

**PENSION REFORMS AND ITS IMPACT ON SAVINGS  
INVESTMENTS AND GROWTH OF INDIAN ECONOMY**



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IN  
COMMERCE**

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I hereby declare that the thesis entitled **“PENSION REFORMS AND ITS IMPACT ON SAVINGS INVESTMENTS AND GROWTH OF INDIAN ECONOMY”** is the result of my own study done under the supervision and guidance of **Prof. S. VENKATESH** Dean and Chairman, Department of Post Graduate Studies and Research in Commerce, Kuvempu University, Jnana Sahyadri, Shankaraghatta, Shimoga -577451 and it has not been submitted earlier to any university for the award of any degree or diploma, during the period **January 2019 to September 2022.**

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## LIST OF TABLES

Table No.	Description	Page No.
1.1	Demographic and Labor Market Trends in Asian Countries	17
1.2	Reliability Statistics	24
1.3	Reliability Test Analysis Result	24
3.1	Components of Retirement Provision	76
3.2	Pension Contribution (in Billions) from 2010 to 2025	79
3.3	India – Roadmap of Pension Reforms	106
3.4	Sector wise NPS Status as of December 2021	110
3.5	Pattern of Investment in Employee Provident Fund from 1975-2021	114
3.6	Who bears the risk Under DB and DC scheme	116
3.7	Asset classed offered by Pension Fund Managers for Investment	120
3.8	Asset Allocation under Active Choice	122
3.9	Asset Allocation under Auto Choice	123
4.1	Gender Status of the Respondents	127
4.2	Age Status of the Respondents	128
4.3	Educational Qualification Status	128
4.4	Region Wise Status of the Respondents	129
4.5	District Wise Status of the Respondents	129
4.6	Religion Status of the Respondents	130
4.7	Category Status of the respondents	130
4.8	Marital Status of the respondents	131
4.9	Status of Family Type	131
4.10	Family Dependents Status	132
4.11	Occupation Status of the Respondents	132
4.12	Monthly Income Status	133
4.13	Status of Retirement Benefit Pension Scheme Opted	133

4.14	Duration of Pension Enrolment	134
4.15	Proportion of Savings Status	134
4.16	Proportion of Investment Status	135
4.17	Awareness about Pension Reforms	135
4.18	Source of Awareness about Pension Reforms	136
4.19	Influencing Factors for enrolling to Pension Schemes	137
4.20	Perception of Pension Beneficiaries towards Defined Benefit Pension Scheme (DB)	139
4.21	Perception of Pension Beneficiaries towards Defined Contribution Pension Scheme (DC)	143-144
4.22	Attitude of Employees towards Pension Schemes	148
4.23	Problems faced by the pension beneficiaries while enrolling to pension scheme	150
4.24	Satisfaction Level towards Pension Schemes	152
4.25	Pension and Other Retirement Benefit (Expenditure in Crores)	153
4.26	Growth in Expenditure by Govt. towards Pension and other Retirement Benefits	154
4.27	Contribution toward Defined Benefit	155
4.28	Growth in Contribution by Govt. towards Defined Benefits	156
4.29	Contribution towards Defined Benefit Pension Schemes	157
4.30	Growth in Expenditure by Govt. towards Defined Benefit Pension Scheme	158
4.31	Expenditure by Govt. towards Defined Contribution Pension Scheme	159
4.32	Growth in Expenditure by Govt. towards Defined Contribution Pension Scheme	160
4.33	Financing Pattern of SPF and PPF under Defined Benefit Pension Scheme	161
4.34	Growth in Financing Pattern of SPF and PPF under Defined Benefit Pension Scheme	162
4.35	Number of Subscribers and Asset under Management – NPS (Central Government Employees)	163
4.36	Growth in subscribers, contribution and AUM in NPS of Central Government Employees	164
4.37	Number of Subscribers and Asset under Management – NPS (State Government Employees)	165



