable practices to sell products to investors that are not suitable to their needs.

The Indian Financial Markets is overseen by the Ministry of Finance through its various arms. The regulators involved are the Reserve Bank of India (RBI) that regulates commercial banks, the Securities and Exchange Board of India (SEBI) that regulates securities markets and commodity derivatives markets and is responsible for its orderly growth and protection of investors' interests, the Insurance Regulatory and Development Authority of India (IRDAI) that regulates insurance companies, the Pension Fund Regulatory and Development Authority (PFRDA) that regulates the pension sector. The Central Government exercises a certain level of oversight on these and other regulatory institutions.

Additionally, intermediaries representing some segment of the securities markets may form a Self-Regulatory Organization (SRO). For recognition as an SRO by SEBI, certain conditions

have to be met as spelt out under the SEBI (Self-Regulatory Organizations) Regulations, 2004. Ideally, an SRO will seek to uphold investors' interest by laying and maintaining high ethical and professional standards of conduct and encouraging best practices among its members.

9.2 Role of Pension Fund Regulatory and Development Authority (PFRDA)

The PFRDA is the authority entrusted with the following responsibilities under the PFRDA Act, 2013:

- To promote old age income security by establishing, developing and regulating pension funds
- To protect the interests of subscribers to schemes of pension funds and related matters

The Act and its provisions apply to the National Pension System (NPS) and other pension schemes not regulated by any other enactment. The NPS is based on defined contributions. It offers a menu of investment choices and fund managers. Though the new system is voluntary, it is mandatory for new recruits of the Central Government, except the armed forces. It is also available on a voluntary basis to all persons including self-employed professionals and others in the unorganized sector. However, mandatory programmes under the Employees Provident Fund Organization (EPFO) and other special provident funds continue to operate according to the existing system, under the Employees Provident Fund and Miscellaneous Provisions Act 1952 and other special acts governing these funds.

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

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

The PFRDA has search and seizure powers to investigate any instance of contravention of the provisions of the Act. The Act gives the PFRDA the authority to ensure compliance of intermediaries and others associated with the scheme, and if found to be in violation impose penalties and other corrective measures. The PFRDA will be subject to the directions of the Central Government on all matters of policy. It shall also submit periodical reports on various aspects of its functioning, the pension sector, and other matters required by the government.

Constitution of the PFRDA

The PFRDA is set up as a body corporate and shall have a chairperson, three whole-time members and three part-time members to be appointed by the central government. The tenure of the chairperson and members will be 5 years and they are eligible for re-appointment.

Functions of the PFRDA

The functions of the PFRDA under the Act shall include the following:

- Regulating the NPS and any other pension scheme to which the Act applies;
- Approving the schemes, investment guidelines and other management norms;
- Registering and regulating intermediaries;
- Protecting the interests of the subscribers by:
 - Ensuring the safety of the contributions made by the subscribers;
 - Keeping the costs associated with the schemes reasonable and economical;
- Establishing a subscriber grievance redressal mechanism;
- Adjudicating disputes amongst the intermediaries;
- Educating subscribers and the public about retirement savings and scheme;
- Standardising dissemination of information about performance of pension funds and performance benchmarks;
- Restrain any person from investing in a scheme, prevent any office bearer of an intermediary from acting as such and attach any proceeds related to matters under investigation;
- Initiate an investigation if the PFRDA believes that the activities of a pension fund or actions of an intermediary are inimical to the interests of the subscribers;
- Report to the Central Government if the PFRDA is of the opinion that a pension fund or the Central RecordKeeping Agency (CRA) is acting in a manner prejudicial to the subscribers, provided the concerned entity has been given a chance to be heard. If so warranted, the government may appoint an administrator to take care of the affairs of the entity.

9.3 Role of Regulators

9.3.1 Ministry of Finance and its Departments

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

• **Department of Economic Affairs** is the nodal agency of the Central Government to formulate and monitor India's macroeconomic policies, covering monetary and fiscal policy as well as the functioning of the capital market including stock exchanges. Other responsibilities include the mobilization of external resources and issuance of bank notes and coins.

- **Department of Expenditure** is concerned with, among other things, the administration of various financial rules and regulations including service conditions of all Central Government employees. The department is also involved with matters such as financial assistance to states and borrowings by states.
- **Department of Revenue** exercises control over matters relating to direct and indirect taxes of the Central Government, through two statutory boards, viz., the Central Board of Direct Taxes and Central Board of Excise and Customs.
- **Department of Financial Services** administers government policies relating to:
 - Public sector banks
 - Term-lending financial institutions
 - Life Insurance and General Insurance
 - Pension Reforms
- **Department of Investment and Public Asset Management** oversees, among other things, all matters relating to the disinvestment of Central Government equity from Central Public Sector undertakings. The department is also concerned with the financial policy relating to the utilization of proceeds of disinvestment.

9.3.2 The Ministry of Corporate Affairs

It is mainly concerned with the administration of the Companies Act, 2013 and other allied acts, rules and regulations pertaining to the corporate sector. The Ministry is also responsible for administering the Competition Act 2002 which has replaced the Monopolies and Restrictive Trade Practices Act, 1969. The Ministry also supervises three professional bodies, viz., the Institute of Chartered Accountants of India (ICAI), the Institute of Company Secretaries of India (ICSI) and the Institute of Cost Accountants of India (ICAI). The Ministry of Corporate Affairs is also vested with the responsibility of administering the Partnership Act, 1932, the Companies (Donations to National Funds) Act, 1951 and Societies Registration Act, 1860.

9.3.3 Reserve Bank of India (RBI)

RBI is the central bank of the country and is vested with the responsibility of administering the monetary policy. Therefore, its key concern is to ensure the adequate growth of money supply in the economy so that economic growth and financial transactions are facilitated, but not so rapidly which may precipitate inflationary trends. This is borne out in its Preamble, in which the basic functions of the Bank are thus defined: "...to regulate the issue of Bank Notes and keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage". In addition to the

primary responsibility of administering India's monetary policy, RBI has other onerous responsibilities, such as financial supervision.

RBI's functions are governed by the Reserve Bank of India Act 1934, whereas the Banking sector is governed by the Banking Regulation Act 1949. The main functions of RBI are:

- As the monetary authority: To formulate, implement and monitor the monetary policy in a manner so as to maintain price stability while ensuring an adequate flow of credit to productive sectors of the economy.
- As the regulator and supervisor of the financial system: To prescribe broad parameters of banking operations within which India's banking and financial system functions. The objective here is to maintain public confidence in the system, protect depositors' interest and facilitate cost-effective banking services to the public.
- As the manager of Foreign Exchange: To administer the Foreign Exchange Management Act 1999, in a manner as to facilitate external trade and payment and promote orderly development and maintenance of the foreign exchange market in India.
- As the issuer of currency: To issue currency and coins and to exchange or destroy the same when not fit for circulation. The objective that guides RBI here is to ensure the circulation of an adequate quantity of currency notes and coins of good quality.
- **Developmental role**: To perform a wide range of promotional functions to support national objectives.
- Banking functions:
 - It acts as a banker to the Government and manages issuances of Central and State Government Securities.
 - It acts as a banker to the banks by maintaining the banking accounts of all scheduled banks.

The general superintendence and direction of RBI's affairs are looked after by a Central Board of Directors (BoD) which is appointed by the Government of India. Further, each of the four regions in the country is served by a Local Board which advises the Central Board on local issues and represents territorial and economic interests of local co-operative and indigenous banks. The Local Boards will also perform other functions as delegated by the Central Board.

RBI performs the important function of financial supervision under the guidance of the **Board for Financial Supervision** (BFS) which was constituted in 1994 as a committee of the Central Board of Directors. The primary objective of the BFS is to carry out consolidated supervision of the financial sector consisting of commercial banks, financial institutions and non-banking finance companies. The BFS oversees the functioning of the Department of Banking Supervision, the Department of Non-Banking Supervision and Financial Institutions Division and issues directions on regulatory and supervisory issues.

9.3.4 Securities and Exchange Board of India (SEBI)

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

SEBI regulates capital market intermediaries such as stock exchanges, brokers, trustees of trust deeds, merchant bankers, bankers to an issue, underwriters, portfolio managers, mutual funds, depositories, depository participants, venture capital funds, and alternative investment funds, Foreign Portfolio Investors, Custodians and Registrars & Transfer agents in the country. Market intermediaries are regulated by SEBI by prescribing registration norms for intermediaries, issue of regulations, notifications and circulars from time to time for compliance by the intermediaries, calling for information from the intermediaries, carrying out inspections, and taking action against non-compliance.

The website of SEBI (www.sebi.gov.in) holds updated and comprehensive list of regulations, rules, circulars and notifications issued there under by SEBI.

Functions of SEBI

The SEBI Act, 1992 details out the functions of SEBI. These include the following:

- Regulating and registration: SEBI regulates the business in stock exchanges and other securities markets. It registers and regulates the working of intermediaries associated with the securities market such as stock brokers, sub-brokers, share transfer agents, bankers to an issue, trustees of trust deeds, registrars to an issue, merchant bankers, underwriters, portfolio managers, investment advisers depositories, participants, custodians of securities, foreign portfolio investors, credit rating agencies, venture capital funds, collective investment schemes, mutual funds and such other intermediaries as may be specified by SEBI. SEBI is also involved in promoting and regulating self-regulatory organisations. The Regulations specify the net worth, experience, infrastructure and other requirements necessary for an intermediary to be eligible for registration.
- **Prohibition of unfair trade practices and insider trading:** An important function of SEBI is to prohibit fraudulent and unfair trade practices relating to securities markets. SEBI also prohibits insider trading in securities which is detrimental to the interests of the investors. Insider trading refers to the dealing in securities by persons connected with a company having material information that is not available to the public. Such persons include the directors and employees of the company, associates such as bankers and tax consultants or government employees who get sensitive information. The SEBI (Prohibition of Insider Trading Regulations), 2015 seeks to prevent insider trading. SEBI Insider trading regulations mention that (a) the board of directors of every listed company and market

intermediary (b) every other person who is required to handle unpublished price sensitive information in the course of business operations shall formulate a code of conduct to regulate, monitor and report trading by its employees and other connected persons towards achieving compliance with these regulations, adopting the minimum standards as set out in these regulations, without diluting the provisions of these regulations in any manner. If an insider trading charge is proved pursuant to SEBI's investigation, the penalties include monetary penalties, criminal prosecution, prohibiting persons from securities markets and declaring transactions as void.

- **Conduct inquiries/inspections:** If SEBI is of the opinion that some intermediary is involved in unfair trade or other such activities, or is not complying with the SEBI Regulations, it has the power to call for information, undertake inspection, conduct inquiries and audits, summon witnesses from such intermediaries. SEBI can take any of the following measures in the interest of investors:
 - Suspend the trading of any security in a recognized stock exchange;
 - Restrain persons from accessing the securities market and prohibit any person associated with securities market to buy, sell or deal in securities;
 - Suspend any office-bearer of any stock exchange or self- regulatory organization from holding such position;
 - Impound and retain the proceeds or securities in respect of any transaction which is under investigation;
 - Attach, after passing of an order on an application made for approval by the Judicial Magistrate of the first class having jurisdiction, for a period not exceeding one month, one or more bank account or accounts of any intermediary or any person involved.
 - SEBI now has the right to attach and sell movable as well as immovable property of the defaulters without recourse to any court of law.
 - Direct any intermediary or any person associated with the securities market in any manner not to dispose of or alienate an asset forming part of any transaction which is under investigation:
- SEBI is also involved in promoting investor education and training of intermediaries of securities markets.
- SEBI regulates substantial acquisition of shares and take-over of companies.

9.3.5 Insurance Regulatory and Development Authority of India (IRDAI)

IRDAI's mission is to regulate, promote and ensure orderly growth of the insurance sector, including the re-insurance business, while ensuring protection of the interests of insurance policyholders. IRDAI was constituted by an act of parliament and according to Section 4 of the IRDAI Act 1999 the Authority comprises ten members who are all government appointees.

The powers and functions of the authority include the following:

- Issuing a certificate of registration or renewing, modifying, withdrawing, suspending or cancelling such registration.
- Protecting the interests of policyholders in matters relating to assignment of policy, nomination by policyholders, insurable interest, settlement of insurance claim, surrender value of policy and other clauses of insurance contracts.
- Spelling out the required qualifications, code of conduct and practical training for intermediaries including insurance intermediaries and agents.
- Specifying the code of conduct for surveyors and loss assessors.
- Seeking information, undertaking inspection, conducting inquiries and investigations including audit of the insurer, intermediaries and others.
- To control and regulate the rates and terms and conditions that may be offered by insurers with regard to general insurance, which are not covered by the Tariff Advisory Committee.
- Regulating the investment of funds by insurance companies.

9.4 Regulations for Retirement Advisers

9.4.1 Pension Fund Regulatory and Development Authority Act, 2013

The PFRDA Act was passed to provide for the establishment of an Authority to promote old age income security by establishing, developing and regulating pension funds, to protect the interests of subscribers to schemes of pension funds and for matters connected with it. It regulates the National Pension System (NPS) and any other pension scheme specified.

Definitions under the Act

- (a) **National Pension System** means the contributory pension system referred to in section 20 of the PFRDA Act whereby contributions from a subscriber are collected and accumulated in an individual pension account using a system of points of presence, a central recordkeeping agency and pension funds as may be specified by regulations
- (b) **National Pension System Trust** means the Board of Trustees who hold the assets of subscribers for their benefit.
- (c) **Pension fund** means an intermediary which has been granted a certificate of registration under sub-section (*3*) of section 27 by the Authority as a pension fund for receiving contributions, accumulating them and making payments to the subscriber in the manner as may be specified by regulations.
- (d) **Central recordkeeping agency** means an agency registered and appointed to perform the functions of recordkeeping, accounting, administration and customer service for subscribers to schemes.

- (e) **Point of presence** means an intermediary registered with the Authority as a point of presence and capable of electronic connectivity with the central recordkeeping agency for the purposes of receiving and transmitting funds and instructions and pay out of funds.
- (f) **Intermediary** includes pension fund, central recordkeeping agency, National Pension System Trust, pension fund adviser, retirement adviser, point of presence and such other person or entity connected with collection, management, recordkeeping and distribution of accumulations.
- (g) **Scheme** means a scheme of pension fund approved by the Authority under this Act.
- (h) **Subscriber** includes a person who subscribes to a scheme of a pension fund.
- (i) **Trustee Bank** means a banking company as defined in the Banking Regulation Act, 1949.

The PFRDA Act 2013 defines the features of the National Pension System as follows:

- Every subscriber shall have an individual pension account with the NPS.
- Withdrawals not exceeding 25 percent of the contributions made by the subscriber, subject to terms.
- The Central Recordkeeping Agency (CRA) shall be responsible for accounting, recordkeeping and switching of options.
- There shall be choice of multiple pension funds for the subscriber to choose from.
- There shall be multiple schemes to select from. Subscribers shall have the option to invest 100 percent in government securities and also in schemes providing minimum assured returns.
- There shall be portability of individual pension accounts if the individual shifts employers.
- The point of presence (PoP) will be responsible for collection of contribution, transmission and instructions.
- There shall be no implicit or explicit assurance of benefits except market-based guarantee mechanism to be purchased by the subscriber.
- The subscriber can only exit from the NPS according to the regulations and shall buy an annuity on exit.
- The subscriber will have the option to have a second account with the NPS which will have all the features of the first account which the subscriber can withdraw at any time.

No intermediary, including a pension fund or a point of presence to the extent regulated under this Act, shall commence any activity relating to a pension fund except under and in accordance with the conditions of a certificate of registration granted by the Authority in accordance with the provisions of this Act and the regulations.

The CRA will receive contributions and instructions from the POP, transmitting it to the pension funds, effecting switching instructions received from subscribers and other functions assigned to the CRA under the Act.

The PoP will receive the contributions and instructions from the subscriber and transmit it to the trustee bank and CRA as the case may be and paying out the benefits to the subscribers.

The pension funds appointed by the PFRDA will be responsible for receiving and accumulating the contributions from the subscribers, manage it according to the regulations and make payments to the subscribers. No pension fund shall directly or indirectly invest the funds of the subscribers outside India.

The central recordkeeping agency, points of presence and pension funds, shall satisfy the eligibility norms as may be specified by the regulations, including minimum capital requirement, past track-record including the ability to provide guaranteed returns, costs and fees, geographical reach, customer base, information technology capability, human resources and such other matters.

9.4.2 PFRDA (Retirement Adviser) Regulations, 2016

The PFRDA (Retirement Adviser) Regulations 2016 provides for a framework for eligibility, registration process, fees etc. of Retirement Adviser. It also defines the scope of work and responsibility of the Retirement Adviser to ensure orderly growth of pension sector.

Who can seek registration as a Retirement Adviser?

Any individual, firm or a corporate body or any registered trust or society, acting as a Retirement Adviser or desirous of acting as such or holding himself/itself out as a retirement adviser by providing or disseminating advice in any manner, either oral or in writing on National Pension System (NPS) or any pension scheme regulated by the Authority, to any potential or existing subscriber with the object of facilitating opening of new accounts or offering advisory services to existing subscribers shall obtain a certificate of registration to act as a Retirement Adviser from the PFRDA.

However, the following persons/entities shall not be required to obtain a certificate of registration subject to the fulfilment of the conditions stipulated therefore,

- a. Any advocate, solicitor or law firm, who provides retirement advice to their clients, incidental to their legal practice;
- b. Any member of Institute of Chartered Accountants of India, Institute of Company Secretaries of India, Institute of Cost and Works Accountants of India, Institute of Actuaries of India or any other professional body as may be specified by the PFRDA, who provides retirement advice to his clients, incidental to his professional service; and
- c. Any other entity as may be specified by the PFRDA.

Qualification and Certification Requirement

- The individual, proprietor, partners and representatives of a retirement adviser registered under these regulations, offering retirement advice shall possess the minimum qualifications of that being a Graduate in any discipline at all times, and;
- Individuals and the proprietor, partners and representatives of retirement advisers to ensure that the individuals offering retirement advice shall have, at all times, possess a valid certification on retirement planning or retirement advisory services from an Institute accredited by PFRDA.

Provided that such certification shall not be mandatory in cases specified by PFRDA from time to time.

The fresh certification or renewal of the existing certification through completing continuous professional education by the accredited institute must be obtained before expiry of the validity of the existing certification to ensure continuity in compliance with certification requirements.

Security Deposit

1. Retirement Advisers who are body corporates or partnership firms or any registered trust or society, on registration shall provide security deposit in the form of bank deposit or performance guarantee to the PFRDA, as may be determined by PFRDA through issuance of appropriate notification/circular /guidelines /directions, before commencement of its activities under National Pension System. The deposit/ Guarantee shall be valid for a period of six months beyond the original or renewed period of registration so granted. Such security deposit or guarantee shall be issued by a scheduled commercial bank and where any bank is offering services of a retirement adviser, the security deposit shall be issued by another scheduled commercial bank. The registration granted is liable to be cancelled, if such deposit is not received within the time stipulated by the Authority, unless extended.

2. Retirement Advisers who are individuals or carrying on proprietary concerns, upon registration, shall provide security deposit in the form of bank fixed deposit receipt or performance guarantee to the Authority, as may be determined by PFRDA through issuance of appropriate notifications/circular/guidelines/directions before commencement of its activities under National Pension System. The bank fixed deposit receipt or Performance Guarantee to be so submitted shall be valid for a period of six months beyond the original or renewed period of registration so granted. The registration granted is liable to be cancelled, if such deposit is not received within the time stipulated by PFRDA, unless extended

Validity and Renewal of the Registration Certificate

The certificate of registration shall have a validity of 3 years from the date of issue. The application for renewal of the certificate shall be made 3 months before the expiry of the period of validity of the certificate. The renewal of application shall be treated in the same manner as during the initial grant of certification. Further, PFRDA may also take into consideration, the performance of the retirement adviser during the original period of certification including the number of new accounts opened.

Fees to be charged by the Retirement Adviser

A) A Retirement adviser shall provide retirement advice and shall facilitate on-boarding to National Pension System and assist the subscriber in getting the subsequent services under National Pension System. The fees for retirement advice, on-boarding and subsequent services or transaction, may be charged by the Retirement Adviser from the subscriber, subject to the maximum of charges that may be determined by PFRDA in this behalf. The upper ceiling of fee payable for on-boarding of a prospect under National Pension System shall be as determined by PFRDA through issuance of appropriate notification/circular/ guidelines/directions, in that behalf. Payment of on-boarding fee by such subscriber will be applicable only upon completion of the registration process/onboarding of the subscriber and generation of his or her individual pension account under National Pension System. For any subsequent services, the Retirement Adviser shall be entitled to collect charges from the subscriber, as may be determined in that behalf, by issuance of appropriate notifications, guidelines, circulars or directions by PFRDA.

B) Retirement Adviser which is an individual or a firm or body corporate or any other entity, advising a prospect or subscriber or a group or class of subscribers collectively, may charge advisory fees, subject to any ceiling as may be specified by PFRDA, through issuance of appropriate notifications, guidelines, circulars or any other directions, if any. The fees in such cases shall be chargeable as per the written agreement between the prospect/subscriber and the Retirement Adviser. Further, a Retirement Adviser shall ensure that fees charged to the prospects/subscribers including the group of subscribers are fair and reasonable and commensurate to the services offered. All fee and charges collected shall be duly acknowledged by the retirement adviser by issuance of appropriate receipts for the service provided.

Retirement advisers who have been specifically allowed to render services to eligible prospects, outside India, shall be entitled to collect an on-boarding fee of upto US \$ 8 or in equivalent currency from the prospect where such retirement adviser sources the application from prospect in such territory, outside India, and sends the same to Point of Presence in India for account opening or getting it opened through online platform.

Where the retirement adviser sources the application from prospect, outside the territory of India and submits the same to the branch of registered Point of Presence, providing services under NPS in such territory, the on-boarding fee which may be collected by the Retirement Adviser, from the prospect shall be limited to US\$ 2 or in equivalent currency. The Retirement adviser shall also be entitled to collect from the subscriber, service charges not exceeding US\$ 1 per transaction or in equivalent currency, for any subsequent services under NPS, provided to such subscriber outside the territory of India, post the opening of his individual pension account.