4.38	Growth in subscribers, contribution and AUM in NPS of State Government Employees	166
4.39	Number of Subscribers and Asset under Management – NPS (Corporate Sector Employees)	167
4.40	Growth in subscribers, contribution and AUM in NPS of Corporate Sector Employees	168
4.41	Number of Subscribers and Asset under Management – NPS (All Citizen)	169
4.42	Growth in subscribers, contribution and AUM in NPS of all citizen	170
4.43	Number of Subscribers and Asset under Management – NPS (Swavalamban)	171
4.44	Number of Subscribers and Asset under Management – NPS (Swavalamban)	172
4.45	Household Financial Savings Rates (Gross) (As percentage of GDP at current market prices)	173
4.46	Growth in Household Financial Savings Rates (Gross) (As percentage of GDP at current market prices)	174
4.47	Performance of Central Government Employees under PFM	175
4.48	Performance of State Government Employees under PFM	176
4.49	Performance of Scheme Equity Tier-I under PFM	176
4.50	Performance of Scheme Equity Tier-II under PFM	177
4.51	Performance of Scheme Corporate sector Tier-I under PFM	178
4.52	Performance of Scheme Corporate sector Tier-II under PFM	179
4.53	Performance of Scheme Government security Tier-I under PFM	179
4.54	Performance of Scheme Government security Tier-II under PFM	180
4.55	Growth in AUM of Equity Investment	181
4.56	Growth in AUM of Bond Investment	182
4.57	Growth in AUM of G-Sec Investment	183
4.58	Growth in AUM of Private Sector Investment	184
4.59	Growth in AUM of Public Sector Investment	185
4.60	Attitude towards Pension Schemes of DB and DC beneficiaries	186-187
4.61	Perception of DB and DC beneficiaries about Pension Schemes	188
4.62	Contribution to the GDP by pension Schemes Before and After the Pension Reforms	189

4.63	Investment in Equity after Pension Reforms (Defined Contribution)	190
4.64	Investment in Bonds after Pension Reforms (Defined Contribution)	191
4.65	Investment in G-Sec after Pension Reforms (Defined Contribution)	192
4.66	Investment in Private Sector after Pension Reforms (Defined Contribution)	193
4.67	Investment in Public Sector after Pension Reforms (Defined Contribution)	194

<b>LIST OF FIGURES</b>		
<b>Figure No.</b>	<b>Description</b>	<b>Page No.</b>
1.1	India's Social Security System	12
1.2	Population of India by Age and Sex: 1997 and 2020	16
1.3	Distribution of Sample Respondents	23
3.1	Subscribers under the NPS in India from Financial Year 2014-2021	103

<b>LIST OF GRAPHS</b>		
<b>Figure No.</b>	<b>Description</b>	<b>Page No.</b>
4.1	Expenditure on pension scheme and other retirement benefits	154
4.2	Contribution to defined benefit	156
4.3	Contribution towards defined benefit pension scheme	158
4.4	Contribution towards defined contribution pension scheme	160
4.5	Financing Pattern of SPF and PPF under Defined Benefit Pension Scheme	162
4.6	Number of Subscribers and Asset under Management – NPS (Central Government Employees)	164
4.7	Number of Subscribers and Asset under Management – NPS (State Government Employees)	166
4.8	Number of Subscribers and Asset under Management – NPS (Corporate sector Employees)	168
4.9	Number of Subscribers and Asset under Management – NPS (all citizen)	170
4.10	Subscribers, contribution and AUM in NPS of Swavalamban Scheme	172
4.11	Household saving rate	174

## LIST OF ABBREVIATIONS

OASIS	Old Age Social and Income Security
IRAs	Individual Retirement Accounts
NPS	New Pension System
IIEF	Invest India Microeconomic Foundation
PFRDA	Pension Fund Regulatory and Development Authority
DFID	Department For International Development
SSS	Social Security Schemes
ESI	Employee's State Insurance
EPF	Employee's Provident Fund
PFDLI	Provident Fund, Deposit- Linked Insurance
PGA	Payment of Gratuity Act
DC	Defined-Contribution
DB	Defined Benefit
EPS	Employees' Pension Scheme
ABD	Asian Development Bank
EPFO	Employee's Provident Fund Organization
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GoI	Government of India
L E	Life Expectancy
NSDL	National Securities Depository Limited
CRA	Central Record Keeping Agency
CRISIL	Credit Rating Information Services of India Limited
SEBI	Security Exchange Board of India
NSE	National Stock Exchange
BSE	Bombay Stock Exchange
NSEIL	National Stock Exchange of India Limited
CSPS	Civil Service Pension System
PAYG	Pay-As-You-Go
CPF	Contributory Provident Fund
OECD	Organization For Economic Co-Operation and Development
HRD	Human Resource Development
SAPF	South Asia Pension Forum
PRA	Pension Reform Act
NSSF	National Social Security Fund

CPC	Central Pay Commission
PFA	Pension Fund Administration
ARDL	Autoregressive Distributed Lag
ERA	Early Retirement Age
DCRG	Death-Cum-Retirement Gratuity
DR	Dearness Relief
SCOVA	Standing Committee of Voluntary Association
CPF	Contributory Provident Fund
CAT	Central Administrative Tribunals
CPC	Central Pay Commission
JCO	Junior Commissioned Officer
NAS	National Accounts Statistics
UNFPA	United Nation Population Fund
NSAP	National Social Assistance Program
IRDA	Insurance Regulatory and Development Authority
RBI	Reserve Bank of India
NABARD	National Bank for Agriculture and Rural Development
EPF&MP	Employees' Provident Funds and Miscellaneous Provisions Act
SPF	Special Provident Funds
CSP	Civil Servants' Pension
EEE	Exempt –Exempt-Exempt
NDC	Notional Defined Contribution
RE	Revenue Expenditure
PoP	Points Of Presence
ELSS	Equity-Linked Savings Scheme
OCI	Overseas Citizen of India
GS	Government Sector
LIC	Life Insurance Corporation
SBI	State Bank of India
UTI	Unit linked Insurance
GPF	General Provident Fund
PPF	Public Provident Fund
UN	United Nations
IT	Income Tax Act-1961

HDFC	Housing Development Finance Corporation
ICICI	Industrial Credit and Investment Corporation of India
NAS	National Accounts Statistics
PFM	Pension Fund Manager
SAF	Superannuation Fund
CG	Central Government
SG	State Government
GR	Growth Rate
CAGR	Compound Annual Growth Rate
AUM	Asset Under Management
G Sec	Government Security

## TABLE OF CONTENT

Sl. No.	INDEX	Page No.
<b>CHAPTER-I</b>		
<b>1.0</b>	<b>INTRODUCTION AND RESEARCH DESIGN</b>	<b>1-25</b>
1.1	Introduction	1-3
1.2	The Concepts	3-18
1.3	Research Gap	18
1.4	Statement of the Problem	18-19
1.5	Need for the Study	19
1.6	Research Questions	19-20
1.7	Objectives of the Study	20
1.8	Hypotheses of the Study	20
1.9	Research Methodology	21-24
	1.9.1 Source of Data	21
	1.9.2 Sampling	21-22
	1.9.3 Statistical Tools and Techniques	23
	1.9.4 Pilot Study	23
	1.9.5 Reliability Analysis	24
1.10	Scope of the Study	24
1.11	Limitations of the study	25
1.12	Chapter Scheme	25
<b>CHAPTER-II</b>		
<b>2.0</b>	<b>REVIEW OF LITERATURE</b>	<b>26-67</b>
2.1	Introduction	26
2.2	Summary	67