General responsibility

- A Retirement Adviser shall act in a fiduciary capacity towards its prospects/subscribers and shall disclose all conflicts of interests as and when they arise;
- A Retirement Adviser may have a tie up with the registered POPs for providing services to the prospects. There shall be no restrictions on the number of POPs with whom the Retirement Adviser may enter into such arrangements provided that the interests of the subscribers are not adversely affected;
- A Retirement Adviser shall not receive any consideration by way of remuneration or compensation or in any other form from any person other than the prospect/subscriber being advised, in respect of National Pension System (NPS) or other pension scheme regulated by Authority, for which such advice is provided;
- A Retirement Adviser shall not collect any amount in cash for investment/contribution to the pension account of the subscribers in the capacity of Retirement Adviser;
- The Retirement Adviser shall advice the prospects/subscribers on how to fill in the registration form for enrolment, exit forms, various other forms required to modify/change personal master details, nomination, POP, Pension Funds, investment choice and other related activities under NPS or other pension schemes;
- The Retirement Adviser shall advice the subscribers on a periodic basis about the performance of Pension Funds, underlying asset portfolio, NAV, general financial market trend or any other relevant information through dedicated e-mail, newsletters or other specified means;
- The Retirement Adviser shall advice the subscribers on a periodic basis about the change in various policy & guidelines issued by Authority, or other information pertaining to intermediaries under National Pension System including the National Pension System Trust;
- A retirement adviser shall maintain an arms-length relationship between its activities as a Retirement Adviser and its other activities;
- A Retirement Adviser which is also engaged in activities other than that of retirement advisory services shall ensure that its retirement advisory services are clearly segregated from all its other activities;

- A Retirement Adviser shall ensure that in case of any conflict of interest of the retirement advisory activities with other activities, such conflict of interest shall be disclosed to the prospects/subscribers, beforehand;
- A Retirement Adviser shall not divulge any confidential information about its prospect/subscriber, which has come to his or its knowledge, without taking prior permission of its prospect, except where such disclosures are required to be made in compliance with any law for the time being in force;
- A Retirement Adviser shall follow 'Know Your Customer' procedure as specified by the Authority from time to time;
- A Retirement Adviser shall abide by Code of Conduct as specified by PFRDA;
- In case of change in control of firm of the Retirement Adviser, timely intimation shall be given to PFRDA;
- Retirement Advisers shall furnish to PFRDA the information and reports as may be specified by PFRDA from time to time.
- It shall be the responsibility of the Retirement Adviser to ensure that its representatives and partners, as applicable, comply with the certification and qualification requirements as specified by PFRDA at all times.

Scope of Work for Retirement Advisers

A Retirement Adviser shall undertake the following activities:

- Creating awareness of NPS and other pension schemes regulated by PFRDA will be the core responsibility of the Retirement Adviser;
- To facilitate on-boarding of the prospective subscriber to National Pension System or other pension scheme regulated by Authority;
- To advise prospects on the necessity of old age income security, retirement planning, level of contributions they can make, having regard to their current and future potential income to achieve desired retirement objectives and other issues connected with taking of these decisions and avoid chances of mis-selling;
- To help prospects and other subscribers in planning for retirement savings;
- The adviser is expected to exercise professional due diligence while dealing with prospects and possess the necessary skills towards this end;
- The adviser shall allow a free and frank atmosphere while dealing with prospects, which shall allow them to take informed transactional decisions and for this purpose shall keep the interest of the prospect/subscriber in the forefront;
- The adviser is required to collect and suggest prospects, the most suitable scheme, taking into consideration the following aspects of the prospects and based on utmost good faith and fair market practices:
 - a) Due diligence on the requirements of the prospect to suggest them the most suitable products by collecting basic information of the prospect such as information pertaining to age, marital status, dependents, current assets,

liabilities, income, planned purchases, planned retirement age; plans post retirement, family history of health and longevity and the current health position.

- b) Identifying prospect's financial and retirement goals.
- c) Analyzing prospect's current financial situation and current investments.
- d) Risk profiling of the prospect/subscriber.
- e) Asset Allocation
- f) Investment allocation strategy
- g) Periodic monitoring and balancing
- h) Likelihood of immediate and near future financial commitments of either self or family.
- A Retirement Advisor will enable the subscribers to avail the benefits of pension schemes regulated by PFRDA by supporting them in making simple decisions about contributions, investments allocation and selection of Pension Funds.
- A Retirement Adviser shall partner with corporates and Government departments to run awareness programmes on retirement planning for their employees.
- A Retirement Advisor shall be able to appropriately guide and advice the subscriber about the risk and return profiles of the different financial securities and also advise the most suitable ratio of fund allocation in each of the asset classes viz. Equity, Government Securities, Corporate Bonds after duly considering the profile of the prospect and prevailing market conditions, and expected growth in the various parameters of economy and financial markets.
- Retirement Advisors may create awareness on the fund performance of each pension fund including comparison of the returns of the scheme and investments made by the pension funds, on the basis of information made available/approved by Authority.
- Retirement Advisors would transmit information and documents to intermediaries in a time bound manner and maintain utmost confidentiality of personal information collected from subscribers and shall not use it for any other activity without the consent of the subscriber.

Risk Profiling

Retirement Adviser shall ensure that they engage in Risk Profiling of their subscribers by obtaining from the prospect/subscriber, such information as is necessary for the purpose of giving retirement advice, including the following: (i) age; (ii) income details; (iii) existing retirement savings/assets; (iv) risk appetite/tolerance; (v) liability/borrowing details; (vi) dependent family members; (vii) life/health insurance details; (viii) any other relevant information as specified in the Regulation.

The Adviser shall follow a process for assessing the risk, a prospect/subscriber is willing and able to take, including: (i)assessing a prospect's capacity for absorbing loss; (ii) identifying whether prospect is in a position to understand the concept of market risk involved in the process of investment; (iii) appropriately interpreting prospect responses to questions and

not attributing inappropriate weight to certain answers; (iv) is able to understand and appreciate that retirement plans involve long gestation period, and early liquidation or exit, from the scheme is not beneficial.

In cases tools are used for risk profiling, it shall be ensured that the tools are fit for the purpose and any limitations are identified and mitigated; any questions or description in any questionnaires used to establish the risk that a prospect/subscriber is willing and able to take are fair, clear and not misleading. Once the risk assessment is done, the risk profile of the prospect/subscriber shall be communicated to the prospect and updated periodically on the basis of the information provided by prospects/subscribers.

Maintenance of records

- a) A Retirement Adviser shall maintain the following records,-
 - (1) KYC records of the prospect/subscriber;
 - (2) Risk profiling sheet duly filled up and signed by the subscriber. Copies of agreements with prospects/subscribers, if any;
 - (3) A register or record containing list of the prospects/subscribers, the date of advice, fee charged, if any for such advice;
 - (4) Any other documents or records, as may be notified by the Authority;
- b) The records may be maintained in physical or electronic format in such manner that it can be retrieved whenever required by the Authority or any other person authorised by PFRDA
- c) A Retirement Adviser, other than an individual Retirement Adviser generating a fees of amount of more than the limit as specified by Authority for retirement advisory services, shall undertake yearly audit in respect of compliance with these regulations from a member of Institute of Chartered Accountants of India. Provided that in case of banks offering services of retirement adviser, the same shall be covered under the scope of its statutory audit.

Segregation of execution services

Retirement Advisers which are banks, Non-Banking Finance Companies (NBFCs) and body corporate providing distribution or execution services to their prospects shall keep their retirement advisory services segregated from other activities:

Provided that such distribution or execution services can only be offered subject to the following:

(a) The prospect shall not be under any obligation to avail the distribution or execution services offered by the Retirement Adviser.

(b) The Retirement Adviser shall maintain arm's length relationship between its activities as retirement adviser and distribution or execution services.

(c) All fees and charges paid to distribution or execution service providers by the prospect shall be paid directly to the service providers and not through the Retirement Adviser.

(d) The Retirement Adviser shall not force the subscriber in any manner to avail their services as a condition precedent for subscribing to NPS or offer any tie up services without the approval of PFRDA.

Disclosures to prospects/subscribers

- A retirement adviser shall disclose to a prospective subscriber, all material information about himself/itself including its business, disciplinary proceedings history, professional qualifications, the terms and conditions on which it offers advisory services, affiliations with other intermediaries and such other information as is necessary to take an informed decision on whether or not to avail his/its services;
- A retirement adviser shall disclose to its prospect, any consideration by way of remuneration or compensation or in any other form whatsoever, received or receivable by it;
- A retirement adviser shall disclose to the prospect any actual or potential conflicts of interest arising from any connection to or association with any intermediaries under National Pension System or any other pension scheme regulated by Authority, including any material information or facts that might compromise its objectivity or independence in the carrying on of retirement advisory services;
- A retirement adviser shall, while making an advice, make adequate disclosure to the prospect of all material facts relating to the key features of the services or products or securities, particularly, performance track record of various investment asset class and annuity schemes offered by various Pension Funds and Annuity Service Providers.;
- A retirement adviser shall draw the prospect's attention to the warnings, disclaimers in documents, advertising materials relating to an investment choice and annuity choice which it is recommending to the prospect/subscriber;
- A retirement adviser shall inform that National Pension System is not a tie-up with other products or offered in combination with other financial products or services provided by the retirement adviser;
- A retirement adviser shall refrain from making any statements which are derogatory or disparages or distorts the image of National Pension System or that of the Authority in any manner.

9.4.3 PFRDA (Point of Presence) Regulations, 2018

The PFRDA (Point of Presence) Regulations, 2018 aims at encouraging an independent, strong and effective distribution channel for NPS and ensuring that market practices of the points of presence are fair, efficient and transparent for the promotion and protection of interest of the subscribers.

Categories of the Points of Presence

(1) Application for registration as Point of Presence shall be made for performing any one or more of the following activities, namely:

i. National Pension System (NPS) – Distribution and servicing for public at large through physical as well as online platforms

ii. National Pension System (NPS) – Distribution and servicing for citizens at large through online platforms only

iii. National Pension System (NPS) – Distribution and servicing only for own employees and other personnel either through physical or online platforms.

Provided that only such entities shall be permitted to function which has covered its employees for social security benefits under the provisions of the Employees Provident Fund and Miscellaneous Provisions Act, 1952 or the Employees State Insurance Act, 1948 or under the Goods and Services Act, 2017 and is registered with authorities under the said enactments, for not less than a period of two years, from the date of the application.

iv. NPS-Lite-Swavalamban scheme.

v.Atal Pension Yojana.

vi. Any other scheme regulated or administered by PFRDA.

Eligibility Criteria

The following shall be the eligibility criteria for any applicant intending to obtain a certificate of registration as a point of presence:

The applicant is registered and regulated by any financial regulator including the RBI, the SEBI, the IRDAI, the PFRDA and the National Housing Bank (NHB). However, this is not applicable to entities such as a) National Pension System (NPS) – Distribution and servicing only for own employees and other personnel either through physical or online platforms

- A company registered in India under Companies Act, 1956 or Companies Act 2013 [with necessary certification from the Reserve Bank of India (for Non Banking Finance Companies(NBFCs), Micro Finance Institutions (MFIs)] or entities of central & state governments or under Banking Regulation Act.
- Has a minimum of fifteen branches in India with each branch having the necessary Information Technology infrastructure and capacity to electronically link to the central

recordkeeping agency registered with PFRDA. Each of these branches of the point of presence should have demonstrated capability to electronically transmit the subscriber's contribution and information as per the service standards or relevant guidelines issued by PFRDA. However, this is not applicable to entities such as a) National Pension System (NPS) – Distribution and servicing for citizens at large through online platforms only b). National Pension System (NPS) – Distribution and servicing only for own employees and other personnel either through physical or online platforms and c) Atal Pension Yojana.

- Has minimum net worth (paid-up capital plus free reserves) of Rs. 75 lakhs which shall include a minimum paid up capital of Rs. 50 lakhs as on the last day of the immediately preceding financial year. Shall possess a 2 year track record of profitability (Profit after tax) as on the last day of the immediately preceding financial year. Absence of convictions and restraint orders by any financial sector regulator or by a court of law in any of the preceding 5 years for any offence involving moral turpitude, economic offences, violation of any securities or banking law or fraud by the entity or any of its principal officers;
- Conforming to any other criteria as may be specified by PFRDA from time to time in the form of resolutions, notifications, circulars, guidelines, having regard to the interest of the subscribers and for orderly growth of the pension industry.

An application for grant of certificate of registration, shall be disposed of by the PFRDA, normally within a period of 60 days from the date of receipt of such application.

Subject to compliance with the provisions of the Act, rules and regulations, the certificate of registration granted to a POP shall remain valid unless suspended or cancelled by PFRDA.

Duties and Responsibilities of Point of Presence

The Point of Presence shall perform the following duties through their service provider branches or offices, including offices where the entire business operations are carried out totally on online platform in accordance with the provisions of the Act, rules and regulations and any guidelines and directions issued by PFRDA and the operational service level agreements executed with the National Pension System Trust as also any standard operating procedure issued by the National Pension System Trust, based on PFRDA's guidelines.

Duties in relation to initial customer interaction for National Pension System

- Addressing queries of potential subscribers regarding National Pension System.
- Providing and displaying information, in accordance with the provisions of the scheme, as approved by the Authority including information relating to, application forms or any other publicity material pertaining to National Pension System;

Duties in relation to subscriber registration:

a) Receive the duly filled application form along with the KYC documentation as may be applicable from time to time and conduct Customer Due Diligence (CDD) procedures as required under the PMLA 2002 including the amendments thereof or any other law through effective use of Know Your Customer verification processes laid down by PFRDA for all subscribers;

b) The point of presence shall carry out checks, as specified in the service standards as per the guidelines laid down by PFRDA.

c) The point of presence shall ensure maintenance and reporting of all transactions by subscribers in accordance with the provisions of PMLA, 2002 including amendments thereof and the rules framed thereunder from time to time, as may be applicable;

d) The point of presence is responsible for collecting and transmitting, the initial contribution at the time of opening an individual pension account and subsequent contributions of subscribers made by them to the Trustee Bank;

e) The point of presence shall be responsible for delivering the subscriber registration form and supporting documents to the central recordkeeping agency or its representative which is approved by PFRDA;

f) The point of presence shall transfer the contributions received from the subscriber to the National Pension System Trust account maintained with the Trustee Bank and upload the subscriber contribution files with the central recordkeeping agency within the timeframe specified by the service standards for point of presence as per the guidelines issued by the PFRDA.

Servicing of subscriber requests such as the following:

1. The point of presence is responsible for receiving and processing switching requests from subscribers among schemes and among pension fund;

2. The point of presence shall upload all requests from subscribers into the central recordkeeping agency system within the timeline laid down under any service standards or in accordance with the guidelines issued by PFRDA.;

3. In respect of the subscriber withdrawal requests, the point of presence shall be responsible for receiving and processing, from subscribers for withdrawal or exiting from pension schemes within the timelines laid down under the service standards or any guidelines issued by PFRDA under the PFRDA (Exit and Withdrawal) Regulations, 2015. The point of presence shall not charge any extra charge for the service, other than what is permitted by PFRDA;

4. The Point of Presence shall be responsible for attending to subscriber's request for shift from one point of presence to another point of presence or to another point of presence service provider branch;

5. The point of presence shall be responsible for receiving and processing all subscriber requests. The point of presence will be responsible for receiving, uploading into centralized grievance management system and resolving the grievance pertaining to it.

6. The point of presence – sub entity shall adhere to the service standards or such standards as per the guidelines laid down by PFRDA for the purpose.

Charges to be charged to the NPS Subscribers

The charges that may be levied on the subscriber by the point of presence shall be subject to the limits and manner of collection as laid down by PFRDA from time to time. No other charges, other than that specified by PFRDA shall be collected from the subscribers.

Maintenance of Books of Account and Audit of Accounts

The following books of accounts have to be kept by the point of presence:

(a) details of applications received and submitted to the central recordkeeping agency for registration and Permanent Retirement Account Number (PRAN) data generated for all such applicants;

(b) details of money received from the subscribers – in cash, by cheque, or any authorized form of remittance;

- (c) details of cash held on a daily basis;
- (d) details of subscriber-wise money remitted to the Trustee Bank;
- (e) details of subscriber-wise instructions such as change of PoP, change of CRA, change of PF, change of scheme, change of nomination details, change of personal details, change of contact details, change of address, error rectification, request or any other request introduced by the authority received, process and sent to the central recordkeeping agency.
- (f) Details of subscriber-wise exit/withdrawals/partial withdrawal request received, processed and sent to CRA.

9.4.4 PFRDA (Central Recordkeeping Agency) Regulations, 2015

The regulations aim to set standards for the eligibility, governance, organization and operational conduct of the Central Recordkeeping Agency (CRA) and for providing centralized recordkeeping, administration and customer service functions to all subscribers.

PFRDA may appoint one or more central recordkeeping agency under these regulations. The allocation of the subscribers between the existing central recordkeeping agency and the other central recordkeeping agency or agencies, if appointed, shall be based on a transparent criteria and process.

Definitions under the Regulations

I-Pin means the Personal Identification Number used to authenticate the subscriber to log in central recordkeeping agency, National Pension System Contributions Accounting Network system through internet.

National Pension System data shall include-all proprietary data generated out of operation and transactions, documents and related information including but not restricted to subscriber data which central recordkeeping agency obtains, possesses or processes in the context of providing the services to the subscribers as specified in the regulations and the Service Level Agreement.

PRAN means the Permanent Retirement Account Number allotted as a unique identification number to each subscriber.

Service Level Agreement (SLA) means the agreement inter-alia providing for quality and performance parameters, specified by PFRDA, which the central recordkeeping agency is expected to execute with other intermediaries.

T-P in" means the number used to authenticate the subscriber in the Interactive Voice Response (IVR) system.

Eligibility Criteria for a CRA

- The applicant should be a company registered under the Companies Act and should have been operating for the last 5 years
- The company should have made net profits in the three out of the five preceding years and should not have incurred cash loss in the preceding two years
- The applicant, or its director or its principal officer, should not have been blacklisted by the government or any regulatory authority or convicted of economic offence or moral turpitude
- The applicant should have information technology capabilities and sufficiently qualified and experienced manpower, as specified by PFRDA in the selection process
- The amounts, numbers or figures, as applicable, in respect of the following criteria shall be specified by PFRDA on the date of inviting applications for registration under the selection process:
 - The applicant should have minimum positive net worth, as on the last day of the preceding financial year, as specified by Authority. It currently stands at Rs.100 crore.

- The applicant should have demonstrated experience in developing and managing technology based central administration and recordkeeping system
- The applicant should have minimum number of experience, currently at least
 5 years, with central recordkeeping and administration functions, as specified
 by PFRDA;
- The applicant should have experience in managing over experiences 5 lakh individual accounts over the last three years, as specified by PFRDA. Any other criteria as may be specified by PFRDA. A direct or indirect cross holding by any intermediary or its sponsor under the central recordkeeping agency should be less than forty percent of the paid up capital.

The applicant shall submit a proposal in the format as may be specified by PFRDA in respect of the selection process. The Authority may grant the certificate of registration as a central recordkeeping agency on being satisfied that the application for registration is complete in all respects and is accompanied by all documents required and all information given in the application form is correct. The authority shall ensure that the applicant is eligible and able to meet effectively its obligations as the central recordkeeping agency.

Where the applicant proposes to change its status or constitution, it shall obtain prior approval of PFRDA for continuing to act as the central recordkeeping agency after such change in status or Constitution.

The CRA shall at all times meet the eligibility criteria and other requirements specified in these regulations. The certificate granted to a central recordkeeping agency shall remain valid , unless suspended or cancelled by PFRDA, or permitted to be surrendered by such central recordkeeping agency, for just cause to be shown.

Roles and Responsibilities

The CRA shall be responsible for the centralized recordkeeping, administration and customer service functions for all the subscribers under the National Pension System. The roles and responsibilities of the central recordkeeping agency shall be to -

- Build, maintain and operate the National Pension System infrastructure, setting up and operating the system including the National Pension System Central Accounting Network;
- Act as operational interface for all intermediaries under its system. This shall include interaction with all necessary external agencies to accomplish the operations and commissioning its functions as per regulations;
- Set up the Information Technology infrastructure in compliance with the proposed architecture and also developing or scaling up of the Information Technology infrastructure;
- Develop, upgrade and maintain software application, data migration strategy and other software development artefacts;

- Provide web based access to the Authority and the National Pension System Trust and role based access to other service providers like Trustee Bank, Government departments, pension funds, Point of presence, aggregators and annuity service providers as specified by the Authority;
- Provide a periodic Management Information System and information as called for to PFRDA, the National Pension System Trust and the Ministry of Finance and to any specified department of the Central and state Government;
- Assist PFRDA and the National Pension System Trust in enforcement of operational guidelines of PFRDA or the National Pension System Trust or service providers by providing the required data or information and reports on lapses and errors;
- Maintain absolute confidentiality of all records, data and information including subscribers' personal information and data.

For providing the services as specified under these regulations to the subscribers, the central recordkeeping agency shall collect service charges, on the basis and in the manner, as may be approved by PFRDA.

Code of Conduct

The central recordkeeping agency shall:

- Act with integrity, competence, diligence, respect, and in an ethical manner with all intermediaries and subscribers under the National Pension System or other pension scheme regulated by the Authority.
- Exercise professional diligence while dealing with subscribers, which implies a standard of skill and care that is commensurate with honest market practice, good faith and the different profiles of consumers.
- Prohibit from indulging in unfair conduct, which includes conduct that is misleading or abusive, while dealing with subscribers. The unfairness of any conduct shall be gauged based on whether it interferes with the ability of the subscriber to make an informed transactional decision.
- Shall not disclose private/confidential information unless the prior written informed consent of the subscriber has been obtained, or the disclosure is required under law or in other identified circumstances.
- Have appropriate internal mechanisms to redress consumer complaints and consumers should be adequately informed of such mechanisms.
- Place the interests of the National Pension System and its subscribers above their own personal interests.
- Maintain independence and objectivity by, among other actions, avoiding conflicts of interest, refraining from self-dealing, and refusing any gift that shall reasonably be expected to affect their loyalty to the National Pension System.

- Abide by all applicable laws, rules, and regulations, including the terms of the documents under National Pension System.
- Maintain confidentiality and protection of National Pension System and subscriber information.
- Communicate with subscribers (as may be applicable) and supervisory authorities in a timely, accurate, and transparent manner.

9.4.5 PFRDA (National Pension System Trust) Regulations 2015

The PFRDA (National Pension System Trust) Regulation lays down the formalities for the appointment of the Board of Trustees of the NPS and for pension schemes and defines their role and responsibilities, power and functions to be exercised in the interest of the subscribers.