<b>CHAPTER-III</b>		
<b>3.0</b>	<b>PENSION REFORMS IN INDIA - AN OVERVIEW</b>	<b>68-126</b>
3.1	Concept of Pension System in India	68-71
3.2	Pension System in India	71-74
3.3	Multi-Pillar System in India	74-76
3.4	Existing Pension Framework	76-77
3.5	An Indian Perspective on Pension Practices	77-79
3.6	Development of the Public Pension System in India	79-81
3.7	Pension Reforms in India	81-86
3.8	Milestone of Pension Reforms	86-102
3.9	Pension Reforms Initiative	102-112
3.10	Reasons for Changing the Old Pension Scheme	113
3.11	Pension Fund Investment Pattern in India	113-115
3.12	Evaluating the Proposed Pension System	115-120
3.13	Pension Fund Investment Pattern of NPS	120-123
3.14	Factors Impacting Growth of Pension in India	124-126
<b>CHAPTER-IV</b>		
<b>4.0</b>	<b>PENSION REFORMS IMPACT ON SAVINGS INVESTMENTS AND GROWTH OF INDIAN ECONOMY – AN ANALYSIS</b>	<b>127-194</b>
4.1	Introduction	127
4.2	Pension Reforms Impact on Savings Investments and Growth- An Analysis	127-185
4.3	Testing of Hypotheses	186-194
4.4	Conclusion	194



<b>CHAPTER-V</b>		
<b>5.0</b>	<b>SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION</b>	<b>195-205</b>
5.1	Introduction	195
5.2	Findings of the Study	195-203
5.3	Suggestions	203-204
5.4	Conclusion	204-205
5.5	Scope for Further Research	205
	<b>BIBLIOGRAPHY</b>	<b>206-223</b>
	<b>QUESTIONNAIRE</b>	<b>224-229</b>

# CHAPTER-I

## INTRODUCTION AND RESEARCH DESIGN

### 1.1 Introduction

Economic development largely depends upon the savings and investment, these two are played important role in the economy growth. Countries with higher rates of savings have had a faster economic growth than with lower savings rates. An increase in the investment rate leads to rapid overall development in the Indian economy. Savings and investment largely depend on income earning capacity, when the income of individuals is more apparent effect is increase in savings and investment. A rise in aggregate savings would yield larger investment associated with higher gross domestic product growth. As a result, the high rates of savings increase the amount of capital and lead to higher economic growth in the country.

The provision of savings at retirement is experimenting structural changes in many developed economic around the world. Traditionally social security and voluntary or mandatory defined benefit pension scheme provided employees with stable and usually generous pension income stream at retirement. In recent years this defined benefit system being changed by another which relies much heavily on employees to finance their own retirement through their participation in defined contribution pension scheme. In these plans, savings at retirement is typically not guaranteed; instead, employees finance their retirement from the assets they have accumulated in their pension account through their working lives. The size of these assets depends on their own lifetime contribution and investment decisions. Many of the factors driving the transition towards a defined contribution pension system in developed economies also affects developing economies. Developing economies are generally open economies subject to global competition in product and capital market.

The aim of the reform of pension system was to restructure the existing pension system according the present social economic system and cutting future liabilities of the government in India. The previous system did not meet the need of the market economy. Creating a social security system, it is essential to meet the present generation's social and economic needs without compromising future generations.

The government of India has taken several measures to facilitate social welfare measures for the formal sector workers. The pension originally limited to the formal sector pensioners. India is feeling demographic tendencies, lower total fertility rate, increased life anticipation and greater amount of the elderly populations.

Over the past decade, the importance of pension system to the economic stability of nations and the security of their aging populations has been increasingly recognized by countries at all level of development. Pension reforms is one of the Burning of debate in India. It has been attracting considerable amount of attention in recent years. Especially after the liberalization of Indian economy (Suken Kali 2017).

Pension scheme, is unity of the social support programs which target income and oldness criteria. In India pension reforms is elaborate massive compound issues like municipal finance, revenue pattern, separation of labour market, socio-culture economy, political and stock market suggestions. This covered the way to pension reforms which result the society. Supplementary pension reforms are split from the current pension scheme in India.