The National Pension System Trust has been established by the PFRDA by executing the trust deed in favour of the trustees. The trust deed contains the following details:

- The objective of establishing the NPS Trust including the rights of the subscribers and the vesting of these rights in the trustees.
- The powers and functions of the Board of Trustees.
- The duties and responsibilities of the Board of Trustees.
- The Trust Deed mentions about:
 - Maintenance of confidentiality of material information in its possession.
 - Taking action on reports submitted by pension funds, trustee banks, custodian and in respect of CRAs for activities with respect to exits and withdrawals under NPS system to ensure compliance with the NPS regulations.
 - Make disclosures of any interest they may have in any particular company and maintain arms-length distance with any intermediary they may have contact with.
 - The subscribers to have beneficial interest in the asset limited to their holding in the scheme.
 - The Board of Trustees to always act in the interest of the subscribers.
 - The Trust to be responsible for monitoring and evaluating the levels of service offered by pension funds, trustee bank, custodians and in respect of CRAs with respect to exits and withdrawals under NPS system.
 - The NPS Trust to be responsible for receiving, processing and settling the claims made by the subscribers on exit.
 - The NPS Trust to be responsible for supervising the receipt of all incomes receivable on the assets held.
- The fees to be paid to the trustees.

Board of Trustees

The Board of Trustees shall have a minimum of five trustees and not exceeding eleven trustees. One person of the appointed trustees shall be designated as the Chairperson of the NPS Trust.

The Eligibility to be appointed on the Board of Trustees as a trustee includes the following.

- Should be a citizen of India
- Is a person of ability, integrity and standing
- Should not have been convicted of any economic offence or found guilty of moral turpitude
- Should be suitably qualified and experienced in law, economics, finance, accountancy and related fields
- Should fulfil any other qualifications that may be specified from time to time

No intermediary of the National Pension System, Director or Sponsor, officer or employee shall be eligible to be appointed as trustee of the trust.

No person who is appointed as a trustee of the Board of Trustees of the National Pension System Trust shall be eligible to be appointed as a trustee of any other pension trust, or as a director of any of the intermediaries registered with the Authority or its sponsor:

Provided that this restriction shall not be applicable to the Trustees appointed by Government of India or those appointed by any of the State Governments¹⁵.

The tenure of the trustee will cease on completion of the term of three years. This may be exceeded by a maximum of two years. However, no person shall hold the office as a trustee after he attained age of seventy years. Other reasons for vacating the office may be by death, resignation, disqualification on account of mental and physical abilities or offence or dereliction of duty etc..

The PFRDA may appoint a qualified and experienced Chief Executive Officer (CEO) to run the daily affairs of the trust. The CEO will not be a trustee of the NPS Trust. The CEO will manage the day to day administration under the supervision and direction of the Board of Trustees. He will be aided by the staff of the NPS Trust.

Operations of the Trust

- The NPS Trust will enter into an Investment Management Agreement with the Pension Funds.
- The NPA Trust will open and operate accounts with the trustee bank and custodian on behalf of the subscribers.
- The securities purchased by a pension fund will be held in the custodial account of the

¹⁵ Here "Director" means "Independent Director" also.

NPS Trust.

- The assets purchased by the pension funds will include cash, securities and other instruments notified by the PFRDA through its investment guidelines
- The Board of Trustees may monitor the scheme performances on a continuous basis and can review all the transactions by the pension funds and submit its report to the PFRDA
- The Trust will ensure accurate and timely dissemination of information on investment policies, objectives and other matters relating to the scheme to the subscribers
- The Board of trustees shall exercise General due diligence that will include the following
 - Review the desirability of the continuance of a pension fund if irregularities are detected in their operations
 - Ensure the protection of trust property
 - Arrange for test checks for service level agreements
- The Board of trustees shall exercise Special due diligence that will include the following
 - Periodically review the audit reports of the auditors appointed by the trustees and intermediaries
 - Obtain compliance reports from the intermediaries
 - Hold periodic meeting of trustees and maintain records of the meetings
 - o Ensure that the entities adhere to the code of ethics

Code of Conduct for Trustees

The Trustees shall:

- Act in good faith and in the best interests of the subscribers
- Act with reasonable care and prudence
- Act with skill, competence and diligence
- Ensure that there will be no conflict of interest
- Deal fairly with all entities of the NPS System
- Maintain high standards of integrity, fairness in dealings and in the conduct of business
- At all times render a high level of service and exercise due diligence
- Maintain confidentiality of information
- Communicate with the authorities and others in a timely manner.

9.4.6 PFRDA (Pension Fund) Regulations, 2015

The objective of the Regulations is to standardize the framework for monitoring, supervision and internal control for pension funds to enable them to establish high standards for internal control and operational conduct, with the aim of protecting the subscribers and ensuring proper management of risk.

Definitions under the Regulations

Business Day means all days excluding weekly holidays (Saturday and Sunday) and such other days on which the designated Branch of the Trustee Bank is closed under the Negotiable Instruments Act, 1881 (26 of 1881) or a day on which the principal stock exchange as well as the debt market with reference to which the valuation of securities under the scheme is done is closed for business.

Tangible net worth would comprise of paid-up capital plus free reserves including share premium but excluding revaluation reserves, plus investment fluctuation reserve and credit balance in profit & loss account, less debit balance in profit and loss account, accumulated losses and intangible assets.

The regulation specifies that,

- A pension fund will commence activity relating to the National Pension System (NPS) only after receiving a certificate of registration from the PFRDA;
- There shall be a choice of a number of pension funds as decided by the PFRDA from time to time to manage the NPS, at least one of which will be a government company;
- The pension fund will be incorporated as a limited company with a minimum positive tangible net worth of Rs. 25 crores.
- The eligibility norms to act as a sponsor of a pension fund includes:
 - Fund management experience of at least five years in managing equity as well as debt schemes;
 - Must be engaged in financial business activity regulated by the RBI, SEBI, IRDAI, PFRDA;
 - The sponsors individually or jointly should have a tangible networth of at least Rs. 50 crore at the end of each of the preceding five financial years and atleast Rs.25 crore should be the paid-up equity capital on the date of making application as sponsors;
 - The sponsor should have generated profits after tax in at least three of the last five years, and should not have had a cash loss in any of the five years;
 - The sponsor will contribute at least 20 percent of the tangible net worth of the pension fund. Any entity that contributes 20 percent or more of the tangible net worth of the fund will have to fulfil the eligibility norms of the sponsor;
 - The sponsor will not hold equity capital in any other pension fund regulated by the PFRDA;
- The pension fund shall have to meet the following mandatory requirements:
 - The fund shall have the infrastructure necessary to conduct its activities
 - At least 50 percent of the directors of the fund and all its key personnel shall have adequate professional experiences in the financial services business
 - \circ At least 50 percent of the board of directors will be independent directors
 - The pension fund, sponsors, and key officers will be deemed fit and proper and not subject to any penalties or fines for financial irregularities

 The pension fund shall execute the Investment Management Agreement and non-disclosure agreement with the NPS Trust. Apart from the Investment Management Agreement, the pension fund shall also enter into agreements with the Central Recordkeeping Agency, Trustee Bank and Custodian of the NPS to facilitate the management and flow of funds, securities and information.

• The schemes managed by the pension fund shall adhere to the following guidelines:

- \circ $\;$ The securities will be held in the name of the NPS Trust.
- No pension fund shall invest in securities outside India.
- There shall be no explicit or implicit guarantee of returns except market based guarantee mechanism.
- The pension fund shall provide the option to subscribers to invest 100 percent of their funds in government securities.
- The initial price of each unit shall be Rs.10.
- The Net Asset Value (NAV) shall be calculated on each business day.
- The pension fund shall make public disclosure of information for the benefit of the subscribers as required by the regulations in a prominent place on their website
 - The daily NAV upto 4 decimal places by 9.00 pm on the same day.
 - Historical NAV since inception
 - Scrip-wise details of each scheme on a monthly basis within 10 days from the end of the month.
 - Unaudited financial statements along with scheme's portfolio on a halfyearly basis before the completion of one month from the close of each half year
 - Annual report with the scheme portfolio within 15 days of approval by NPS trust

Code of Conduct

- A pension fund shall make all efforts to protect the interests of subscribers and shall render the best possible service to the PFRDA/ National Pension System Trust having regard to the subscriber's needs and the environments and its own professional skills.
- A pension fund shall ensure that it and its key management personnel, employees, contractors and agents, shall in the conduct of their business, observe high standards of integrity, dignity, fairness, ethics and professionalism and all professional dealings shall be affected in a prompt, effective and efficient manner. A pension fund shall be responsible for the acts or omissions of its employees and agents in respect to the conduct of its business.
- A pension fund shall at all times render high standards of service, exercise due skill and diligence over persons employed or appointed by it, ensure proper care and exercise independent professional judgment and shall not at any time act in collusion with other intermediaries in a manner which is detrimental to the subscribers.

- A pension fund shall levy charges/ fees for the services rendered as may be determined by PFRDA.
- A pension fund shall be prompt in crediting dividends, interests or any such accrual income received or collected by it on behalf of the PFRDA, the National Pension System Trust or subscribers to the scheme accounts.
- A pension fund shall ensure that adequate disclosures are made to PFRDA, the National Pension System Trust or subscriber in a comprehensible and timely manner so as to enable them to make a balanced and informed decision.
- A pension fund shall not make any misrepresentation and ensure that the information provided to PFRDA, the National Pension System Trust or subscriber is not misleading.
- A pension fund shall not make any exaggerated statement whether oral or written to the PFRDA, the National Pension System Trust or subscribers, either about its qualification or capability to render certain services or its achievements in regard to services rendered to other Authority, National Pension System Trusts or subscribers.
- A Pension fund shall not divulge to anybody, either orally or in writing, directly or indirectly, any confidential information about the PFRDA, the National Pension System Trusts or subscribers, which has come to its knowledge, without taking prior permission of the PFRDA, the National Pension System Trusts, except where such disclosures are required to be made in compliance with any law for the time being in force.
- A pension fund shall avoid conflict of interest and make adequate disclosure of its interest and shall put in place a mechanism to resolve any conflict of interest situation that may arise in the conduct of its business or where any conflict of interest arises, shall take reasonable steps to resolve the same in an equitable manner. A pension fund shall make appropriate disclosure to the PFRDA, the National Pension System Trust or subscribers of its possible source or potential areas of conflict of duties and interest while acting as a pension fund which would impair its ability to render fair, objective and unbiased services.
- A pension fund or any of its directors, or employee or an associate of the pension fund shall not, either through its account or their respective accounts or through their family members, relatives or friends indulge in any insider trading.
- A pension fund shall ensure that good corporate policies and corporate governance is in place. It shall not engage in fraudulent and manipulative transactions in the securities listed on any stock exchange in the country and shall not indulge in any unfair competition (including resorting to unfair means for inducing another intermediaries, the PFRDA or the National Pension System Trust) which is likely to harm the interests of other intermediaries or subscribers or is likely to place such other intermediaries in a disadvantageous position while competing for or executing any assignment.
- A pension fund shall take adequate and necessary steps to ensure that continuity in data and record keeping is maintained and that the data or records are not lost or destroyed. It shall also ensure that for electronic records and data, up-to-date back up is always available with it.

 A pension fund shall co-operate with the PFRDA, or any intermediary designated by the PFRDA, as and when required and shall not make any untrue statement or suppress any material fact in any documents, reports, papers or information furnished to the PFRDA or neglect or fail or refuse to submit to the PFRDA or other agencies with which it is registered, such books, documents, correspondence and papers or any part thereof as may be demanded/requested from time to time.

9.4.7 PFRDA (Exits and Withdrawals under the National Pension System) Regulations 2015

The regulations aim at providing an effective mechanism in the interest of subscribers, upon exit or withdrawal from the National Pension System, including the conditions, purpose, frequency and limits for withdrawals from individual pension account, as also the conditions, subject to which a subscriber shall exit from the National Pension System and purchase an annuity thereupon.

Definitions under the Regulations

Accumulated pension wealth means the monetary value of the pension investments accumulated in the Permanent Retirement Account of a subscriber under the National Pension System.

Annuity service provider means a life insurance company registered and regulated by the Insurance Regulatory and Development Authority of India and empanelled by PFRDA for providing annuity services to the subscribers of the National Pension System.

Exit from the NPS

Exit from National Pension System for Government sector subscribers

- On superannuation from service then at least forty percent out of the accumulated pension wealth of such subscriber shall be mandatorily utilized for purchase of annuity providing for a monthly or any other periodical pension and the balance of the accumulated pension wealth shall be paid to the subscriber in lump sum or he shall have a choice to collect such remaining pension in accordance with the other options specified by PFRDA from time to time in the interest of the subscribers.
- Provided that:
 - The default annuity contract that will be applicable is the contract that shall provide for annuity for life of the subscriber and his or her spouse (if any) with provision for return of purchase price of the annuity and upon the demise of such subscriber, the annuity be re-issued to the family members in the order specified hereunder at a premium rate prevalent at the time of purchase of such annuity by utilizing the purchase price required to be returned under the annuity contract (until all the family members in the order specified below are covered) :
 - living dependent mother of the deceased subscriber;
 - living dependent father of the deceased subscriber.

- After the coverage of all the family members specified above, the purchase price or the amount which was to be utilized for purchase of annuity shall be returned to the surviving children of the subscriber and in the absence of children, the legal heirs of the subscriber, as may be applicable.
- The subscriber who wishes to opt out of the default option mentioned above and wishes to choose the annuity contract of his choice from the available annuity types or contracts with the annuity service providers, shall be required to specifically opt for such an option.
- Where the subscriber does not desire to withdraw the balance amount, after purchase of mandatory annuity, such subscriber shall have the option to defer the withdrawal of the lump sum amount until he or she attains the age of seventy five years, provided the subscriber intimates his or her intention to do so in writing in the specified form at least fifteen days before the attainment of age of superannuation to the National Pension System Trust or an intermediary or entity authorized by the PFRDA for this purpose; The subscriber shall have an option to exit from the NPS at any point of time and frequency by submitting the request to NPS Trust or any intermediary or any entity authorized by PFRDA for this purpose. In case of death of subscriber during the period of deferment, such deferred amount of the subscriber shall be paid be in the preferential order of nominee(s) following by legal heir(s).
- Where the subscriber desires to defer the purchase of annuity, he or she shall have the option to do so until they attain the age of seventy five years, provided the subscriber intimates his or her intention to do so in writing in the specified form at least fifteen days before the attainment of age of superannuation to the CRA or National Pension System Trust or an intermediary or entity authorized by PFRDA for this purpose. It shall be a condition precedent to opt for such deferment of annuity purchase that in case if the death of the subscriber occurs before such due date of purchase of an annuity after the deferment, the annuity shall mandatorily be purchased by the spouse (if any) providing for annuity for life of the spouse with provision for return of purchase price of the annuity and upon the demise of such spouse be re-issued to the family members in the order of purchase of the annuity, utilizing the purchase price required to be returned under the contract until the family members in the order specified below are covered):
 - o living dependent mother of the deceased subscriber;
 - living dependent father of the deceased subscriber.
 - After the coverage of all such members, the purchase price shall be returned to the surviving children of the subscriber and in absence of children to the legal heirs of the subscribers as applicable;
- where the subscriber desires to defer the withdrawal of benefits available under National Pension System, the expenses, maintenance charges and fee payable under the National Pension System in respect of the individual pension account/ Permanent Retirement Account, shall continue to remain applicable.

- Where the accumulated pension wealth in the Permanent Retirement Account of the subscriber is equal to or less than a sum of five lakh rupees, or a limit as specified by PFRDA, basing on the instructions issued by the appropriate regulator on the minimum value of annuities to be made available by the life insurers, the subscriber shall have the option to withdraw the entire accumulated pension wealth without purchasing annuity and upon such exercise of this option, the right of such subscriber to receive any pension or other amount under the National Pension System or from the government shall extinguish;
- where the subscriber desires to continue in the National Pension System and contribute to his retirement account beyond the age of sixty years or the age of superannuation, he or she shall have the option to do so by giving in writing or in such form as may be specified, and up to which he would like to contribute to his individual pension account but not exceeding seventy-five years of age. Such option shall be exercised at least fifteen days prior to the age of attaining sixty years or age or superannuation, as the case may be to the central recordkeeping agency or the National Pension System Trust or any other intermediary or entity authorized by PFRDA for the purpose. In such cases, individual pension account/ permanent retirement account shall require to be shifted from government sector to all citizens including corporate sector and the expenses, maintenance charges and fee payable under the NPS in respect of the said individual pension account/permanent retirement account shall continue to remain applicable.
- Provided that if the employer certifies that the subscriber has been discharged from the services of the concerned office on account of invalidation or disability, the exit shall be determined as specified. Where the subscriber who, before attaining the age of superannuation prescribed by the service rules applicable to him or her, on resignation from service voluntarily closes individual pension account/permanent account or exits or dismiss or removed by the government or employer prematurely, then at least eighty per cent out of the accumulated pension wealth of the subscriber shall mandatorily be utilized for purchase of annuity and the balance of the accumulated pension wealth, after such utilization, shall be paid to the subscriber in lump sum or the subscriber shall have a choice to collect such remaining pension in accordance with the other options specified by PFRDA from time to time in the interest of the subscribers. Provided that such annuity contract shall provide for annuity for life of the subscriber and his or her spouse (if any) with provision for return of purchase price of the annuity and upon the demise of such subscriber and his or her spouse, the annuity be re-issued to the family members in the order specified hereunder at a premium rate prevalent at the time of purchase of the annuity, utilizing the purchase price required to be returned under the annuity contract (until all the members given below are covered) :
 - i. living dependent mother of the deceased subscriber;
 - ii. living dependent father of the deceased subscriber.

After the coverage of all such members, the purchase price or the amount which was to be utilized for the purchase of annuity shall be returned to the surviving children of

the subscriber and in the case of absence of children, to the other legal heirs of the subscriber, as may be applicable. In the absence of or non-availability of such a default annuity for any reason, the subscriber shall be required to exercise the option for purchase of such annuity of his choice, within the annuity types or contracts made available by the annuity service providers empanelled by PFRDA. Further, a subscriber who wishes to opt out of the option mentioned above and wishes to choose the annuity contract of his choice from the available annuity types or contracts with the annuity service providers shall be required to specifically opt for such option.

- Provided that if the accumulated pension wealth of the subscriber is more than Rs.2.5 lakhs or a limit to be specified by PFRDA for the purpose but the age of the subscriber is less than the minimum age required for purchasing any annuity from any of the empanelled annuity service providers as chosen by such subscriber, such subscriber shall continue to be subscribed to the National Pension System, until he or she attains the age of eligibility for purchase of any annuity.
- Provided further that if the accumulated pension wealth of the subscriber is equal to or less than Rs.2.5 lakh rupees or a limit to be specified by PFRDA, such subscriber shall have the option to withdraw the entire accumulated pension wealth without purchasing any annuity and upon such exercise of this option the right of the subscriber to receive any pension or other amounts under the National Pension System shall extinguish and any such exercise of this option by the subscriber.
- Where the subscriber who, before attaining the age of superannuation, dies, then at least eighty percent out of the accumulated pension wealth of the subscriber shall be mandatorily utilized for purchase of annuity and balance pension wealth shall be paid as lump sum or in another manner from among the options made available by PFRDA from time to time to the nominee or nominees or legal heirs, as the case may be, of such subscriber: Provided that,- (i) such annuity contract shall provide for annuity for life of the spouse of the subscriber (if any) with provision for return of purchase price of the annuity and upon the demise of such spouse be re-issued to the family members in the order specified hereunder at the premium rate prevalent at the time of purchase of the annuity, utilizing the purchase price required to be returned under the contract (until the family members in the order specified below are covered):-
 - (a) living dependent mother of the deceased subscriber;
 - (b) living dependent father of the deceased subscriber.

After the coverage of family members specified above, the purchase price or the amount which was to be utilized for the purchase of the annuity shall be returned to the surviving children of the subscriber and in absence of children, the legal heirs of the subscriber as applicable. In the absence of or non-availability of such a default annuity for any reason, the subscriber shall be required to exercise the option for purchase of such annuity of his choice within the then annuity types or contracts made available by the annuity service providers empanelled by the PFRDA. Provided further that if the accumulated pension wealth in the permanent retirement account of the subscriber at the time of his death is equal to or less than five lakh rupees or a limit to be specified by PFRDA, , the nominee or legal heirs as the case may be, shall have the option to withdraw the entire accumulated pension wealth without requiring to purchase any annuity and upon such exercise of this option the right of the family members to receive any pension or other amounts under the National Pension System shall extinguish.

Exit from National Pension System by citizens, including corporate sector subscribers

Where a subscriber attains the age of sixty years or superannuates in accordance with the service rules applicable to such subscriber, at least forty percent out of the accumulated pension wealth of such subscriber shall be mandatorily utilized for purchase of annuity providing for a monthly or any other periodical pension and the balance of the accumulated pension wealth, after such utilization, shall be paid to the subscriber in lump sum or he shall have a choice to collect such remaining pension wealth in accordance with the other options specified by PFRDA from time to time, in the interest of the subscriber. In case, the accumulated pension wealth of the subscriber is equal to or less than a sum of five lakh rupees, the subscriber shall have the option to withdraw the entire accumulated pension wealth without purchasing any annuity. Provided that:

• Where the subscriber does not exit from NPS beyond the age of sixty years, or the age of superannuation, as the case may be, shall continue to remain subscribed to NPS till he or she attains the age of 75 years. Provided further that such subscriber having any employee-employer relationship, the individual pension account/permanent retirement account shall be shifted from the employer to all-citizens model. Notwithstanding in such automatic continuation, the subscriber may exit at any point of time from the NPS, by submitting a request to NPS Trust or any intermediary or entity authorized by PFRDA for the purpose. In case of death of subscriber during the period of continuation, the entire accumulated pension wealth of the subscriber shall be paid to the nominees or legal heirs, as the case may be, of such subscriber. The nominees or family members of the deceased subscriber shall have the option to purchase any of the annuities being offered upon exit, if they so desire.

- The subscriber shall have the option to defer the withdrawal of lump sum amount until he or she attains the age of seventy-five years, provided the subscriber intimates his or her intention to do so in writing in the specified form at least fifteen days before the attainment of age of sixty years or, the age of superannuation.
- the subscriber shall have the option to defer the purchase of annuity until they attain seventy five years of age , provided the subscriber intimates his or her

intention to do so in writing in the specified form at least fifteen days before the attainment of age of sixty years or the age of superannuation.

- the subscriber shall be allowed to continue to subscribe, defer the withdrawal of lump sum amount or the purchase of annuity, as the case may be, provided the subscriber agrees to bear the maintenance charges of the Permanent Retirement Account, including the charges payable to the central recordkeeping agency, pension fund, Trustee Bank or any other intermediary, as may be applicable from time to time;
- Provided that a subscriber is physically incapacitated or has suffered a bodily disability leading to his incapability to continue with his individual pension account under National Pension System, the exit in such cases shall be determined as per the provisions of sub regulation (a) subject to the subscriber submitting a disability certificate from a Government surgeon or Doctor (treating such disability or invalidation of subscriber) stating the nature and extent of disability and also certifying that:

a. the affected subscriber shall not be in a position to perform his regular duties and there is a real possibility of the affected subscriber, being not able to work for the remaining period of his life.; and
b. Percentage of disability is more than seventy-five percent. in the opinion of such Government surgeon or doctor (treating such disability or invalidation of subscriber).