India does not have a universal social security scheme. A big number of India's ageing are not protected by any pension scheme. Pension restructurings and a pension scheme with larger reach will not only certify citizens' happiness in their golden years but will also help the chief and public governments cut their future obligations. With these wide aims in mind, the government of India established an professional committee in 1998 to plan a new pension scheme for India. Project OASIS, which was chaired by S.A. Dave, submitted its report in 2000. The report recommended setting up a new pension system in India. It suggested creating a pension scheme based on individual retirement accounts (IRAs). An individual would save and collect assets through his whole employed life. Upon departure, the individual would be talented to use his pension assets to buy incomes from annuity providers and find a monthly allowance. The pension total would be administered by what the employees' pension fund account could make from market funds.

This was a paradigm shift, from the existing defined return's philosophy to a defined contributions philosophy. The committee suggested creating a profession-

ally managed system with a large base of pension account holders across all sectors of the economy and centralized record-keeping. The proposed system would ensure fair competition among professional fund managers so as to provide a wide range of choices to employers and fair market-linked returns to the account holders.

In line with the above endorsements, the government established its New Pension System (NPS). The New Pension System was launched in 2004 for central and state government workers, who had to contribute mandatorily. In 2009, it was thrown open to all Indian people in the 18-60 age group. However, it has unsuccessful to take off in the voluntary part given the weak contributions from the isolated sector.

## **1.2 The Concept**

### **Pension**

Pension is the amount paid by government or company to an employee after working for some specific period of time, considered too old or ill to work or have reached the statutory age of retirement. It is monthly sum paid to a retired officer until death because the officer has worked with the organization paying the sum.

Pension is also the method whereby a person pays into pension scheme a proportion of his earnings during his working life. A pension is usually a regular payment made by the government or by private companies or organizations to their retirees as a form of social security against old-age risks and uncertainties. In some countries, especially those that are economically advanced, pensions are usually extended to other categories of people apart from retirees, such as widows, orphans, disabled people (in the form of disability pensions), and the elderly or the aged.

A pension is a retirement account that an employer maintains to give you a fixed pay-out when you retire. It's a kind of defined benefit plan. It is also a mechanism by which employers of labour agree to alleviate the sufferings, impoverishment and dependency of its employees in the long run by putting in place a welfare package that would take care of them when they are labour-inactive, retired or have changed jobs. Olaniyan takes pension to be a systematic plan by an employer to give benefits to their employees when they decide to leave the job either through retirement or change of job.

The pension is most important part of social security system. It must be the goal of our laws and legal mechanism that almost cares should be given to the destitute aged people, those who are the heart of poverty. In India there are a lot of houses in which most of the inmates are too old to work and having no means of subsistence. Our present laws are providing much security to these old aged people in the form of social security benefits. It not at all unusual, that a man lives through the whole of his effective working life from 16 to 65 without ever drawing unemployment pay and sickness benefit. But it is the rule and not the exception to draw a retirement pension.

Pension is the reward of employee and not the discretion or benevolence of the employer. It can be the term of the contract with public and private sector corporations besides the governmental and semi-governmental establishment.

The pension is a bounty, a gracious payment, not depended upon the sweet will or grace of the employer, but claimable as a right through the conn" The pension is the retribution to be distributed by the government to its employees on their retirement. It is a valuable right and property in their hands and culpable delay in settlement and disbursement thereof must be visited with the penalty of payment of interest at the current market rate till the actual payment. It is essentially a payment to a person in consideration of past services for the employer when he is the twilight zone of his life. The pension is a profit, payable to an employee, earned by rendering the long and sufficient service and therefore can be said to be a differed portion of compensation.

The pension is a retirement benefit given to the person periodically as long as the pensioner alive, not ordinary at retirement. It means pension is a kind of benefit paid by employer to employee, time to time as the matter of necessity. Finally, the pension is an old-age benefit whereby the employee is given periodical payments from the date of the retirement for the rest of his life, the basis being that the service rendered by the employee with the employer carries with it a right to receive superannuation benefit. It may be regarded as differed wage payable upon retirement and affording a means which the individual

## **Reform**

Reform means the improvement or amendment of what is wrong, corrupt, unsatisfactory, etc. The use of the word in this way emerges in the late 1700s and is believed to originate from Christopher Wyvill's Association movement which identified "Parliamentary Reform" as its primary aim. Reform seeks to improve the system as it stands, never to overthrow it wholesale.