- Where the subscriber who, before attaining the age of sixty years or the age of superannuation as prescribed by service rules, or subscriber not having any employeeemployer relationship having subscribed to NPS for atleast a minimum period of 5 year, voluntary opts to exits from the NPS, then at least eighty percent out of the accumulated pension wealth shall be mandatorily utilized for purchase of annuity and the balance of the accumulated pension wealth, after such utilization, shall be paid to the subscriber in lump sum:
 - Provided that if the accumulated pension wealth of the subscriber is more than Rs. 2.5 lakh rupees but the age of the subscriber is less than the minimum age required for purchasing any annuity from any of the empanelled annuity service providers as chosen by such subscriber, such subscriber shall continue to subscribe to the National Pension System, until he or she attains the age of eligibility for purchase of any annuity:
 - Provided further that if the accumulated pension wealth in the individual pension account of the subscriber is equal to or less than 2.5 lakh rupees, or a limit to be specified by PFRDA, basing on the instructions issued by the appropriate regulator on the minimum value of annuities to be made available by the life insurers such subscriber shall have the option to withdraw the entire accumulated pension wealth without requiring to purchase any annuity.

- Where the subscriber dies before reaching the age of sixty years or superannuation then the entire accumulated pension wealth of the subscriber shall be paid to the nominee or nominees or legal heirs, as the case may be, of such subscriber. Provided that:
 - the nominee(s) or legal heir(s) of the deceased subscriber shall have the option to purchase any of the annuities being offered upon exit, if they so desire, while applying for withdrawal of benefits on account of deceased subscribers' Permanent Retirement Account;
 - In case, the nomination is not registered by the deceased subscriber before his death, the accumulated pension wealth shall be paid to the family members on the basis of the legal heir certificate issued by the competent authorities of the State concerned or the succession certificate issue by a court of competent jurisdiction.
- Exit from National Pension System by subscribers joining the pension system on or after attaining the age of sixty years (but before attaining seventy years of age):
 - In case of a subscriber, joining NPS under all citizens model or in corporate model, on or after attaining the age of sixty years, (but before attaining seventy years of age) and after having subscribed to such pension system for atleast a period of three years, from the date of such joining and thereafter till he attains the age of seventy five years, on exit, at least forty percent out of the accumulated pension wealth of such subscriber shall be mandatorily utilized for purchase of annuity providing for a monthly or any other periodical pension and the balance of the accumulated pension wealth, after such utilization, shall be paid to the subscriber in lump sum. In case, the accumulated pension wealth of the subscriber is equal to or less than a sum of five lakh rupees or a limit to be specified by the PFRDA, the subscriber shall have the option to withdraw the entire accumulated pension wealth without there being any requirement of purchasing an annuity.
 - where a subscriber who, before completion of three years in such pension system, voluntarily opts to exit from the National Pension System, at least eighty percent out of the accumulated pension wealth shall be mandatorily utilized for purchase of annuity and the balance of the accumulated pension wealth, after such utilization, shall be paid to the subscriber in lump sum. Provided further that if the accumulated pension wealth in the individual pension account of the subscriber is equal to or less than a sum of Rupees 2.5 lakh, or a limit to be specified by PFRDA, basing on the instructions issued by the appropriate regulator on the minimum value of annuities to be made available by the life insurers such subscriber shall have the option to withdraw the entire accumulated pension wealth without there being any requirement of purchase of an annuity.
 - where a subscriber dies, while being subscribed to National Pension System, the entire accumulated pension wealth of the subscriber shall be paid to the

nominee or nominees or legal heirs, as the case may be, of such subscriber.

Exit from National Pension System by NPS-Lite and Swavalamban subscribers

- Upon a subscriber, attaining the age of sixty years, at least forty percent of the accumulated pension wealth of such subscriber shall be mandatorily utilized for purchase of annuity providing for a monthly or any other periodical pension and the balance of the accumulated pension wealth, after such utilization, shall be paid to the subscriber in lump sum. Provided that:
 - for a Swavalamban subscriber the annuity purchased by utilizing the mandatory minimum of forty percent of the accumulated pension wealth of the subscriber shall yield at least a monthly annuity or pension of one thousand rupees, failing which the entire accumulated pension wealth shall be annuitised in such a manner so as to yield at least a monthly annuity or pension of one thousand rupees and balance if any thereafter shall be paid in lump sum to the subscriber. However, there shall be no implicit or explicit guarantee that the annuity purchased even with entire accumulated pension wealth would yield a monthly annuity or pension of one thousand rupees;
 - if the accumulated pension wealth of the subscriber is equal to or less than a sum of one lakh rupees, such subscriber shall have the option to withdraw the entire accumulated pension wealth without purchasing any annuity.
 - Provided that a subscriber is physically incapacitated or has suffered a bodily disability leading to his incapability to continue with his individual pension account under National Pension System, the exit in such cases shall be determined as per the mentioned provisions subject to the subscriber submitting a disability certificate from a Government surgeon or Doctor (treating such disability or invalidation of subscriber) stating the nature and extent of disability and also certifying that: a. the affected subscriber shall not be in a position to perform his regular duties and there is a real possibility of the affected subscriber, being not able to work for the remaining period of his life.; and b. Percentage of disability is more than seventy five percent. in the opinion of such Government surgeon or doctor (treating such disability or invalidation of subscriber).
- At any time, before attaining the age of sixty years, the subscriber may exit the NPS. This is subject however to the requirement that at least eighty percent out of the accumulated pension wealth shall be mandatorily utilized for purchase of annuity and the balance of the accumulated pension wealth, after such utilization shall be paid to the subscriber in lump sum:
 - for a Swavalamban subscriber the annuity purchased by utilizing the mandatory minimum of eighty percent out of the accumulated pension wealth ought to yield at least a monthly annuity or pension of one thousand rupees per month, failing which the entire accumulated pension wealth shall be annuitised in such a manner so as to yield at least a monthly annuity or pension of one thousand rupees and balance if any thereafter shall be paid as lump sum to the subscriber. However, there shall be no implicit or explicit guarantee that

the annuity purchased even with entire accumulated pension wealth would yield a monthly annuity or pension of one thousand rupees:

- Where the accumulated pension wealth does not exceed one lakh rupees or a limit to be specified by PFRDA basing on the instructions issued by the appropriate regulator on the minimum value of annuities to be made available by the life insurers, the whole of the pension wealth upto the limit so specified shall be paid to the subscribers, who have not availed any Swavalamban cocontribution, without any requirement of annuitisation and further this provision shall be applicable to a subscriber who has availed a Swavalamban co-contribution only if such subscriber has continued in the scheme for a minimum period of twenty-five years;
- The migration of Swavalamban subscriber or subscribers to any other pension scheme of Government of India and as approved by PFRDA shall not be deemed as an exit and withdrawal for the purposes of these regulations.
- Where a subscriber who, before attaining the age of sixty years, dies, the entire accumulated pension wealth of the subscriber shall be paid to the nominee, or the legal heir of such subscriber and there shall not be any condition of mandatory purchase of annuity and provision of a monthly or periodical pension and there shall not be any requirement of the annuitisation of the accumulated pension wealth of such deceased subscriber. The nominee or family members of the deceased subscriber shall have the option to purchase any of the annuities being offered upon exit, if they so desire.
 - Where a nomination is not registered by the subscriber before his death, the accumulated pension wealth of such subscriber shall be paid to the family members on the basis of the legal heir certificate.

Conditions to apply for exit and withdrawal

A subscriber registered under the National Pension System shall not exit therefrom, and no withdrawal from the accumulated pension wealth in the Tier-1 of the Permanent Retirement Account of such subscriber shall be permitted, except as specified hereunder, namely:-

- No pension or accumulated pension wealth in Tier-I account of the Permanent Retirement Account of the subscriber under the National Pension System on account of past or present services, shall be liable to seizure, attachment or sequestration by process of any court at the instance of a creditor, for any demand against the subscriber, or in the satisfaction of a decree or order of any such Court except where the National Pension System Trust or its authorised representative has accorded prior sanction for assignment of the pension wealth accumulated in the pension account of the subscriber, which shall be restricted to such limit as prescribed.
- Any assignment, pledge, contract, order, sale or security of any kind made by any subscriber of the National Pension System, with respect to any benefit receivable by him or her under the National Pension System, or in respect of any money payable at or on account of any such benefit to such subscriber under the National Pension System, or for giving or assigning any future interest therein shall be null and void

except where the National Pension System Trust or its authorized representative has accorded prior permission for such assignment of the pension wealth accumulated in the pension account of the subscriber and which shall be restricted to such limit as prescribed.

- The President of India or the Governor of a State, as the case may be, if so provided in the service rules, governing the employment of the subscriber, reserves the right of withholding the part of pension wealth, accumulated through co-contributions made by the Central Government or the State Government, as employer to the Tier-I account of the National Pension System account of the subscriber and the investment income accruing thereon, for the purpose of recovery of the whole or part of any pecuniary loss caused to the Central Government or the State Government, provided such loss is established, in any departmental or judicial proceedings, initiated against such subscriber by the employer concerned. Such right of withholding shall have to be exercised prior to the date of superannuation of the subscriber, pursuant to a notice to be given to the National Pension System Trust or an entity to whom such authorization has been given, and seeking to withhold the said pension wealth of subscriber. Upon such right of withholding being validly exercised:
 - the amount withheld which are payable under the NPS shall not be paid to such subscriber until the conclusion of the departmental or judicial proceedings, as the case may be and subject to the final orders, passed in such proceedings;
 - the amount withheld shall remain subscribed to the scheme in the mode and manner in which it was held prior to resorting to such action by the concerned Government and the final settlement of the withheld amount shall be made by the National Pension System Trust normally within ninety days of the receipt of an appropriate order from the concerned Government;
 - the amount withheld becomes payable to the subscriber on the final settlement, as certified by the employer specified, which has sought withholding of such benefits, and shall be paid to the subscriber as per applicable regulation while executing exit as soon as possible and in no case beyond ninety days of receipt of the final order by the NPS Trust or any other entity or person, authorized for the purpose by PFRDA. Provided that, in case the amount withheld becomes payable after the death of subscriber, on the final settlement, the benefits, shall be paid to the nominee(s) or legal heir(s) as applicable.
- The family members as specified under the service rule or on the basis of the legal heir certificate of the deceased subscriber, as the case may be, or subscriber upon invalidation, or disability during service, avails the option of additional pensionary relief provided by the government or the employer, the government or employer shall have the right to adjust or seek transfer the part or full accumulated pension corpus of the subscriber to itself as per the applicable service rules. The subscriber or family members of the deceased subscriber availing such benefits shall specifically and unconditionally agree and undertake to transfer the part or full accumulated pension

corpus as per the applicable service rules to the government or employer, in lieu of enjoying such additional reliefs like family pension on death or pension or any other pensionary benefit on invalidation or disability provided by the government or employer. The remaining accumulated pension corpus, if any, in case of death shall be paid in lumpsum to the nominee(s) or the legal heir(s) as applicable. In case of invalidation or disability, the same shall be paid to the subscriber as applicable.

- All benefits receivable, including the purchase of annuity as specified under these regulations, shall be arranged to be paid by the National Pension System Trust or the central recordkeeping agency or any other entity authorized for the purpose by the Authority after processing the withdrawal applications in accordance with the provisions of these regulations, or any guidelines, order or notification, as may be issued by the Authority, from time to time.
- Upon exit of a subscriber from Tier-I of the National Pension System, the Tier-II account of the subscriber shall also be simultaneously closed and amounts under the said account shall be paid to the subscriber or his nominees or legal heirs as the case may be.
- With respect to subscribers who have not submitted the withdrawal application as is required under the said regulation and within one month from the date of attainment of the age of sixty years or the age of normal superannuation as the case may be, for withdrawal of benefits upon exit from national pension system, the accumulated pension wealth in the account of such subscriber (both under tier I and tier II) would be monetized and kept separately as per the guidelines or directions issued by the Authority for the said purpose. The income earned from such safe keeping of the monetized accumulated pension wealth of the subscriber shall form part of the benefits that the subscriber is entitled under the National Pension System. This provision shall apply in respect of such subscribers who have deferred the withdrawal of benefits or have partly withdrawn the benefits and have not taken the steps to completely withdraw the benefits as is required under the regulations and or in the guidelines or directions issued by the Authority for the purpose.
- With respect to settlement of claims arising out of the accumulated pension corpus of deceased subscribers, where no valid nomination as specified in these regulations exist on the date of death, the Authority may issue suitable directions in the interest of subscribers for settlement of such claims in favour of the family members on the basis of legal heir certificate of the deceased subscriber, upto a specified limit, by requiring such heirs to submit such documents as may be specified.

With effect from April 1, 2016, it has been decided that withdrawal process should only be done online. This has been done to simplify and streamline the processing of exit and withdrawal claims. For the same CRA has developed an 'Online Withdrawal' module to process 'Withdrawal Request' for subscribers exiting NPS on the online platform made available by CRA.

Partial Withdrawals, Purpose, Frequency and Limits

The following withdrawal shall be made:

- A partial withdrawal of accumulated pension wealth of the subscriber, not exceeding twenty-five per cent of the contributions made by the subscriber and excluding the contributions made by the employer may be made by the subscriber at any time before exit from National Pension System subject to the terms and conditions, purpose, frequency and limits specified below:
 - Purpose: A subscriber on the date of submission of the withdrawal form, shall be permitted to withdraw not exceeding twenty-five percent of the contributions made by such subscriber to his individual pension account, for any of the following purposes only:
 - for Higher education of his or her children including a legally adopted child
 - for the marriage of his or her children, including a legally adopted child;
 - for the purchase or construction of a residential house or flat in his or her own name or in a joint name with his or her legally wedded spouse.
 - In case, the subscriber already owns either individually or in the joint name a residential house or flat, other than ancestral property, no withdrawal under these regulations shall be permitted
 - for treatment of specified illnesses: if the subscriber, his legally wedded spouse, children, including a legally adopted child or dependent parents suffer from any specified illness, which shall comprise of hospitalization and treatment in respect of the following diseases:
 - Cancer
 - Kidney Failure (End Stage Renal Failure)
 - Primary Pulmonary Arterial Hypertension
 - Multiple Sclerosis
 - Major Organ Transplant
 - Coronary Artery Bypass Graft
 - Aorta Graft Surgery
 - Heart Valve Surgery
 - Stroke
 - Myocardial Infarction
 - Coma
 - Total blindness
 - Paralysis
 - Accident of serious/ life threatening nature
 - any other critical illness of a life threatening nature

- For meeting medical and incidental expenses arising out of the disability or incapacitation suffered by the subscriber.
- For meeting the expenses by subscriber for skill development/reskilling or for any other self-development activities, as may be permitted by PFRDA.
- For meeting the expenses by subscriber for establishment of own venture or any start-ups, as may be permitted by PFRDA.
- Limits: the permitted withdrawal shall be allowed only if the following eligibility criteria and limit for availing the benefit are complied with by the subscriber:
 - the subscriber shall have been in the National Pension System at least for a period of last three years from the date of his or her joining;
 - the subscriber shall be permitted to withdraw accumulations not exceeding twenty-five per cent of the contributions made by him or her and standing to his or her credit in his or her individual pension account, a son the date of application for withdrawal;

Frequency

The subscriber shall be allowed to withdraw only a maximum of three times during the entire tenure of subscription under the National Pension System. The request for withdrawal shall be submitted by the subscriber either offline or online to the CRA/Nodal office/PoP as the case may be. For online withdrawal the subscriber has to login to the CRA system using the login credentials and select the amount of partial withdrawal and reasons for the same and provide the self declaration stating that the amount withdrawn will be used for the declared reason. The request has to be authorized using OTP/esign. The CRA will conduct instant bank account verification by penny drop and then execute the withdrawal. The amount will be credited to the subscriber's bank account on T+4 day.

A subscriber having a valid and active Tier-II account of the Permanent Retirement Account can withdraw the accumulated wealth either in full or part, at any time by applying for such withdrawal, on such application form and in such mode and manner, as may be specified by PFRDA in this behalf. There shall be no limit on such withdrawals till the account has sufficient amount of accumulated pension wealth to take care of the applicable charges and the withdrawal amount. Provided that the Tier-II account shall stand automatically closed at the time of exit of the subscriber from the National Pension System, even if an application so specified for the purpose has not been received from the subscriber, and the accumulated wealth in such account shall be transferred to the bank account provided by the subscriber, while submitting his application for exit from the National Pension System.

Annuity Purchase and Annuity Service Providers

- The subscriber, at the time of exit, shall mandatorily purchase an annuity providing for a monthly or periodical annuity or pension as specified in these regulations, excepting those cases where exempted or provided otherwise and to the extent so exempted. Such annuity shall be purchased from an annuity service provider who is empanelled by PFRDA.
- The exercise of option of the annuity and the type thereof shall be made by the subscriber at the time of exit from the National Pension System.
- Once an annuity is purchased, the option of cancellation and reinvestment with another annuity service provider or in another annuity scheme shall not be allowed unless the same is within the time limit specified by the annuity service provider, for the free look period as provided in the terms of the annuity contract or as specifically provided by the Insurance Regulatory and Development Authority of India.
- The subscriber shall have an option to choose from various types of annuities, provided by the annuity service provider and the annuity so chosen shall be provided by the empanelled annuity service provider.
- There shall be a default annuity service provider and a default annuity scheme for the benefit of subscribers exiting from the National Pension System. The information on the default annuity service provider and default annuity scheme applicable shall be such as may be specified by the Authority and placed on its website, apart from communicating to the subscriber through circulars, guidelines or notification issued by it. Such default annuity scheme shall not be available or applicable in the case of Government subscribers.

Eligibility Criteria for Annuity Service Providers

The following shall be the eligibility criteria for any applicant to act as an empanelled annuity service provider:

- any life insurance company registered and regulated by the Insurance Regulatory and Development Authority and dealing with annuity products in the domestic market for the last three years.
- the applicant having a minimum net worth of Rs. 250 crores.
- the applicant shall have competency in design, development and offering of annuity products, which is demonstrable by the details of the annuity products filed with the IRDAI.
- not barred from dealing with or selling annuity products in the market by the IRDAI.
- any other criteria as may be specified by the Authority from time to time through resolutions, notifications, circulars, guidelines, norms or memoranda.

Duties and responsibilities of empanelled annuity service providers

The main functions of an empanelled annuity service provider are:

- To provide different kinds of immediate annuities to the subscribers at the time of exit from the National Pension System;
- To provide minimum immediate annuity variants options as required by PFRDA and to be able to provide any new variant as required by the PFRDA from time to time in the interest of subscribers in conformity with the Insurance Act, 1938 and the IRDA Act, 1999 and the rules and regulations made thereunder;
- To provide monthly or any other periodical annuity payment to the subscriber for the annuity contract purchased by the subscriber under the National Pension System;
- The annuity service provider shall be responsible for handling the grievances and issues related to or arising out of the entering into the annuity contract with the subscribers under the National Pension System;
- Provide information about the products to potential subscribers;
- To make available the necessary infrastructure required for receipt and acceptance of applications with the specified premiums and issuance of annuity contracts in line with the approvals granted by the Insurance Regulatory and Development Authority of India;
- Facilitate or provide infrastructure required for online purchase of annuity products by the subscribers through the central record keeping agency;
- Issuance of the annuity contract as per the choice of the subscriber provided in the annuity application;
- The annuity service provider shall be responsible for delivering the monthly, quarterly or annual pension or annuity as chosen by the subscriber. However, in case of government sector subscribers, the annuity payable shall be on monthly basis only;
- The annuity service provider shall provide the information on annuity purchases made by the subscribers under the National Pension System to the National Pension System Trust and the central recordkeeping agency;
- The handling of subscriber requests such as receiving, processing and effecting requests from the subscribers for change in address, nomination or any other activity in connection with the annuity contract entered into by the annuity service provider;
- The annuity service provider shall be responsible for receiving from, and resolving the, grievances of subscribers;
- Any complaint from a subscriber relating to the services provided shall be dealt by the annuity service provider and settled;
- There shall not be any additional fees or charges other than the premium as approved by the Insurance Regulatory and Development Authority for the product but excluding any taxes imposed by the Government;
- Code of conduct -The empanelled annuity service provider shall at all times observe the code of conduct for insurers or any other similar rules, guidelines or regulations specified by the IRDAI;

Nomination

A subscriber, at the time of joining the National Pension System is required to make a nomination, in the specified form, conferring on one or more persons the right to receive the amount that may stand to the subscriber's credit in the accumulated wealth or fund in the event of the subscriber's death/missing or presumed dead, before that amount becomes payable or having become payable has not been paid.

- (a) If the nominee predeceases the subscriber, the nomination shall so far as it relates to the right conferred upon the said nominee, become void and of no effect.
- (b) The amounts due will pass on to other nominees, if any.
- (c) A subscriber may in his nomination distribute the amount that may stand to his credit in the fund amongst his nominees at his own discretion.
- (d) If a subscriber has a family at the time of making a nomination, the nomination shall be in favour of one or more persons belonging to his family. Any nomination made by such subscriber in favour of a person not belonging to his family shall be invalid.
- (e) A fresh nomination shall be made by the subscriber on his marriage and any nomination made before such marriage shall be deemed to be invalid.
- (f) If at the time of making a nomination the subscriber has no family, the nomination may be in favour of any person or persons but if the subscriber subsequently acquires a family, such nomination shall forthwith be deemed to be invalid and the subscriber shall make a fresh nomination in favour of one or more persons belonging to his family.
- (g) Where the nomination is wholly or partly in favour of a minor, the subscriber may, for the purposes of this Scheme, appoint a major person of his family, to be the guardian of the minor nominee in the event of the subscriber predeceasing the nominee and the guardian so appointed; where there is no major person in the family, the subscriber may, at his discretion, appoint any other person to be a guardian of the minor nominee.
- (h) A nomination made under the National Pension System may at any time be modified by a subscriber after giving a written notice of his intention of doing so in the mode as specified. A nomination or its modification so made shall take effect to the extent that it is valid on the date on which it is received by the intermediary or nodal office under the National Pension System.
- (i) If a subscriber proves that his spouse has ceased, under the personal law governing him or her, or the customary law of the community to which the spouses belong, to be entitled to maintenance he or she shall no longer be deemed to be a part of the subscriber's family for the purpose of this Scheme, unless the subscriber subsequently intimates by express notice in writing to the designated intermediary for the purpose that he or she shall continue to be so regarded.
- (j) If a subscriber by notice in writing to the designated intermediary for the purpose expresses her desire to exclude her husband from the family, the husband and his dependent parents shall no longer be deemed to be a part of the subscriber's family for the purpose of this Scheme, unless the subscriber subsequently cancels in writing any such notice.
- (k) where no valid nomination exists in accordance with these regulations, at the time of exit of such subscriber on account of death, the nomination, if any existing in the records of

such subscriber with his or her employer for the purpose of receiving other admissible terminal benefits shall be treated as nomination exercised for the purposes of receiving benefits under the National Pension System. The employer shall send a confirmation of such nomination in its records, to the National Pension System Trust or the central recordkeeping agency, while forwarding the claim for processing.

9.5 Ethics beyond Regulations

The regulatory framework prescribes the code of conduct that should guide various intermediaries engaged in providing advice for retirement planning. But beyond the prescriptions of the regulations it is important to imbibe ethics that will guide their behaviour in dealing with their clients. Some of the behaviours that they need to exhibit are as given below:

Integrity: The advice and services provided by the adviser should always be in the best interests of the client. It is not enough that it should be so but the client should also be able to see it as such. This helps build confidence in the client that their affairs are in good hands. The adviser should always focus on what is advantageous to the client irrespective of whether their actions are to their own personal gain or detriment. They should make full disclosure to the clients of the compensation that they are likely to receive as the result of their relationship with the client, and of all other areas which may result in a conflict of interest.

Objectivity: The advisor should be able to evaluate all options available with a focus on the client's requirements, irrespective of whether the advice will be liked or popular with the client. They should be able to place a logical argument before the client to convince them of the soundness and unbiased nature of their advice.

Competence: It is important for the advisers to maintain a high level of knowledge and skill in all the areas in which they provide advice and assistance. Investing time and resources in keeping themselves updated on the latest developments in their area of expertise, and applying it to provide the best advice for their clients should be a priority.

Professionalism: The advisor should see the work they do as their profession, and bring in the qualities of punctuality, adherence to time schedules and tasks committed to the client, deal with the clients in a respectful manner and ensure that all regulatory norms are taken care of in their activities.

Confidentiality: The advisor should maintain the confidentiality of their relationship with their clients. All the information provided by the client should be used only for matters relating to their needs. Proper care should be taken to keep the documents and other information received from the client secure.

Diligence: Due diligence should be exercised before any recommendation is made to a client. This should include a complete understanding of the risk and return features of a product and their suitability to the needs of the client, examine the costs and fees associated to make sure they are not excessive and make sure the clients are fully aware and understand the consequences of the decisions that are made.

9.6 Subscriber Grievance Redressal Mechanism

The PFRDA (Redressal of Subscriber Grievance) Regulations, 2015 provides for a mechanism for the NPS to deal with the grievances of its subscribers.

According to the regulations all intermediaries in the NPS shall have a senior management level officer designated as grievance redressal officer. Each branch or office shall also have an officer so designated. Each intermediary shall have a clearly laid out grievance policy and procedure to receive, register, acknowledge and handle any grievance raised by a subscriber. The policies laid down should meet with the standards laid down by the PFRDA. The turnaround times specified for grievance redressal are:

- An acknowledgement will be sent to the complainant within 3 days of receiving the complaint.
- If the complaint does not pertain to the intermediary to whom it was sent, then it shall be forwarded to the appropriate entity within 3 days and the complainant shall be kept informed of the same.
- Every grievance shall be disposed within 30 days from receipt and the complainant shall be informed of the resolution in detail.
- The options to pursue the complaint available to the subscriber should be intimated to the subscriber while informing them of the disposal of the case.
- The complainant can escalate the matter to the NPS Trust if dissatisfied with the way the complaint was redressed.
- If the complaint forwarded to the NPS trust remains unresolved satisfactorily after thirty days, the subscriber can approach the ombudsman.
- If the matter is not resolved in a mutually acceptable manner within 30 days, the ombudsman shall pass an award not later than 90 days from the day on which the appeal was filed with the ombudsman.

The grievance redressal policy should be displayed in the office of the intermediary and should be made available to the subscriber in their first interaction with the officials of the intermediary.

Grievance Redressal by the CRA

Investors can register a grievance through physically, or on phone through the call centre, or online. The PRAN, T-PIN and I-PIN issued at the time of registering the subscriber are required to identify the subscriber in the NPS System.

A complaint can be registered by calling the toll-free numbers. The grievance can be raised online on the Central Grievance Management System (CGMS) on the website of the CRAs.

An email to CRAs from a registered email id is another way to register a grievance. A grievance can also be raised by an intermediary, such as a POP, on the CGMS on behalf of the subscriber.

Grievance Redressal by an NPS Intermediary

The NPS Trust has laid down the guidelines to be followed by all intermediaries in the NPS system while framing the Investor Grievance Redressal Policy. This should include the systems and procedure for receiving, registering and resolving grievances within defined timelines.

The intermediary should have a two-tier organisational structure to handle subscriber grievances, a designated senior management executive at the head office, and each branch to have an officer to handle grievances. The investor grievance redressal policy should cover the following activities:

- The right of the subscriber to seek redressal for deficiency in service offered by the intermediary;
- The details of the physical and online mode in which the grievance can be registered;
- The turnaround times for addressing the grievance, in line with the service level agreements with the NPS Trust;
- Generate a unique grievance number through the CGMS hosted by the CRA;
- Send an acknowledgement of receiving the grievance to the subscriber within 3 days and update this on the CGMS;
 - The acknowledgment should contain
 - the date of receipt of grievance,
 - unique token number,
 - the expected date of resolution,
 - details of the grievance officer handling said grievance, details of contact and address if the grievance has to be escalated to the next level in the organisation itself, NPS Trust and then Ombudsman,
 - method to track the progress of the grievance using the token number issued.
 - \circ If the grievance is resolved within 3 days, then the details of the resolution
- If the grievance does not pertain to the said intermediary, forward the grievance tithe concerned intermediary it pertains to within 3 working days under intimation to the subscriber;
- All Grievance to be resolved within 30 days of receipt;
- System to track grievance not resolved for more than 2 weeks of sending the acknowledgement and method to escalate it to the next level;
- Manner of intimating subscriber of resolution of grievance including details of the officer in charge of the grievance and the escalation available to the subscriber in case they are dissatisfied with the resolution;

- The CGMS is updated within 1 working day of intimating the subscriber;
- The records of grievances received and resolved should be maintained and details provided to the NPS Trust and PFRDA;

Grievance Redressal by the NPS Trust

The NPS Trust has laid down the procedure for registering a complaint against the Trust for services provided by it under the NPS.

The grievance can be raised by:

- (a) Email to grievances@npstrust.org.in
- (b) Letters addressed to the Grievance Redressal Officer, NPS Trust
- (c) Registering the complaint on the CGMS provided by the CRA using the login and password issued to the subscriber

Grievances received by email or letters are also registered on the CGMS and a unique grievance number generated under CGMS is issued to the subscriber for future reference. The complaint letter/email should contain the PRAN/ Application number/ other relevant reference number, Complainant's name, address and contact details and copies of supporting documents, wherever applicable. An acknowledgement is sent to the subscriber, acknowledging the receipt of the grievance within 3 days and is updated on the CGMS.

- The acknowledgment should contain
 - the date of receipt of grievance,
 - o unique grievance number,
 - the expected date of resolution,
 - details of the grievance officer handling said grievance, grievance escalation matrix with contact details and address (includes organizational levels and Ombudsman)
 - manner and mode of tracking resolution of grievance / complaint with the Unique Grievance Number.
- If the grievance is resolved within 3 days, then the details of the resolution shall also be communicated along with the acknowledgement to the complainant.

If the grievance does not pertain to the Trust, then it shall forward the grievance to the concerned intermediary(s) within 3 working days under intimation to the subscriber. All Grievance should be resolved within 30 days of receipt.

There will be a system to track grievances not resolved for more than 2 weeks of sending the acknowledgement and the same will be escalated to the Chief Grievance Redressal Officer of the NPS.

The subscriber/complainant shall be intimated on resolution of grievance/complaint. The intimation of resolution shall contain the Date of receipt of complaint/grievance, Unique Grievance Number, Name, Designation and Contact details of Officer signing the communication, procedure of representing the mater to Ombudsman and PFRDA in case of non-satisfactory resolution of grievance, within the time specified in the regulation. The complaint shall be treated as closed if the complainant has not responded within forty-five days of the receipt of the written response from NPS Trust.

Any subscriber whose grievance has not been resolved within thirty days from the date of submission of the grievance to the National Pension System Trust, or who is not satisfied with the resolution provided by the National Pension System Trust or where the grievance is raised against the NPS Trust and has not been resolved within 30 days, shall prefer an appeal to the Ombudsman against the concerned intermediary or entity. The appeal has to be filed in writing by the complainant or their authorized representative within the specified time period. The ombudsman can call for information from both parties and hold oral proceedings. The Ombudsman will strive for an amicable settlement of dispute but if a settlement does not materialize then the ombudsman will adjudicate in the matter and issue an award within 90 days from the date of filing the appeal. Within 15 days of the award either party can request for correction of any computation or other clerical errors. Within 30 days of the award a party to the complaint can seek review with the PFRDA. The award of the ombudsman or PFRDA has to be implemented within 30 days. If this is not done it can lead to suspension of registration and other actions laid out in the regulations.

Every grievance shall be disposed within a period of 30 days of its receipt and a final reply shall be sent to the complainant, containing details of resolution or rejection of the complaint, with reasons thereof recorded in writing. A grievance shall be considered as disposed and closed in any of the following instances, namely:

- when the intermediary or entity regulated by PFRDA has acceded to the request of the complainant fully;
- where the complainant has indicated in writing, its acceptance of the response of the intermediary or entity regulated by PFRDA;
- where the complainant has not responded within forty-five days of the receipt of the written response of the intermediary or entity regulated by PFRDA;
- where the Grievance Redressal Officer has certified under intimation to the subscriber that the intermediary or entity regulated by PFRDA has discharged its contractual, statutory and regulatory obligations and therefore closes the complaint;
- where the complainant has not preferred any appeal within forty-five days from the date of receipt of resolution or rejection of the grievance communicated by the intermediary or entity regulated by PFRDA or the National Pension System Trust, as the case may be;
- where the decision of the Ombudsman in appeal has been communicated to such complainant:

The closure shall not be applicable where the Ombudsman or PFRDA, as the case may be has allowed filing of the appeal/revision, beyond the specified period.

Sample Questions

- 1. Which of the following is a responsibility of a Self Regulatory Organisation (SRO)?
- a. Make regulations on specific areas allowed by the regulator
- b. Enforce the regulations made by the regulator of the industry
- c. Encourage best practices amongst members
- d. Create a code of ethics to be followed by its employees

2. Who manages the issuance of Central and State Government securities?

- a. Securities and Exchange Board of India
- b. Ministry of Finance
- c. The central government
- d. The Reserve Bank of India
- 3. Who is the chief regulator of securities markets in India?
- a. Pension Fund Regulatory and Development Authority
- b. Securities and Exchange Board of India
- c. Reserve Bank of India
- d. Ministry of Finance
- 4. The maximum time within which the Ombudsman shall pass an award after an appeal is filed with it under the NPS is
- a. 3 weeks
- b. 4 weeks
- c. 90 days
- d. 30 days

Annexure 1: Composite Subscriber Registration Form (CSRF1)

er-2)			CSRF
	NATIONAL PENSION	SYSTEM (NPS)	
	SUBSCRIBER REGIST	RATION FORM	
	Please Select your Category [Please t	tick(√)]	Affix recent colour
To	Government Sector		photograph
lo,		Corporate Sector	of 3.5 cm X 2.5 cm
National Pension System Trust.	All Citizen Model	NPS Lite/Swavalamban	size
Dear Sir/Madam,	e onened in my name as nor the particulars	given below:	
	e opened in my name as per the particulars e form in English and BLOCK letters with black	s given below. k ink pen. (Refer general guidelines at instructions page	
	From an English and DEOOK IEliers with Didd	white peak (merer general guidelines at instructions page	
1. PERSONAL DETAILS: Name of Applicant in full	Shri 🗌 Smt. 🗌 Kumari 🗍		
First Name*		$\vec{ }$	
Middle Name			
Last Name			
Date of Birth* d	d / m m / y y y y (Da	ate of Birth should be supported by relevant document	ary proof)
Gender* [Please tick $(\sqrt{)}$] Ma	ale Female Others		
Father's Name*	 r s t M	iddle Ie Las	t
(Refer Sr. No. 1 of instructions)			
2. IDENTITY DETAILS* (Any one of the	e documents need to be provided)		
PAN	Aadhaar	Voter ID	
Passport	Others Name of the ID		e refer Sr. No. 2 of the instructions.
3. CORRESPONDENCE ADDRESS			
Flat/Room/Door/Block no.		Landmark	
Premises/Building/Village			
Road/Street/Lane Area/Locality/Taluk			
City/Town/District		PIN Code	
State/U.T.			n t r v
State/0.1.			11 L I Y
4. PERMANENT ADDRESS DETAIL	LS Tick (√) in the box in case the a	address is same as above.	
Flat/Room/Door/Block no.		Landmark	
Premises/Building/Village			
Road/Street/Lane			
Area/Locality/Taluk			
City/Town/District		PIN Code	
State/U.T.		C O U	n t r y
Proof of Address (Correspondence			
		tion Card Registered Lease Sale age	reement of residence
		ners (please specify)	
*Not more than 3 months old. Please re	eter Sr. No. 2 of the instructions		
5. CONTACT DETAILS			
Landline Phone (with STD Code)		Mobile + 9 1	
Email ID			
Do you want to subscribe to SN	IS Alerts : Yes No Mobile nun	nber is essential for receiving sms alerts regarding your	NPS account
6. OTHER DETAILS (Please refer to \$	Sr no. 3 of the instructions)		
Occupation Details [please t	ick(√)]		
	overnment Sector Dublic Sector D	Business Professional	Agriculture
	udent Other (please specify)		
Homemaker St	Politically exposed person Rela	ated to Politically exposed Person	
Homemaker St			and above
Please Tick If Applicable	Upto 1 lac 1 lac to 5 lac 5 lac	Graduate Masters Professionals (C	A, CS, CMA, etc.)
 Please Tick If Applicable Income Range (per annum) Educational Qualifications 	Upto 1 lac 1 lac to 5 lac 5 lac Below SSC SSC HSC 0	Graduate Masters Professionals (C	A, CS, CMA, etc.)
 Please Tick If Applicable Income Range (per annum) Educational Qualifications 	Upto 1 lac 🗌 1 lac to 5 lac 🗌 5 lac	Graduate 🗌 Masters 🗌 Professionals (C	A, CS, CMA, etc.)
 Please Tick If Applicable Income Range (per annum) Educational Qualifications SUBSCRIBER BANK DETAILS (Upto 1 lac 1 lac to 5 lac 5 lac Below SSC SSC HSC 0 Please refer to Sr no. 4 of the instructions)	Graduate Aasters Professionals (C	A, CS, CMA, etc.)
 Please Tick If Applicable Income Range (per annum) Educational Qualifications SUBSCRIBER BANK DETAILS (Account Type [please tick(\sqrt{y})] 	Upto 1 lac 1 lac to 5 lac 5 lac Below SSC SSC HSC 0 Please refer to Sr no. 4 of the instructions)	Graduate Masters Professionals (C	A, CS, CMA, etc.)
 Please Tick If Applicable Income Range (per annum) Educational Qualifications SUBSCRIBER BANK DETAILS (Account Type [please tick(\scrimes)] Bank A/c Number 	Upto 1 lac 1 lac to 5 lac 5 lac Below SSC SSC HSC 0 Please refer to Sr no. 4 of the instructions)	Graduate Masters Professionals (C	A, CS, CMA, etc.)
 Please Tick If Applicable Income Range (per annum) Educational Qualifications SUBSCRIBER BANK DETAILS (Account Type [please tick(\sqrt{y})] Bank A/c Number Bank Name 	Upto 1 lac 1 lac to 5 lac 5 lac Below SSC SSC HSC 0 Please refer to Sr no. 4 of the instructions)	Graduate Masters Professionals (C	A, CS, CMA, etc.)
 Please Tick If Applicable Income Range (per annum) Educational Qualifications SUBSCRIBER BANK DETAILS (Account Type [please tick(\sqrt{y}] Bank A/c Number Bank Name Branch Name 	Upto 1 lac 1 lac to 5 lac 5 lac Below SSC SSC HSC 0 Please refer to Sr no. 4 of the instructions)		
 Please Tick If Applicable Income Range (per annum) Educational Qualifications SUBSCRIBER BANK DETAILS (Account Type [please tick(\sqrt{y}] Bank A/c Number Bank Name Branch Name 	Upto 1 lac 1 lac to 5 lac 5 lac Below SSC SSC HSC 0 Please refer to Sr no. 4 of the instructions) Saving A/c Current A/c 1 Saving A/c State/U.T.		

-2)										
B. SUB	SCRIBERS	OMINATION DETAIL	.S* (Please refe	er to Sr. No . 5	of the instructio	ns)				
Nam	ne of the Nomi	inee (You can nominate	up to a maximun	n of 3 nominees	s and if you des	ire so p	lease fill in Ann	exure III (Additiona	I Nomination Form) p	provided separately
Nom	ninee Name	First		M i	d d l e			Last		
Rela	tionship with	the Nominee	West Wester	Weiter Witten	Date	of Birth	h (In case of	Minor) dd	1 m m 1 v	
		an Details (in case of	a minor)		Duto	or bird	in (in cube of			1 1 1
	ninee's Guardi	and the second second second second		M i	i d d l e]_[_]	Last		
NPS	OPTION DE	TAILS (Please tick (v) :	as applicable)							
		scribe for Tier II Acco			Swavala	mban s	subscribers).		l account is not avail	able for NPS Lite/
Iwo	uld like my PF	RAN to be printed in H	indi YES	S NO	If Yes, pl	ease s	ubmit details o	n Annexure II		
0. PEN	ISION FUND	(PF) SELECTION AN	D INVESTME	NT OPTION*						
	(i) Governme (a) LIC Pen (ii) NPS Lite/S (iii) All Citizen	ND SELECTION (Tie with following condi nt Sector: For Governmi ision Fund Limited (b) S wavalamban: NPS Lite 3 Model: Subscribers und Model: Subscribers shall	tions: ent Subscribers, BI Pension Fun Swavalamban is er All Citizen mo	the following F ds Pvt. Limited a group choice del has the opt	PFs act as defa (c) UTI Retire model where s tion to choose t	ult PFs ment S ubscril he avai	as per the guid Solutions Ltd. ber has a choic ilable PFs as p	delines issued by the of PF and investner their choice in the of the other t	ne Government: nent option as availa e table below.	ble with Aggregate
13		Name of the Pe	9.9		1				1911 21 21	
	LIC Densis	Contraction Contraction Const	nsion Fund		Please Tick			Availability of t	he Pension Funds	
	CONTRACTOR OF THE	on Fund Limited					Available to			
	Contraction and Action	on Funds Private Limited				-	Sovernment Sector			
		ment Solutions Limited						Available to	Available to All	Available to
	100 (Constant) (Constant)	lential Pension Funds Ma	ne	pany Limited				NPS Lite/ Swavalamban	Citizen Model*	Corporate Model*
	No. of Concession, Name	hindra Pension Fund Lim	Long to the second s			-				
		Capital Pension Fund Lin								
		nsion Management Comp of Pension Fund is mandate		and Auto Choic		0 pot in	dicate a choice	of PE please pote th	at it is deemed that	u have concented
1	(Please Tick (a harris and the second second			oorporate it	odel	Subscribers	/		
l	Active Choic For details on Ar 1. In case you 2. In case you	(\for \) in the box given be the Auto C uto Choice, please refer to do not indicate any inve- have opted for Auto Ch- nent will be made as per	to the Offer Doci stment option, y bice, DO NOT fill] ument. Please our funds will b	ent option). note: pe invested in A	uto Ch	oice		et Allocation instruction	ons will be ignore
(iii) / (iii) / []	Active Choic For details on A 1. In case you 2. In case you and investn ASSET ALLO Asset Class %	Auto C uto Choice, please refer do not indicate any inver- have opted for Auto Cho- nent will be made as per- DCATION (to be filled E (Cannot exceed 50%) BY SUBSCRIBER* (P	Choice to the Offer Doc stment option, y ice, DO NOT fill Auto Choice. C C lease refer to Sr	ument. Please our funds will b l up section bel ase you have G	ent option). note: be invested in A low relating to A e selected th Total	uto Chi Asset A e 'Act Note: 100%	oice Ilocation. In ca ive Choice' i - The total allo	se you do, the Asse investment opti cation across E, C allocation is left bl		s must be equal t
(iii) / (iii)	Active Choic For details on A 1. In case you and investin ASSET ALLO Asset Class % CLARATION E aration & Auth- her agree to be correct informati- her agree to be belete or partial w is) & T-pin on th correct informati- tional declarat re to de prescri- be for the prescri- boy declare that to peruse my fil d violating the pi	Auto C uto Choice, please refer do not indicate any inver- have opted for Auto Cho- nent will be made as per CATION (to be filled E (Cannot exceed 50%)	Choice to the Offer Doc stment option, y to the Offer Doc stment option, y to cont fil Auto Choice. Up only in ca C C C C C C C C C C C C C C C C C C C	ument. Please our funds will I I up section bel ise you have G r no. 6 of the in tional Pension belief. I under not hold any pr rovision of servi d by me. I shal an guidelines a 200/- and maxi scribed. ct, 2002 f has been der	ent option). note: pe invested in A low relating to A e selected th Total structions) System and he take to inform in re-existing acco vices by CRA, 1 II be bound by ti and I meet the p imum of Rs. 12 ived from legally	uto Chu ssset A e 'Act Note: 100% applic reby ac mmedia unt unc rom tin ne term rescrib: 000/-, 1	oice llocation. In ca: ive Choice' i - The total allo . In case, the cation shall be gree to the sam ately the Centra ter NPS. I und her NPS. I und her o time and us and condition ped eligibility cr failing which th red and assess	se you do, the Asse investment opti cation across E, C allocation is left bi rejected. e and declare that t al Record Keeping erstand that I shall I any amendment th ns for the usage of iteria for assistance e Central Governm	and G asset classe ank and/or does no he information and d Agency/National Per fully liable for sub information and d agency/National Per information and d agency/National Per fully liable for sub information agency/National Per fully liable for sub informatio	s must be equal to t equal 100%, the occuments furnishen nsion System Trus mission of any falt sy PFRDA, wheth /NPSCAN and vice I also undertake ditted to my accou
(iii) / (iii) / (iii) / Decl. I hava detai Addi Addi Addi Addi founce Decl. De	Active Choic For details on A 1. In case you and investin ASSET ALLO Asset Class % CLARATION E aration & Auth- her agree to be correct informati- her agree to be belete or partial w is) & T-pin on th correct informati- tional declarat re to de prescri- be for the prescri- boy declare that to peruse my fil d violating the pi	Auto C Auto Choice, please refer do not indicate any inver- have opted for Auto Cho- near visual provides a sper- CATION (to be filled (Cannot exceed 50%) Cannot exceed 50%) Ary SUBSCRIBER* (P orization by all subscri restod the terms and cor porcer, to the best of my above information furnis- bound by the terms and ithout any new declaration the CAR website. Ion by Sawalamban sid do the and understood ibed contribution limit of ng with such interest rate the contribution paid by nancial profile or share the rowslows of any law relation of any law relation of the set of the contribution paid by the contribution paid by and any law relation of the set of the se	Choice to the Offer Doc stment option, y to the Offer Doc stment option, y to cont fil Auto Choice. Up only in ca C C C C C C C C C C C C C C C C C C C	ument. Please our funds will I I up section bel ise you have G r no. 6 of the in tional Pension belief. I under not hold any pr rovision of servi d by me. I shal an guidelines a 200/- and maxi scribed. ct, 2002 f has been der	ent option). note: pe invested in A low relating to A e selected th Total structions) System and he take to inform in re-existing acco vices by CRA, 1 II be bound by ti and I meet the p imum of Rs. 12 ived from legally	uto Chu ssset A e 'Act Note: 100% applic reby ac mmedia unt unc rom tin ne term rescrib: 000/-, 1	oice Ilocation. In car ive Choice' i - The total allo 5. In case, the cation shall be gree to the sam ately the Centra der NPS. I under ne to time and is and condition the deligibility cr failing which the red and assess urther agree the state of the sam the contract of the sam the	se you do, the Asse investment opti- cation across E, C allocation is left bl rejected. e and declare that t al Record Keeping erstand that I shall I any amendment th ns for the usage of iteria for assistance e Central Governm sed sources of inco at NPS Trust has t	and G asset classe ank and/or does no he information and d Agency/National Per be fully liable for sub lereof as approved l per fully liable for sub lereof as approved punder the scheme. e under the scheme. me. I understand tha he right to close my	s must be equal t t equal 100%, the ocuments furnishen nsion System Trus mission of any fait syp PFRDA, wheth //NPSCAN and vie I also undertake dited to my accou
(iii) / (iii) / (iii) / (iii) / Decl. I have by m of an of a	Active Choic For details on A 1. In case you and investin ASSET ALLO Asset Class % CLARATION E aration & Auth- her agree to be correct informati- her agree to be belete or partial w is) & T-pin on th correct informati- tional declarat re to de prescri- be for the prescri- boy declare that to peruse my fil d violating the pi	Auto C Auto Choice, please refer do not indicate any inver- have opted for Auto Cho- near visual provides a sper- CATION (to be filled (Cannot exceed 50%) Cannot exceed 50%) Ary SUBSCRIBER* (P orization by all subscri restod the terms and cor porcer, to the best of my above information furnis- bound by the terms and ithout any new declaration the CAR website. Ion by Sawalamban sid do the and understood ibed contribution limit of ng with such interest rate the contribution paid by nancial profile or share the rowslows of any law relation of any law relation of the set of the contribution paid by the contribution paid by and any law relation of the set of the se	Choice to the Offer Doc stment option, y to the Offer Doc stment option, y to cont fil Auto Choice. Up only in ca C C C C C C C C C C C C C C C C C C C	ument. Please our funds will I I up section bel ise you have G r no. 6 of the in tional Pension belief. I under not hold any pr rovision of seru- id by me. I shal an guidelines a 200/- and maxi scribed. ct, 2002 f has been deri	ent option). note: pe invested in A low relating to A e selected th Total structions) System and he take to inform in re-existing acco vices by CRA, 1 II be bound by ti and I meet the p imum of Rs. 12 ived from legally	uto Chu ssset A e 'Act Note: 100% applic reby ac mmedia unt unc rom tin ne term rescrib: 000/-, 1	oice llocation. In car ive Choice' i - The total allo b. In case, the cation shall be gree to the sam ately the Centra ter NPS. I undt ne to time and is and condition ped eligibility cr red and assess urther agree th Signature/	se you do, the Asse investment opti cation across E, C allocation is left bl rejected. e and declare that t al Record Keeping erstand that I shall I any amendment th ns for the usage of iteria for assistanci e Central Governm sed sources of inco at NPS Trust has t	and G asset classe ank and/or does no he information and d Agency/National Per fully liable for sub information and d agency/National Per information and d agency/National Per fully liable for sub information agency/National Per fully liable for sub informatio	s must be equal t t equal 100%, th ocuments furnishn nsion System Tru- mission of any fai- by PFRDA, wheth /NPSCAN and vie 1 also undertake ditted to my accou- t NPS Trust has th PRAN in case I a
(iii) / (iii) / (iii) / Decl. I have of an of an	Active Choic For details on A 1. In case you and investin ASSET ALLO Asset Class % CLARATION E aration & Auth- her agree to be correct informati- her agree to be belete or partial w is) & T-pin on th correct informati- tional declarat re to de prescri- be for the prescri- boy declare that to peruse my fil d violating the pi	Auto C Auto Choice, please refer do not indicate any inver- have opted for Auto Cho- near visual provides a sper- CATION (to be filled (Cannot exceed 50%) Cannot exceed 50%) Ary SUBSCRIBER* (P orization by all subscri restod the terms and cor porcer, to the best of my above information furnis- bound by the terms and ithout any new declaration the CAR website. Ion by Sawalamban sid do the and understood ibed contribution limit of ng with such interest rate the contribution paid by nancial profile or share the rowslows of any law relation of any law relation of the set of the contribution paid by the contribution paid by and any law relation of the set of the se	Choice to the Offer Doc stment option, y to the Offer Doc stment option, y to cont fil Auto Choice. Up only in ca C C C C C C C C C C C C C C C C C C C	ument. Please our funds will t I up section bel isse you have G r no. 6 of the in titional Pension belief. I undert not hold any pr rovision of serv d by me. I shal an guidelines a 000/- and maxi scribed f has been derir with other gove n of money laur	ent option). note: pe invested in A low relating to A e selected th Total structions) System and he take to inform in re-existing acco vices by CRA, 1 II be bound by ti and I meet the p imum of Rs. 12 ived from legally	e 'Act Note: 100% applid unt unc reby ac mmedia unt unc rescritt / declat	oice llocation. In car ive Choice' i - The total allo b. In case, the cation shall be gree to the sam ately the Centra ter NPS. I undt ne to time and is and condition ped eligibility cr red and assess urther agree th Signature/	se you do, the Asse investment opti cation across E, C allocation is left bl rejected. e and declare that t al Record Keeping erstand that I shall I any amendment th ns for the usage of iteria for assistanci e Central Governm sed sources of inco at NPS Trust has t	and G asset classe ank and/or does no he information and d Agency/National Pei be fully liable for sub hereof as approved t l-pin (to access CRA e under the scheme, hent contribution crea- me. I understand tha he right to close my bion* of Subscrib	s must be equal t t equal 100%, the occuments furnish nsion System Trus mission of any fait by PFRDA, wheth /NPSCAN and vie 1 also undertake ditted to my accou t NPS Trust has th PRAN in case I a
(iii) / (iii) / (iii) / Decl. Ihave by m of an of an o	Active Choic For details on A 1. In case you and investin ASSET ALLO Asset Class % CLARATION E aration & Auth- her agree to be correct informati- her agree to be belete or partial w is) & T-pin on th correct informati- tional declarat re to de prescri- be for the prescri- boy declare that to peruse my fil d violating the pi	Auto C Auto C Auto Choice, please refer ido not indicate any inver- have opted for Auto Cho- henet will be made as per CATION (to be filled E (Cannot exceed 50%) Cannot exceed 50%) BY SUBSCRIBER* (P orization by all subscri restod the terms and cor correct, to the best of my above information furnis- bound by the terms and above information furnis- tion by Sawalambans sid to the contribution inimit of igo with such interest rate the contribution paid by hancial profile or share the torvisions of any law relat (mm / y y y	Choice to the Offer Doc stment option, y to the Offer Doc stment option, y to cont fil Auto Choice. Up only in ca C C C C C C C C C C C C C C C C C C C	ument. Please our funds will t I up section bel isse you have G r no. 6 of the in titional Pension belief. I undert not hold any pr rovision of serv d by me. I shal an guidelines a 000/- and maxi scribed f has been derir with other gove n of money laur	ent option). note: pe invested in A low relating to A e selected th Total istructions) System and he take to inform in re-existing acco vices by CRA, 1 II be bound by th and I meet the p imum of Rs. 12 viced from legally remnent authorin indering.	e 'Act Note: 100% applid unt unc reby ac mmedia unt unc rescritt / declat	oice llocation. In car ive Choice' i - The total allo b. In case, the cation shall be gree to the sam ately the Centra ter NPS. I undt ne to time and is and condition ped eligibility cr red and assess urther agree th Signature/	se you do, the Asse investment opti cation across E, C allocation is left bl rejected. e and declare that t al Record Keeping erstand that I shall I any amendment th ns for the usage of iteria for assistanci e Central Governm sed sources of inco at NPS Trust has t	and G asset classe ank and/or does no he information and d Agency/National Pei be fully liable for sub hereof as approved t l-pin (to access CRA e under the scheme, hent contribution crea- me. I understand tha he right to close my bion* of Subscrib	s must be equal t t equal 100%, th ocuments furnishn nsion System Tru- mission of any fai- by PFRDA, wheth /NPSCAN and vie 1 also undertake ditted to my accou- t NPS Trust has th PRAN in case I a
(iii) / (iii) / (iii) / (iii) / Decl. Have by m of an of an	Active Choic For details on A 1. In case you and investin ASSET ALLO Asset Class % CLARATION E aration & Auther e read and unde e are true and c y change in the correct informati er act and unde e are true and c y change in the correct informati er act and unde e are true and c y change in the correct informati er act and unde e are true and c y change in the correct informati er act and unde e are true and c y change in the correct informati er act and unde e are true and c peruse my find d violating the pre- event of the pre- set of the Subsc	Auto C Auto C uto Choice, please refer do not indicate any inver- have opted for Auto Cho- have opted for Auto Cho- have opted for Auto Cho- have opted for Auto Cho- material and the server of the server CATION (to be filled (Cannot exceed 50%) Y SUBSCRIBER* (P forization by all subscri restod the terms and cor for or correct, to the best of my above information furnis ion or documents. bound by the terms and thouse the terms and cor for a documents. bound by the terms and thou the terms and thouse the served ib do contribution limit of ng with such interest rate he Prevention of Mone the contribution paid by hancial profile or share the rovisions of any law relat / m m / y y fiber:	Choice to the Offer Doc stment option, y to the Offer Doc stment option, y to cont fil Auto Choice. Up only in ca C C C C C C C C C C C C C C C C C C C	ument. Please our funds will t I up section bel isse you have G r no. 6 of the in titional Pension belief. I undert not hold any pr rovision of serv d by me. I shal an guidelines a 000/- and maxi scribed f has been derir with other gove n of money laur	ent option). note: pe invested in A low relating to A e selected th Total istructions) System and he take to inform in re-existing acco vices by CRA, 1 II be bound by th and I meet the p imum of Rs. 12 viced from legally remnent authorin indering.	e 'Act Note: 100% applid unt unc reby ac mmedia unt unc rescritt / declat	oice llocation. In car ive Choice' i - The total allo b. In case, the cation shall be gree to the sam ately the Centra ter NPS. I undt ne to time and is and condition ped eligibility cr red and assess urther agree th Signature/	se you do, the Asse investment opti cation across E, C allocation is left bl rejected. e and declare that t al Record Keeping erstand that I shall I any amendment th ns for the usage of iteria for assistanci e Central Governm sed sources of inco at NPS Trust has t	and G asset classe ank and/or does no he information and d Agency/National Pei be fully liable for sub hereof as approved t l-pin (to access CRA e under the scheme, hent contribution crea- me. I understand tha he right to close my bion* of Subscrib	s must be equal t t equal 100%, th ocuments furnishn nsion System Tru- mission of any fai- by PFRDA, wheth /NPSCAN and vie 1 also undertake ditted to my accou- t NPS Trust has th PRAN in case I a
(iii) / (iii) / (iii) / (iii) / Decl. I hav by m of an or inc Unate adhe may Decl. I hav by m of an or inc thav by m of an or inc thav thav by m of an or inc thav thav by m of an or inc thav thav thav thav thav thav thav thav	Active Choic For details on Al 1. In case you and investm ASSET ALLO Asset Class % CLARATION E aration 8 Auth er erad and unde e are true and 0 y change in the correct informati e are to be point of the agree to be plete or partial w IS) & T-pin of the agree to be to the agree to the agree to th	Auto C Auto C uto Choice, please refer do not indicate any inver- have opted for Auto Cho- have opted for Auto Cho- have opted for Auto Cho- have opted for Auto Cho- material and the server of the server CATION (to be filled (Cannot exceed 50%) Y SUBSCRIBER* (P forization by all subscri restod the terms and cor for or correct, to the best of my above information furnis ion or documents. bound by the terms and thouse the terms and cor for a documents. bound by the terms and thou the terms and thouse the served ib do contribution limit of ng with such interest rate he Prevention of Mone the contribution paid by hancial profile or share the rovisions of any law relat / m m / y y fiber:	Choice to the Offer Doc stment option, y sice, DO NOT fil Auto Choice. up only in ca C Tease refer to Sr bers diftions of the Na knowledge and hed by me. I do conditions of pin n being furnishe abscriber the Swavalambb minimum Rs. 11 s as may be pre- y Laundering A me/on my behal he information, v ing to preventior y y y	ACKN	ent option). note: pe invested in A low relating to A e selected th Total istructions) System and he take to inform in re-existing acco vices by CRA, 1 II be bound by th and I meet the p imum of Rs. 12 viced from legally remnent authorin indering.	e 'Act Note: 100% applid unt unc reby ac mmedia unt unc rescritt / declat	oice llocation. In car ive Choice' i - The total allo b. In case, the cation shall be gree to the sam ately the Centra ter NPS. I undt ne to time and is and condition ped eligibility cr red and assess urther agree th Signature/	se you do, the Asse investment opti cation across E, C allocation is left bl rejected. e and declare that t al Record Keeping erstand that I shall I any amendment th ns for the usage of iteria for assistanci e Central Governm sed sources of inco at NPS Trust has t	and G asset classe ank and/or does no he information and d Agency/National Pei be fully liable for sub hereof as approved t l-pin (to access CRA e under the scheme, hent contribution crea- me. I understand tha he right to close my bion* of Subscrib	s must be equal t t equal 100%, the occuments furnish nsion System Trus mission of any fait by PFRDA, wheth /NPSCAN and vie 1 also undertake ditted to my accou t NPS Trust has th PRAN in case I a
(iii) / (iii) / Decl. I. DEC Decl. I.hav by m of an or inc Unav detai detai detai Addi I.hav detai Comtr Plac Contr	Active Choic For details on Al 1. In case you and investm ASSET ALLO Asset Class % CLARATION E aration 8 Auth er erad and unde e are true and 0 y change in the correct informati e are to be point of the agree to be plete or partial w IS) & T-pin of the agree to be to the agree to the agree to th	Auto C Auto C uto Choice, please refer do not indicate any inver- have opted for Auto Cho- have opted for Auto Cho- have opted for Auto Cho- have opted for Auto Cho- have opted for Auto Cho- restance of a second second second (Cannot exceed 50%) GY SUBSCRIBER* (Po- for and the terms and cor- or correct, to the best of my above information furnisis on of documents. bound by the terms and dow and understood ibed contribution limit of ng with such interest rate he Pervention of Mone the contribution paid by nancial profile or share the rovisions of any law relat / m m / y y riber: the Remitted:	Choice to the Offer Doc stment option, y loce, DO NOT fil Auto Choice. up only in ca C lease refer to Si bers C lease refer to Si bers loc conditions of the Na knowledge and hed by me. I don it conditions of prin in being furnishe ubscriber the Swavalambic minimum Rs. I (or y Laundering A me/on my behalt y Laundering A me/on my behalt y Laundering A me/on my behalt to prevention y Laundering A me/on my behalt to prevention y Laundering A me/on my behalt to but the state of the state to but the state of the state to but the state of the state the state of the state of the state the state of the state of the state the state of the state of the state of the state the state of the state of t	ument. Please our funds will t I up section bel isse you have G r no. 6 of the in titional Pension belief. I undert not hold any pr rovision of serv rovision of serv d by me. I shal an guidelines a D00/- and maxi scribed f has been derir with other gove n of money laur	ent option). note: pe invested in A low relating to A e selected th Total structions) System and he take to inform in e-existing acco vices by CRA, 1 ll be bound by th and I meet the p ived from legally rmment authori ndering.	uto Chi isset A e 'Act 100% applit unt unc rom tin ne term v declai v declai iss. I fi	oice llocation. In car ive Choice' i - The total allo 5. In case, the cation shall be gree to the sam ately the Centra der NPS. I under ne to time and is and condition red eligibility cr failing which th red and assess urther agree th Signature/ (* LT	se you do, the Asse investment opti cation across E, C allocation is left bl rejected. e and declare that t al Record Keeping erstand that I shall I any amendment th ns for the usage of iteria for assistance e Central Governm sed sources of inco at NPS Trust has t	and G asset classe ank and/or does no he information and d Agency/National Pei be fully liable for sub hereof as approved t l-pin (to access CRA e under the scheme, hent contribution crea- me. I understand tha he right to close my bion* of Subscrib	s must be equal t t equal 100%, th ocuments furnish nsion System Tru mission of any fai by PFRDA, wheth /NPSCAN and vie 1 also undertake ditted to my accou t NPS Trust has t PRAN in case 1 a

	GREGATOR Applicable to Governm	nent Subscribers only	
	Employment Details to be filled and	attested by the Deptt. (All Details are Ma	
Date of Joining d d /	m m I y y y y	Date of Retirement d	d I m m I y y y y
Employee Code/ID			
Group of Employee (Tick as applicable)	Group A Group B	Group C Group	D
Office			
Department			
Ministry			
DDO Registration Number	* * * * * * * * * *		
DTO/PAO/CDDO/DTA/PrAO Registration N	umbor	Basic Pav	
		Dasiciay	
Pay Scale			
It is certified that the details provided in t ncluding the address and employment deta		e record of the employee maintained by us	employed with us Also, it is further certified that he/she ha
read entries/entries have been read over to			-
Signature of the Authorised person (In the box above)	Rubber Stamp of the DDO (In the box above)	Signature of the Authorised person (In the box above)	Rubber Stamp of the DTO/PAO/CDDO/ DTA/PrAO (In the box above)
Designation of the Authorised Person		Designation of the Authorised Perso	
Name of the DDO		Name of DTO/PAO/CDDO/DTA/PrAO	
Deptt/Ministry		Date dd/mm/m//y	у у у
	Applicable to Corpor	ate Subscribers only	
(Subscribe		ate Subscribers only attested by Corporate (All Details are Mand	atory))
Date of Joining d d /	m m I y y y y	Date of Retirement	d d 1 m m 1 y y y
Employee ID			
Corporate Regd. No Allotted by CRA		CBO No. allotted by CRA	
Certified that the details provided in this sub-	aribar registration form by	CBC NO. another by CNA	employed with us, includin
the employment details provided above are	as per the service record of the employe	e maintained by us. Also, it is further certified	
have been read over to him / her by us and	got confirmed by him / her.		
	Date d d	I m m I y y y y	
	Diase		
Signature of the Authorized Person (Ir	n the box above) Place		Rubber Stamp of the Corporate
Signature of the Authorized Person (In Designation of the Authorized Person:	n the box above) Place		Rubber Stamp of the Corporate (In the box above)
Designation of the Authorized Person:	The box above)	I Citizen Model or Corporate subscribers	(In the box above)
Designation of the Authorized Person:	The box above)	I Citizen Model or Corporate subscribers POP-SP Registration Nu	(In the box above)
Designation of the Authorized Person:	The box above)		(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof. Copy of PAN card submitted YES	Filled by POP-SP (Only in case of Al		(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof: Copy of PAN card submitted YES Existing Bank Customer:	filled by POP-SP (Only in case of Al	POP-SP Registration Nu Compliance YES NO	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof: Copy of PAN card submitted YES Existing Bank Customer: We hereby certify/confirm that Shri/Smt/Ku Bank account no	e filled by POP-SP (Only in case of Al	POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof: Copy of PAN card submitted YES Existing Bank Customer: I/we hereby certify/confirm that Shri/Smt/Ku Bank account no or opening NPS account have been fully cr	filled by POP-SP (Only in case of Al filled by POP-SP (Only in case o	POP-SP Registration Nu Compliance YES NO is an existing customer	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof: Copy of PAN card submitted YES Existing Bank Customer: We hereby certify/confirm that Shri/Smt/Ku Bank account no for opening NPS account have been fully cr is not a 'Basic Savings Bank Deposit Accou dhaar Based KYC Certificate: Not Manc	a filled by POP-SP (Only in case of Al a filled by POP-SP	POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba S. B. a/c of Sh/Smt/Kum	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof: Copy of PAN card submitted YES Existing Bank Customer: Ave hereby certify/confirm that Shri/Smt/Ku Bank account no for opening NPS account have been fully cr is not a 'Basic Savings Bank Deposit Accou Alchaer Based KYC Certificate: Not Manc I/we hereby certify that Aadhaar Number	filled by POP-SP (Only in case of Al filled by POP-SP (Only in case of Al NO KYC im at bran pomplied with. We further confirm that the unt'. Jatory	POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba a S. B. a/c of Sh/Smt/Kum Sh/Smt/Kum	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof: Copy of PAN card submitted YES Existing Bank Customer: Wave hereby certify/confirm that Shri/Smt/Ku Bank account no or opening NPS account have been fully cr is not a Basic Savings Bank Deposit Accou Althara Based KYC Certificate: Not Manc Wave hereby certify that Aadhaar Number thecked and the name and address mentio	filled by POP-SP (Only in case of Al filled by POP-SP (Only in case of Al NO KYC im at bran pomplied with. We further confirm that the unt'. Jatory	POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba a S. B. a/c of Sh/Smt/Kum Sh/Smt/Kum atching with that mentioned on NPS applica	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof: Copy of PAN card submitted YES Existing Bank Customer: Ave hereby certify/confirm that Shri/Smt/Ku Bank account no for opening NPS account have been fully cr is not a 'Basic Savings Bank Deposit Accou Alchaer Based KYC Certificate: Not Manc I/we hereby certify that Aadhaar Number	filled by POP-SP (Only in case of Al filled by POP-SP (Only in case of Al NO KYC im at bran pomplied with. We further confirm that the unt'. Jatory	POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba a S. B. a/c of Sh/Smt/Kum Sh/Smt/Kum atching with that mentioned on NPS applica Name:	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof: Copy of PAN card submitted YES Existing Bank Customer: Wave hereby certify/confirm that Shri/Smt/Ku Bank account no or opening NPS account have been fully cr is not a Basic Savings Bank Deposit Accou Althara Based KYC Certificate: Not Manc Wave hereby certify that Aadhaar Number thecked and the name and address mentio	filled by POP-SP (Only in case of Al filled by POP-SP (Only in case of Al NO KYC im at bran pomplied with. We further confirm that the unt'. Jatory	POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba a S. B. a/c of Sh/Smt/Kum Sh/Smt/Kum atching with that mentioned on NPS applica	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof: Copy of PAN card submitted YES Existing Bank Customer: Wave hereby certify/confirm that Shri/Smt/Ku Bank account no or opening NPS account have been fully cr is not a Basic Savings Bank Deposit Accou Althara Based KYC Certificate: Not Manc Wave hereby certify that Aadhaar Number thecked and the name and address mentio	filled by POP-SP (Only in case of Al filled by POP-SP (Only in case of Al NO KYC im at bran pomplied with. We further confirm that the unt'. Jatory	POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba S. B. a/c of Sh/Smt/Kum Sh/Smt/Kum atching with that mentioned on NPS applica Name: Designation:	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof. Copy of PAN card submitted YES Existing Bank Customer: Wae hereby certify/confirm that Shri/Smt/Ku Bank account no is not a 'Basic Savings Bank Deposit Accoundant Based KYC Certificate: Not Manc U/We hereby certify that Addhaar Number thecked and the name and address mentio To be filled by POP-SP POP-SP Seal	filled by POP-SP (Only in case of Al in	POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba S. B. a/c of Sh/Smt/Kum Sh/Smt/Kum Name: Designation: y Date d d / m m	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof. Copy of PAN card submitted YES Existing Bank Customer: Wae hereby certify/confirm that Shri/Smt/Ku Bank account no is not a 'Basic Savings Bank Deposit Accoundant Based KYC Certificate: Not Manc U/We hereby certify that Addhaar Number thecked and the name and address mentio To be filled by POP-SP POP-SP Seal	filled by POP-SP (Only in case of Al in a standard stress of Al in a standard st	POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba S. B. a/c of Sh/Smt/Kum Sh/Smt/Kum atching with that mentioned on NPS applica Name: Designation:	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof. Copy of PAN card submitted YES Existing Bank Customer: We hereby certify/confirm that Shri/Sm/t/Ku Bank account no is not a "Basic Savings Bank Deposit Accound Adhaar Based KYC Certificate: Not Manc We hereby certify that Aadhaar Number checked and the name and address mentio To be filled by POP-SP POP-SP Seal POP-SP Seal Deci Authorisation by Aggregator's office (NL Certified that the subscriber is registered wi	if filled by POP-SP (Only in case of Al if is a second se	POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba s, B, a/c of Sh/Smt/Kum Sh/Smt/Kum Name: Designation: y Date d d / m m se of NPS Lite/Swavalamban Subscribers to join NPS. I hereby declare that the subscriber	(In the box above) (In the box a
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof. Copy of PAN card submitted YES Existing Bank Customer: We hereby certify/confirm that Shri/Sm/t/Ku Bank account no is not a "Basic Savings Bank Deposit Accound Adhaar Based KYC Certificate: Not Manc We hereby certify that Aadhaar Number checked and the name and address mentio To be filled by POP-SP POP-SP Seal POP-SP Seal Deci Authorisation by Aggregator's office (NL Certified that the subscriber is registered wi	if filled by POP-SP (Only in case of Al if is a second se	POP-SP Registration Nu Compliance YES NO Compliance YES NO Sh/Smt/Kum Sh/Smt/Kum Atching with that mentioned on NPS applica Name: Designation: Y Date d d / m m Sh of NPS Lite/Swavalamban Subscribers	(In the box above) (In the box a
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof. Copy of PAN card submitted YES Existing Bank Customer: We hereby certify/confirm that Shri/Sm/t/Ku Bank account no is not a "Basic Savings Bank Deposit Accound Adhaar Based KYC Certificate: Not Manc We hereby certify that Aadhaar Number checked and the name and address mentio To be filled by POP-SP POP-SP Seal POP-SP Seal Deci Authorisation by Aggregator's office (NL Certified that the subscriber is registered wi	if filled by POP-SP (Only in case of Al if is a second se	POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba s, B, a/c of Sh/Smt/Kum Sh/Smt/Kum Name: Designation: y Date d d / m m se of NPS Lite/Swavalamban Subscribers to join NPS. I hereby declare that the subscriber	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof. Copy of PAN card submitted YES Existing Bank Customer: Are hereby certify/confirm that Shri/Smt/Ku Bank account no for opening NPS account have been fully co is not a "Basic Savings Bank Deposit Accound the anse and address mentio To be filled by POP-SP POP-SP Seal Deci Authorisation by Aggregator's office (NL Certified that the subscriber is registered wi feclaration has been signed /thumb impress	filled by POP-SP (Only in case of Al in a case of Al	POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba e S. B. a/c of Sh/Smt/Kum atching with that mentioned on NPS applica besignation: y Date d d / m m se of NPS Lite/Swavalamban Subscribers to join NPS, I hereby declare that the subsc- after (s)he has read the entries/ entr	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof. Copy of PAN card submitted YES Existing Bank Customer: We hereby certify/confirm that Shri/Sm/t/Ku Bank account no is not a "Basic Savings Bank Deposit Accound Adhaar Based KYC Certificate: Not Manc We hereby certify that Aadhaar Number checked and the name and address mentio To be filled by POP-SP POP-SP Seal POP-SP Seal Deci Authorisation by Aggregator's office (NL Certified that the subscriber is registered wi	filled by POP-SP (Only in case of Al in a case of Al	POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba e S. B. a/c of Sh/Smt/Kum atching with that mentioned on NPS applica besignation: y Date d d / m m se of NPS Lite/Swavalamban Subscribers to join NPS, I hereby declare that the subsc- after (s)he has read the entries/ entr	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof. Copy of PAN card submitted YES Existing Bank Customer: Are hereby certify/confirm that Shri/Smt/Ku Bank account no for opening NPS account have been fully co is not a "Basic Savings Bank Deposit Accound the anse and address mentio To be filled by POP-SP POP-SP Seal Deci Authorisation by Aggregator's office (NL Certified that the subscriber is registered wi feclaration has been signed /thumb impress	filled by POP-SP (Only in case of Al in a case of Al	POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba e S. B. a/c of Sh/Smt/Kum atching with that mentioned on NPS applica besignation: y Date d d / m m se of NPS Lite/Swavalamban Subscribers to join NPS, I hereby declare that the subsc- after (s)he has read the entries/ entr	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof. Copy of PAN card submitted YES Existing Bank Customer: Are hereby certify/confirm that Shri/Smt/Ku Bank account no for opening NPS account have been fully co is not a "Basic Savings Bank Deposit Accound that Based KYC Certificate: Not Manc I/we hereby certify that Adhaar Numberhecked and the name and address mentio To be filled by POP-SP POP-SP Seal Decl Authorisation by Aggregator's office (NL Certified that the subscriber is registered wi feclaration has been signed /thumb impress Signature of the Authorised	filled by POP-SP (Only in case of Al in box above) filled by POP-SP (Only in case of Al	POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba e S. B. a/c of Sh/Smt/Kum atching with that mentioned on NPS applica besignation: y Date d d / m m se of NPS Lite/Swavalamban Subscribers to join NPS, I hereby declare that the subsc- after (s)he has read the entries/ entr	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof. Copy of PAN card submitted YES Existing Bank Customer: Are hereby certify/confirm that Shri/Smt/Ku Bank account no is no ta 'Basic Savings Bank Deposit Accound that Based KYC Certificate: Not Manc I/we hereby certify that Adhaar Number thecked and the name and address mentio To be filled by POP-SP POP-SP Seal Decl Authorisation by Aggregator's office (NL Certified that the subscriber is registered wi feclaration has been signed /thumb impress Signature of the Authorised Name of the Aggregator		POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba e S. B. a/c of Sh/Smt/Kum atching with that mentioned on NPS applica besignation: y Date d d / m m se of NPS Lite/Swavalamban Subscribers to join NPS. I hereby declare that the subsc- after (s)he has read the entries/ entr Rubber Stamp of the Agg	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof. Copy of PAN card submitted YES Existing Bank Customer: Are hereby certify/confirm that Shri/Smt/Ku Bank account no is no ta 'Basic Savings Bank Deposit Accound that Based KYC Certificate: Not Manc I/we hereby certify that Adhaar Number. thecked and the name and address mentio To be filled by POP.SP POP-SP Seal Decl Authorisation by Aggregator's office (NL Certified that the subscriber is registered wi feclaration has been signed /thumb impress Signature of the Authorised Name of the Aggregator NPS Lite Account Office (NL-AO) Registration		POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba e S. B. a/c of Sh/Smt/Kum atching with that mentioned on NPS applica besignation: y Date d d / m m se of NPS Lite/Swavalamban Subscribers to join NPS. I hereby declare that the subsc- after (s)he has read the entries/ entr Rubber Stamp of the Agg	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof. Copy of PAN card submitted YES Existing Bank Customer: We hereby certify/confirm that Shri/Smt/Ku Bank account nave been fully co is not a 'Basic Savings Bank Deposit Accound the anse and address mentio To be filled by POP-SP POP-SP Seal Decl Authorisation by Aggregator's office (NL Certified that the subscriber is registered wi declaration has been signed /thumb impress Signature of the Authorised Name of the Aggregator NPS Lite Account Office (NL-AO) Registratic Wembership No. allotted by Aggregator (if a		POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba e S. B. a/c of Sh/Smt/Kum atching with that mentioned on NPS applica besignation: y Date d d / m m se of NPS Lite/Swavalamban Subscribers to join NPS. I hereby declare that the subscribers to join NPS. I he	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof. Copy of PAN card submitted YES Existing Bank Customer: We hereby certify/confirm that Shri/Smt/Ku Bank account nave been fully co is not a 'Basic Savings Bank Deposit Accound the anse and address mentio To be filled by POP-SP POP-SP Seal Decl Authorisation by Aggregator's office (NL Certified that the subscriber is registered wi declaration has been signed /thumb impress Signature of the Authorised Name of the Aggregator NPS Lite Account Office (NL-AO) Registratic Wembership No. allotted by Aggregator (if a		POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba e S. B. a/c of Sh/Smt/Kum atching with that mentioned on NPS applica besignation: y Date d d / m m se of NPS Lite/Swavalamban Subscribers to join NPS. I hereby declare that the subscribers to join NPS. I he	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof. Copy of PAN card submitted YES Existing Bank Customer: Are hereby certify/confirm that Shri/Smt/Ku Bank account no for opening NPS account have been fully co- that a Based KYC Certificate: Not Mance Author and the name and address mentio To be filled by POP-SP POP-SP Seal Decl Authorisation by Aggregator's office (NL Certified that the subscriber is registered wi declaration has been signed /thumb impress Signature of the Authorised Name of the Aggregator NPS Lite Account Office (NL-AO) Registratic Membership No. allotted by Aggregator (if a Place		POP-SP Registration Nu Compliance YES NO is an existing customer ch and KYC norms required for opening Ba e S. B. a/c of Sh/Smt/Kum atching with that mentioned on NPS applica taching with that mentioned on NPS applica Designation: y Date d d / m m se of NPS Lite/Swavalamban Subscribers to join NPS. I hereby declare that the subscribers to join NPS. I hereby dec	(In the box above)
Designation of the Authorized Person: To be Receipt No. (17 digits) Document accepted for date of Birth Proof. Copy of PAN card submitted YES Existing Bank Customer: We hereby certify/confirm that Shri/Sm/t/ku Bank account no is not a 'Basic Savings Bank Deposit Accoundant Agene Authorised KYC Certificate: Not Manc We hereby certify that Aadhaar Number checked and the name and address mentio To be filled by POP-SP POP-SP Seal Decl Authorisation by Aggregator's office (NL Certified that the subscriber is registered wi declaration has been signed /thumb impress Signature of the Authorised Name of the Aggregator NPS Lite Account Office (NL-AO) Registratic Membership No. allotted by Aggregator (if a Place		POP-SP Registration Nu Compliance YES NO is an existing customer is an existence customer is an existen	(In the box above) (In the box above) (In the box above) (In the box above) (In the box above) (In the b

Annexure 2: Tier II Account Opening Form

										_																			
								1	TIER		DET	AILS	S																
	bmit the following de	_	or ac	tivat	tion	of Ti	er –	ll ac	cour	nt un	der N	IPS.																	
. PAN car	rd Number (Mandatory)																												
	ribers Bank Details		7				1.1.	ile le						1		0													
	as Tier I, Please Tick (v)	els	e, pr	OVIC	the the	deta	alis d	elow	1. 5	aving	IS A/O		7		Cui	rren	t A/c		1									
	c Number		p	8	1			7	1	ß		r	1	1 T	10	1	4	r.						4	1	ß	1	The second secon	
Bank Na Branch I			8	7		1		4		2			- 2	8	25 - 1		4	8					1	4		ř	7	8	
	Address		1	ß	1		1	1	1	ß	1	ŕ	1	1	1		1	P.	P		CODI	F	1	1	Ť	ĥ	1	ľ	
			Ŷ.	ř			1	State	e/U.T.	ľ.	T		1		1	1		ř.		c	0	u	n	t	L e	6		Ŷ	
Bank M	ICR Code								IF	SC C	Code																		
Subscribe	er's Nomination Det	ails																											
	Fier I, Please Tick ($$)	_	50 D	ovid	o th	o dot	oile b		u In a	0000	VOUL	locin	o to p	omi	noto	mo	ro th	ion c	no	nore	on r		200	fill /	nnc		ro II		
	f the Nominee:	els	se, pr	ovid		e uel	ans D	CION	v. (1) (case	you o	16210	5 (U f)	ornil	nate	110	ie (ле	pers	οn, β	JES	35E	nii A	ATT I E	-AU	e II		
						liddle	N-										0.51	NI -											
First Name	•	i î	ĩ	2 1	IV	lidale	Nam	ie	ľ	ï	n n	ŕ	9	î î	1		ast	Nam	ie	ř	9	ř	ĩ	Ť	ĩ	Ť	Ĩ	ř	ī
. Nomine	nship with the Nominee: e's Guardian Details (ir		ofa	minc	1	liddle	Nam	10								L	ast	Nam	Ie										
5. Nomine First Name	e's Guardian Details (ir	n case			M	1	[]	Ì	or fur	rther	detail	ls):			1		ast	Nam	le				1			Ĩ	1	Ĩ	
Subscribe ((i). Pens a choice Pension	e's Guardian Details (ir	ce (Ple ion (Se is the	ease elect leem defa	refe only ed th ult P	mat y FM.	fer do ne PF /ou h	cume): Se ave c	ent fe lecti	ion of entec	f PFN	vi is m	nanda				Activ	re ar	nd Ar	uto (
 Nominee First Name Subscribe (i). Pens a choice Pension 	e's Guardian Details (in e er Scheme Preferen sion Fund (PF) Selecti e of PF, please note tha n Funds Private Limited	ce (Pla ce (Pla ion (Se is the els	ease elect leem defa	refe only ed th ult P	M er off y or nat y FM.	fer do ne PF /ou h	cume): Se ave c ails b	ent fe lecti	ion of entec	f PFN	vi is m	nanda		faul	t opt	Activ	re ar for t	nd Ar	uto (s pre	escrit								
 Nominee First Name Subscribe (i). Pens a choice Pension 	e's Guardian Details (in e er Scheme Preferen sion Fund (PF) Selecti e of PF, please note tha n Funds Private Limited	ce (Ple ion (Se is the els Pe	ease elect defa se, pr nsio	refe only ed th ult P	M er off y or nat y FM.	fer do ne PF /ou h	cume): Se ave c ails b	ent fe lecti	ion of entec	f PFN	vi is m	nanda		faul	t opt	Activ	re ar for t	nd Ar	uto (s pre	escrit								
 Nominee First Name Subscribe (i). Pens a choice Pension 	e's Guardian Details (ir e er Scheme Preferen sion Fund (PF) Selecti e of PF, please note tha n Funds Private Limited Fier I, Please Tick ($$)	ce (Pl ce (Pl tion (St els els Pe Limite	ease elect defa defa se, pr nsio	refe only ed th ult P rovid	M er off y or hat y FM.	fer do ne PF /ou h	cume): Se ave c ails b	ent fe lecti	ion of entec	f PFN	vi is m	nanda		faul	t opt	Activ	re ar for t	nd Ar	uto (s pre	escrit								
 Nominee First Name Subscribe (i). Pens a choice Pension 	e's Guardian Details (ir e er Scheme Preferen sion Fund (PF) Selecti e of PF, please note tha Funds Private Limited Fier I, Please Tick (\d)	ce (Pli ion (Se is the els Pel Limite	ease elect defa defa se, pr nsio	refe only ed th ult P ovid on F	M er off y or hat y FM. le th unc	fer do ne PF /ou h	cume): Se ave c ails b	ent fe lecti	ion of entec	f PFN	vi is m	nanda		faul	t opt	Activ	re ar for t	nd Ar	uto (s pre	escrit								
 Nominee First Name Subscribe (i). Pens a choice Pension 	e's Guardian Details (ir er Scheme Preferen sion Fund (PF) Selecti e of PF, please note tha i Funds Private Limited fier I, Please Tick (√)	ce (Pli ion (Sc is the els Pei Limite	ease elect defa se, pr nsio ed ate L	refe only ed th ovid on F	M er off y or hat y FM. le th unc	fer do ne PF you h	ccume): Se ave c ails b me	ent fi	v	f PFN	VI is m ppting	for t		faul	t opt	Activ	re ar for t	nd Ar	uto (s pre	escrit								
 Nominee First Name Subscribe (i). Pens a choice Pension 	e's Guardian Details (ir er Scheme Preferen sion Fund (PF) Selecti e of PF, please note tha n Funds Private Limited fier I, Please Tick (\/) [LIC Pension Fund SBI Pension Funds UTI Retirement So	ce (Ple ion (Sc is the els Pel Limite	ease elect defa se, pr nsio ad ate L s Lin s Lin	refe only ed th ult P ovid on F	Mar Mar Mar	fer do ne PF /ou h e det d Nan	ccume): Se ave c ails b me	ent fi	v	f PFN	VI is m ppting	for t		faul	t opt	Activ	re ar for t	nd Ar	uto (s pre	escrit								
Subscribe (i). Pens a choice Pension	e's Guardian Details (ir er Scheme Preferen sion Fund (PF) Selecti a of PF, please note tha Funds Private Limited Fier I, Please Tick ($$) [LIC Pension Fund SBI Pension Funds UTI Retirement So ICICI Prudential Pe	ce (Pli ion (Sc is the els Pei Limite lutions	ease elect defa defa se, pr nsio ed ate L s Lin s Lin n Fur	refe only ed th ult P rovid on F	er off y or FM. e th unc ed	fer da ne PF /ou h e det d Nar	ccume): Se ave c ails b me	ent fi	v	f PFN	VI is m ppting	for t		faul	t opt	Activ	re ar for t	nd Ar	uto (s pre	escrit								

nnevuro I to CEDE

Annexure I to CSRF 1

Active Choice	Auto Choice	(For details on	Auto Choice,	please re	efer to the Offer Document)
		(b) In c	ase you have op	pted for A	any investment option, your funds will be invested in Auto Choice Auto Choice, DO NOT fill up section (iii) below relating to Asset Allocation. In eation instructions will be ignored and investment made as per Auto Choice
i). Asset Alloca	tion (to be filled u	p only in case you	have selected ti	he 'Active	e Choice' investment option)
Asset Class	E (Cannot ex 50%)	ceed C	G	Total	Note:- The allocation across E, C and G asset classes must equal 100% In case, the allocation is left blank and/or does not equal 100%, the application shall be rejected by the POP.
				<mark>100%</mark>	
Declaration & A	uthorization by s	ubscriber			
documents furnis Frust, of any cha for submission o	shed by me are trunnge in the above f any false or inco	ie and correct, to th information furnish rrect information or	ne best of my kn ed by me. I do r r documents.	nowledge not hold a	System and hereby agree to the same and declare that the information an and belief. I undertake to inform immediately the National Pension Syster any pre-existing account under NPS. I understand that I shall be fully liabl es by CRA, from time to time and any amendment thereof as approved b
		ial without any nev d view details) & T-			shed by me. I shall be bound by the terms and conditions for the usage of
Declaration un	der the Preventic	on of Money Laun	dering Act, 200	02	
NPS Trust has th	ne right to peruse	my financial profile	or share the in	formatior	ed from legally declared and assessed sources of income. I understand the n, with other government authorities. I further agree that NPS Trust has the relating to prevention of money laundering.
Date:					
Place:					Signature/Thumb Impression* of Subscriber in black ink (* LTI in case of male and RTI in case of female)
			To be fill	ed by I	POP/POP(SP)
OP-SP Registrat	ion Number				
opy of PAN Card		S NO			
					Name:
					Designation:
					Place:
POP-SP Seal		Signa	ature of Authoris	sed Signa	atory Date d d / m m / y y y

Annexure 3: NPS Form for NRIs

																												Ν	RSI	-1
						1	ITAV	ON	AL I	PEN	sio	N S	YST	EM	(NF	PS)														
	SUB	SCRI	BER	R RE	GIS	STR	ATIC	DN	FOR	M F	OR	NC	N R	ESI	DEN	I TI	NDI/	٩N	(NI	RI)										
(P	LEASE	REAL	D IN	ISTR	UC	τιο	NS O	N P.	AGE	3 BI	FO	RE F	ILLII	VG I	UP T	HIS	FOR	M)												
To,																														
National Pension System Trust.																									Aff	ix re	ecer	nt o	olou	ır
Dear Sir/Madam,																									ph	oto	gra	oh o	f 3.	5
I hereby request that an NPS account be	opene	ed in	my	nan	ne a	as p	er th	e pa	artic	ular	s giv	en	belo	w :											cr	n X	2.5	cm	size	
* indicates mandatory fields. Please fill	the fo	orm ir	n En	glis	h ai	nd I	BLOC	K le	etter	s wi	th b	lac	k ink	(pe	n.															
1. PERSONAL DETAILS:	-	-																					_		ļ					
Name of Applicant in full Shri	Т	Т	Sm	nt.				Ku	ımar	i	Т	Т																		
First Name*	-	+												Τ													Γ	1		
Middle Name	+	+					-					+	+	+					-				\vdash	_			+			
Last Name	+	+					-					+	+	+					-					_			+			
Date of Birth* d d m m		v	v	y	y	-	_		_	Date	e of	Bir	th sh		d be	511	ppor	ted	hv	rele	van	t dor		nen	tarv	pro	of)	-	-	
	Fema		_	3	-	hers				Duc		0		- Cul			ppor		~1				- uni		car y	pro				
				_	00	iei :	M	i	d	d	1	~	-	Т		<u> </u>			_		т	0	0	+		T	Г	<u> </u>		
Father's Name* F i r s t (Refer Sr. No. 1 of							111	1	u	u	1	C									L	a	2							
instructions)																														
2. IDENTITY DETAILS* (The documen	it nee	ds to	o be	e pr	ovi	dec	4)																							
Passport No.*										Da	ite d	of Is	ssue	m	m	d	d	у	у	у	у	Pl	ace	e of	Issu	Je				
	-								•	Dat	te o	f Ex	piry	1	m	m	d	d	у	у	у	у								
3. PRESENT ADDRESS (OVERSEAS AI	DDRE	SS)*																												
Flat/Room/Door/Block no.	—	T												1												1		1		
Premises/Building/Village	+	+									-	+		12	ndr	nar	k													
Road/Street/Lane	+	+					-				-	-	+	Т					_	_			\vdash				+	-		
Area/Locality/Taluk		+					-				-	+	+	+					_				\vdash			-	\vdash	-		_
City/Town.District		+					-	_			-		-	+		-			_						-	-	\vdash			
11		+									_	_	-	+			6.00					P		COD	E	-	-	-		
State/U.T.																	Co	inti	ry											
4. PERMANENT ADDRESS (INDIAN A	DDRE	.ss)*		_	_	_			_	_	_	_	_	_	-	_	-		_		_		_	_		_	_	_	_	
Flat/Room/Door/Block no.		_																												
Premises/Building/Village															Lanc	lma	ark													
Road/Street/Lane		<u> </u>																												
Area/Locality/Taluk		<u> </u>																												
City/Town.District		—									_	_	_	-			_					P	IN (COD	E					
State/U.T.	A							1-1								- /0	Co													
Proof of Address submitted to Bank		lhar o ister													ense	елк	atio	n Ca	aro						2			1.0		
(Tick √ as appropriate)		test (vo. 2						a. PI	ease	refer
l		ers (-10.							_										
5. Preferred Address for	+				-		eas	Ad	dres	s							Per	mai	ner	nt A	dd	ess								
Communication (please tick √)												+ o1	iore		ode	dro	ss w						ha		1					
	_						<u> </u>				ла	10	vers	eas	aut	are	55 W	Juio	u e	nta	n ex	ura	una	irge	:5]					
6. CONTACT DETAILS (Include count	-	le foi	r 0\	rers	eas	s pr	ione	nu	dimi	ers)	_	-	-	-																
Landline phone (Overseas No.)	+	-	-								\rightarrow	+	+																	
Mobile* (Overseas No.)	+																													
Email ID*	—		_	_	_	_																								
Do you want to subscribe to SMS Alerts :		es	Ĺ		lo					N	/lobil	e nu	mber	is e	ssenti	ial fo	or rece	iving	g sm	is ale	rts n	egardi	ing y	/our	NPS	ассоц	Int			
		3 of t	the	ins	tru	ctio	ons)																							
7. OTHER DETAILS (Please refer to S	r no.					-																			1					
	r no.					S	ervi	ce													Sel	fEm	plo	ye	a					
7. OTHER DETAILS (Please refer to S	r no.		F	Polit	tica		ervi expo		d pe	rsor	n			+			Re	elat	ed			tical				d Pe	rsc	n		
7. OTHER DETAILS (Please refer to S Occupation Please Tick If Applicable		pto 5			tica		expo	sec	d pe ics to			s			10	lac	Re s to			to			iy e	exp						
7. OTHER DETAILS (Please refer to S Occupation	U	pto 5 ow SS	5 lao		tica		expo	sec 5 la		o 10) lac		dua	te	10			25		to s	Poli		ly e 2	exp 5 la	ose acs a	and	abo	ove	c.)	
7. OTHER DETAILS (Please refer to S Occupation Please Tick If Applicable Income Range (per annum)	U	ow SS	5 lao SC	cs		lly (expo C	sec 5 la	ics to HSC	5 10	lac (Gra	dua	te	10		s to	25		to s	Poli	tical	ly e 2	exp 5 la	ose acs a	and	abo	ove	c.)	
7. OTHER DETAILS (Please refer to S Occupation Please Tick If Applicable Income Range (per annum) Educational Qualifications	U Belo ase re	ow SS	5 lao SC to S	cs ir no		SS(expo C	sec 5 la inst	ics to HSC truc	5 10	lac (Gra	dua	te	10		s to	25		to s	Poli	tical	ly e 2	exp 5 la	ose acs a	and	abo	ove	c.)	
7. OTHER DETAILS (Please refer to S Occupation Please Tick If Applicable Income Range (per annum) Educational Qualifications 8. SUBSCRIBER BANK DETAILS *(Ple Account Type (please tick(V))	U Belo ase re	ow SS efer t	5 lao SC to S	cs ir no		SS(expo C the	sec 5 la inst	ics to HSC truc	5 10	lac (Gra	dua	te	10		s to	25		to s	Poli	tical	ly e 2	exp 5 la	ose acs a	and	abo	ove	c.)	
7. OTHER DETAILS (Please refer to S Occupation Please Tick If Applicable Income Range (per annum) Educational Qualifications 8. SUBSCRIBER BANK DETAILS * (Ple Account Type (please tick(v)) Bank A/c Number	U Belo ase re	ow SS efer t	5 lao SC to S	cs ir no		SS(expo C the	sec 5 la inst	ics to HSC truc	5 10	lac (Gra	dua	te	10		s to	25		to s	Poli	tical	ly e 2	exp 5 la	ose acs a	and	abo	ove	c.)	
7. OTHER DETAILS (Please refer to S Occupation Please Tick If Applicable Income Range (per annum) Educational Qualifications 8. SUBSCRIBER BANK DETAILS *(Ple Account Type (please tick(v)) Bank A/c Number Bank Name	U Belo ase re	ow SS efer t	5 lao SC to S	cs ir no		SS(expo C the	sec 5 la inst	ics to HSC truc	5 10	lac (Gra	dua	te	10		s to	25		to s	Poli	tical	ly e 2	exp 5 la	ose acs a	and	abo	ove	c.)	
7. OTHER DETAILS (Please refer to S Occupation Please Tick If Applicable Income Range (per annum) Educational Qualifications 8. SUBSCRIBER BANK DETAILS *(Ple Account Type (please tick(V)) Bank A/c Number Bank Name Branch Name	U Belo ase re	ow SS efer t	5 lao SC to S	cs ir no		SS(expo C the	sec 5 la inst	ics to HSC truc	5 10	lac (Gra	dua	te	10		s to	25		to s	Poli	fessi	ly e 2 ona	2xp 5 la	ose acs a	and	abo	ove	c.)	
7. OTHER DETAILS (Please refer to S Occupation Please Tick If Applicable Income Range (per annum) Educational Qualifications 8. SUBSCRIBER BANK DETAILS *(Ple Account Type (please tick(v)) Bank A/c Number Bank Name	U Belo ase re	ow SS efer t	5 lao SC to S	cs ir no		SS(expo C the O Ac	inst cou	truc truc	tion	lac (Gra	dua	te	10		s to	25		to s	Poli	fessio	ly e 2 ona co	2xp 5 la lls(ose acs a	and	abo	ove	c.)	
7. OTHER DETAILS (Please refer to S Occupation Please Tick If Applicable Income Range (per annum) Educational Qualifications 8. SUBSCRIBER BANK DETAILS *(Ple Account Type (please tick(V)) Bank A/c Number Bank Name Branch Name	U Belo ase re	ow SS efer t	5 lao SC to S	cs ir no		SS(expo C the O Ac	inst cou	ics to HSC truc	tion	lac (Gra	dua		10	Ma	aster	25		to s	Poli	fessi	ly e 2 ona co	2xp 5 la lls(ose acs a	and	abo	ove	c.)	

																															N	RSF-
9. SUBSCRIBER	RS NOMIN	ATION	DETA	LS* (Pleas	se refe	er to Sr.	No . 5	of the inst	uctions)																							
Name of the No	ominee (You	can nor	ninate	up to a m	aximu	ım of 3 r	nomin	ees and if y	ou desir	e so j	please fill	in Anne	exure	III (Add	litional	Nominatio	n Form	n) prov	ided s	eparat	ely)											
		First	Name		-	_	_					viddle I	Name	_	-								_	, Li	ast N	ame			-	-	-	_
							-																									
Relationship wit Date of Birth (In													-		1			1								- 1			1			
													-	d	-	d	m	-	m		/		У	-	У	_		У	-			
Nominee's Guar	rdian Detail		e of a : Name	ninor)								/iddle	Name					T						L	ast N	ame						
		1					1						Т					+						T	Т							T
10. NPS OPTIO	ON DETAILS	5										_	-	-			-						-	-	-			-	-			-
I	would like t	o subsci	ribe fo	Tier II A	ссоци	t also		3	ΈS		NO		(Ple	ase tick	(V) as a	pplicable). I	f yes, ple	ease su	bmit d	tails in	Anne	ure I.										
I would like 1								7	ES		NO							If	Yes, p	ease s	ubmi	t deta	ils or	n Ann	exur	e II						
11. PENSION FU												all a la se																				
(i) PENSION FUN	ND SELECTIC	DN (Her		me of the				o choose tr	e avalla	DIE P	Fs as per			in the t ick (V)	able b	elow.																_
LIC Pension Fun	d Limited		140	ine or an	e r en	SIGHTE	ilu					-	ase i		†																	
5BI Pension Fun		imited													1																	
UTI Retirement !															1																	
CICI Prudential			azeme	ent Compa	ny I tr	4									1																	
otak Mahindra						-									1																	
Reliance Capital												+			1																	
HDFC Pension N															1																	
Selection of Pen					nd Aut	to Choice	. In car	e, you do no	t indicate	a ch	oice of PF,	please r	note th	at it is d	leemed	i that you h	ve cons	ented	ior the	default	PF sp	cified	by PF	RDA.	Curre	ntly, S	Bl Per	nsion I	unds F	rivate	Limited	d is the
default PF.			_		_	_	_	_	_	_		_	_				_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	
(ii) INVESTMENT		airea b	olouu c	howing up	ur im	ortexa	tooti																									
(Please Tick (V) Active) in the box re Choice	Siven b	eiuw S	nowing yo	our Iniv	Auto (
		nlazza	ofor *-	the Office	Dee				1																							
For details on Ai 1. In case you do									Auto Ch	noice																						
2. In case you ha	ave opted fo	or Auto	Choice	DO NOT	fill up	section	below	relating to	Asset Al	locat	ion. In ca	se you	do, th	e Asset	Alloca	tion instru	ctions v	will be	ignore	d and	inves	ment	will t	oe ma	ide a	s per	Auto	Choir	e.			
(iii) Asset Alloca	ation (to be	filled u	only	in case vo	u hav	e selecti	ed the	'Active Ch	oice' inv	estm	ent optio	n)																				
		E			T		—																									
Asset Class	(Cannot	exceed 5	o%)	с		G		Total						E, C an	nd G as	set classes	must b	e equi	l to 1	10%. In	case	the a	llocat	tion is	i left	blank	and	or do	es no	t equa	100%	6, the
%					+		-		арриса	ition	shall be r	ejected																				
12. DECLARATIO	ON BY SUBS	CRIBER	' (Plea	ise refer t	o Sr n	o. 6 of t	he ins	tructions)	-																							
Declaration & Aut																																
I have read and ur inform immediate																																
or incorrect inform	mation or doc	uments.																														
I further agree to I the terms and con	be bound by	the term	s and c	onditions o	f provi	ision of s od view d	ervices	by CRA, from & Train on t	n time to	time	and any a	mendme	ent the	reof as a	approv	ed by PFRD	, wheth	er com	plete (r partia	l with	out an	y new	decla	ration	1 bein	g furn	ished	by me.	Ishal	be bo	und by
and company and com		ic onebc	or r pin	(to access			econs)	a r pin on c																								
Declaration unde																																
I hereby declare ti authorities. I furth																			right t	perus	e my f	nancia	al prof	ile or	share	the ir	form	ation,	with o	ther go	vernm	ent
authorities. I forth	ner agree that	chiro ne		ine right to	close	iny rises	in cas	er am round	Holating	une p	rovisions (w reia	ing to p	prevent		y lacito	ering.														
	Date			Sign	ature	/Thumi	himn	ession* of	Subscrib	or in	black in	(* I TI	in car	e of																		
d d m	m y	у	У					f females)	Subscrib	-	DIGCKIII		in cas	6.01																		
Place																																
13. DECLARATIO	ON BY POP-	SP										To be	filler	i by PO	D.SD																	
Receipt Number	r								ТТ			10.04	line	10,10	- SF		1	T					1	Т								
POP-SP Registra		er											+				-			-			-	_								
POP-SP Branch I	Name :														·														_			_
KYC Compliance	9									Yes				No		Pass	port w	ith Vis	a/Wo	rk Per	mit (pleas	e ticl	c√)			Yes			No		
Document accep	pted for dat	e of Birt	h Proc	f				_																				_			_	-
Copy of PAN Car		d	Ye	is .		No					P	AN Car	rd No																			
Existing Bank Cu	astorner.														-																	
I/we hereby cer (NRE/NRO) whic																			at	is not									penin	g NRI	Bank	Accou
Adhaar Based K																																
I/we hereby cer								of Sh/	Smt/Kur	n								has b	een c	ecked	and t	he na	me a	nd ad	idres	s mer	ntion	ed on	the o	riginal	Aadha	aar ca
are matching wi To be filled by P		nioned	on NPS	applicatio	n for	m.																										
	and the set						+										Nam	ie:														
																	Desi	gnatio	n:						_		_					
																	Place								_		_					
	P	OP-SP S	eal				L				re of Auth				- C-	tro (cp.t	Date	e.							1	d	m	m	У	У	у	у
Received by										10 0				ilitatio Number		itre (CRA-	rcj]				_	_	_	_		_		_				
-											CR	- n- negi	au eti ól	. number							-	te					-	-				
Received at Acknowledgeme	ant Number	(hy co	LEC)							_			-	-	1			1			0	e	-	(d	m	m	У	У	У	У
	ent Number	(DY CR/	erc)		-	-			+			+	+	-	+	\vdash	_	-	I				1	-	_			I	-	<u> </u>	I	4
PRAN Alloted		_		_			L					_			1	L	_		_		_	_			_		_	_	_	_	_	_
					-	-						ACKN	IOWL	EDGEN	VIENT		-	-					-	-	-	-			-	-	-	-
Name of the Sub					-	_		\vdash	+	_		-	-		-	\vdash	-	-	-			-	-	+	+	+		-	-	-	-	+-
Contribution Am						Rs.	L					-	-		-	\vdash	_	-	-				-	+		+			1	-	-	+
Date of Receipt			Contril	oution Am	ount:			_				d	d	m	m	у у	У	У					1	1		1			1	1		
Stamp and Signa	ature of the	POP-SP																														

NRSF-1

INSTRUCTIONS FOR FILLING THE SUBSCRIBER REGISTRATION FORM

No	Item	Item Details		<u>General Guidelin</u>		Instructions					
	No.	Personal Details	The s								
			Ine a	pplicant shall mention father's name and mother's nan	ne and	shall select the option to be printed on PRAN Card.					
1	1	Date of Birth		e ensure that the date of birth matches as indicated in th							
		Father's Name		ther's name has more than 30 digits, you may fill Annex							
_			s.No	e applicant wants mother's name to be printed instead Proof of Identity (Copy of any one)	S.No	Proof of Address (Copy of any one)					
			1	Passport issued by Government of India.	1	Passport issued by Government of India					
			2	Ration card with photograph.	2	Ration card with photograph and residential address					
			3	Bank Pass book or certificate with Photograph.	3	Bank Pass book or certificate with photograph and residential address					
			4	Certificate of the POP bank for an existing Bank customer.	4	Certificate of the POP bank for an existing Bank customer.					
			5	Voters Identity card with photograph and residential address.	5	Voters Identity card with photograph and residential address					
			6	Valid Driving license with photograph	6	Valid Driving license with photograph and residential address					
			7	Certificate of identity with photograph signed by a Member of Parliament or Member of Legislative Assembly	7	Letter from any recognized public authority at the level of Gazetted officer like District Magistrate, Divisional commissioner, BDO, Tehsildar, Mandal Revenue Officer, Judicial Magistrate etc.					
			8		8	Certificate of address with photograph signed by a Member of Parliament or					
			•	PAN Card issued by Income tax department	•	Member of Legislative Assembly Aadhar Card / letter issued by Unique Identification Authority of India clearly					
			9	Aadhar Card / letter issued by Unique Identification Authority of India	9	showing the address					
			10	Job cards issued by NREGA duly signed by an officer of the State Government	10	Job cards issued by NREGA duly signed by an officer of the State Government					
2	2, 3 & 4	Identity, Present & Permanent address details	11	Identity card issued by Central/State government and its Departments, statuary/ Regulatory Authorities, Public Sector Undertakings, Scheduled commercial Banks, Public Financial Institutions, Colleges affiliated to universities and Professional Bodies such as ICAI, ICWAI, ICSI, Bar Council etc.	11	Central/State Government and its Departments, Issued by any of the following. Central/State Government and its Departments, Statuary/Regulatory Auth Public Sector Undertakings, Scheduled Commercial Banks, Public Financia Institutions for their employees.					
			12	Photo. Identity Card issued by Defence, Paramilitary and Police department's	12	Latest Electricity/water bill in the name of the Subscriber / Claimant and showing the address (less than 3 months old)					
			13	Ex-Service Man Card issued by Ministry of Defence to	13	Latest Telephone bill in the name of the Subscriber / Claimant and showing the					
				their employees.	14	address (less than 3 months old)					
			14	Photo Cr <mark>e</mark> dit card.	14	Latest Property/house Tax receipt (not more than one year old) Existing valid registered lease agreement of the house on stamp paper (in case or rented/leased accommodation)					
	s		openi identi comm	ng form, the document may be accepted as a valid pro	of of b h the a	by the prospective customer is same as that declared by him/her in the accou- th identity and address. If the address indicated on the document submitted f ccount opening form, a separate proof of address should be obtained. All futu unication and bank details within India.					
		Other Details (Occupation Details)	Fund	transfers by NRIs would be subject to regulatory require	ments	as prescribed by RBI from time to time and FEMA requirements.					
3	6	Politically Exposed Person		s of state or of the government, senior politicians, senio	r govei	been entrusted with prominent public functions in a foreign country, for example mment, judicial or military officials, senior executives of state-owned corporation t political party officials.					
4	7	Subscriber's Bank Details	Numb	ank details are mandatory for activation of Tier I & II er and IFS Code) or Bank Certificate containing Name, I	accour Bank A	Explosite performance. Is. Please attach a Cancelled cheque (containing Subscriber Name, Bank Accour count Number and IFSC code, for direct credit or electronic transfer. In case if it passbook or bank certificate containing Name, Bank Account Number and IFSC					
5	8	Subscriber's Nomination Details	In cas the no	e of more than one nominee, percentage share value t	or all t	he nominees must be integer. Decimals/Fractional values shall not be accepted must be equal to 100. If sum of percentage is not equal to 100, entire nominati					
6	12	Declaration by Subscriber	Signat			ed in the form. Thumb impression, if used, should be attested by the nodal offic ales and Right Thumb Impression in case of females					

General Information for Subscribers
a) The Subscribers are advised to remained mapresonant in case of remaines.
() Subscribers are advised to retain the acknowledgement slip signed/ stamped by the designated nodal officer where they submit the application.
() For more information / clarifications, contact CRA:
Website: https://www.npscra.nsdl.co.in
Cali: 022-2499-4200
e-mail: info-cra@nsdl.co.in
Address: Central Recordkeeping Agency, NSDL e-Governance Infrastructure Limited, 1st Floor, Times Tower, Kamala MillsGovernance Compound, Senapati Bapat Marg, Lower Parel
(W), Mumbal - 400 013.

About NISM

National Institute of Securities Markets (NISM) is an educational institution established by the Securities and Exchange Board of India (SEBI), the securities market regulator, in 2006. The Institute was established in pursuant to the Union Finance Minister's proposal, in his 2005-06 Budget Speech, to set up an institution 'for teaching and training intermediaries in the securities markets and promoting research'.

NISM is committed to its vision 'to lead, catalyze and deliver educational initiatives to enhance the quality of securities markets'. The Institute conducts a wide range of capacity building programmes in securities markets - from basic financial literacy to full-time post-graduation programmes. The Institute's six Schools of Excellence, viz., School for Certification of Intermediaries, School for Securities Education, School for Investor Education and Financial Literacy, School for Regulatory Studies and Supervision, School for Corporate Governance and School for Securities Information and Research upholds NISM's vision and works in synergy towards professionalizing the markets.

NISM is mandated by SEBI (Certification of Associated Persons in the Securities Markets) Regulations, 2007 to conduct certification examinations and continuing professional education programs for associated persons engaged by an intermediary. NISM also conducts certification examinations for other regulators like IBBI and PFRDA. NISM's certifications establish a single market-wide knowledge benchmark for different functions in the Indian securities market and enable the associated persons to advance their knowledge and skills.

About the Workbook

This workbook has been developed to assist candidates in preparing for the National Institute of Securities Markets (NISM) Certification Examination for Retirement Advisers. Retirement Adviser Certification Examination seeks to create a common minimum knowledge benchmark for individuals, proprietors, partners and representatives of a retirement adviser registered under Pension Fund Regulatory and Development Authority (Retirement Adviser) Regulations, 2016.

The book covers all important topics to enhance the quality of retirement advisers. It covers topics related to retirement planning—fundamental concepts; retirement planning products, process and strategies; evaluating fund performance and selection; National Pension System (NPS) and other retirement products. The book also discusses the concept of compliance, operations and service elements in retirement advise.

NATIONAL INSTITUTE OF SECURITIES MARKETS

NISM Registered Office

5th floor, NCL Cooperative Society, Plot No. C-6, E-Block, Bandra Kurla Complex, Bandra East, Mumbai, 400051 Tel: +91-22-41738811

NISM Campus

Plot No. IS 1 & 2, Patalganga Industrial Area, Mohopada, District Raigad, Maharashtra–410222 Tel: +91-2192-668300/01



NISM Bhavan

Plot No. 82, Sector-17, Vashi, Navi Mumbai, Maharashtra-400703 Tel: +91-22-66735100/5101 Fax: 022-66735110