## **Pension reform**

The pension reform refers to a set of actions taken to restructure the administration of old age security device of retirees. An important dimension here is its capability to sustain postretirement life. On the one hand, it is capable of financing the livelihood of the retiree and his family over a long time; on the other, it could serve as a financing source for further economic activities he may want to embark upon. (Olayinka K Binuomoya, 2010)

Reforms in the pension sector were started with the establishment of "New Pension Scheme" by the Government of India in January 2004. However, the process was initiated in 1998 with commissioning of the Invest India Microeconomic Foundation (IIEF). It was the first inclusive study undertaken by the Ministry of Welfare, Government of India. The idea of single scheme for catering to the needs of the formal and informal sector was mooted in the report and reduce the financial burden on the Government. New pension scheme was introduced to replace the age-old defined benefit system applicable only for government employees. Therefore, initially it was started by only for central and state government employees. But the success of the scheme encouraged the Government to pass on the benefit to all citizens and it was extended to employees of the private and informal sectors from 1st May 2009. It is the ambitious step undertaken by the 95 Government to move from pension less society to pensioned society. The unique approach has been followed by the Government with the setting up of the regulatory body pension fund regulatory and development authority of India in 2003 under which pension fund managers are registered for providing services to the public. Combination of both public and private sectors makes it a unique case in Indian context. (Source: [www.pfrda.org](http://www.pfrda.org) )

## **Pension Schemes**

A pension scheme is a transfer programme that serves as a channel for redistributing income to the elderly or retirees, after a stipulated number of service years.

There are two types of pension schemes private and public. A public pension scheme is a social welfare security payment made to the retired, elderly and those that have changed jobs in the public sector of the economy. According to Heller, the aim of a public pension programme is not to raise the savings rate, but rather to provide income security, or at least a minimum income for the elderly. A private pension scheme is a social security scheme managed and administered by the private sector in order to provide succor and relief to elderly and retired employees at a time when they are not economically active. This scheme is defined benefit in nature, as employees save part of their income to receive it with the returns of its investment by the time they have retired or changed jobs. Nearly half of all private sector employees participate in a retirement plan, and the pension costs are approximately 55 per cent of payroll for the sponsoring firms.

The aim of the Pension Reform Scheme of 2004 is to ensure that an individual who has worked either in the public or corporate sector receives his retirement assistances as and when due. This scheme aims to provide assistance to indigent people by ensuring that they save to cater for their livelihood during old age; to establish a uniform set of rules and regulations for the administration and payment of retirement benefits in both the public and private sectors; and to stemming the growth of outstanding pension liabilities.

Essentially, pensions serve as social security for old age. And the reforms that the pensions systems of many countries have undertaken are aimed towards attaining this development progress. According to Department for International Development (DFID), social pensions in developing countries raise the livelihood of older, poorer individuals and their families above the poverty level.

The new pension scheme is a defined contribution scheme where returns generated at the time of maturity depends upon the contributions made by the individual over the period of the scheme. Therefore, the returns may vary according to the amount and period of the contribution. This is opposed to the defined benefit

scheme prevalent in India for government employees where returns are fixed on the basis of service provided by employees. Thus, it is basically voluntary saving scheme where people have to sacrifice their current consumption for meeting their retirement goals.

### **Challenges**

Before introduction of National pension scheme, social security was restricted only to the handful of the people in the society. Traditional approach to social security was to provide social insurance only to the employees in the formal and organized sector. This restrictive approach has harmed the growth of the pension industry in India where majority of the workers are working in the unorganized and informal sectors. Not only the share of employees in the unorganized sector has increased over a period of years but at the same time informal workers in the formal sectors are on rise.

This led to emergence of the single pension system which will cater to the needs of the workers in both formal and informal sector. Design and implementation of the social security system in such diverse and complex economy has to face many challenges.

Firstly, there is no possibility of compulsory saving, which is prevalent in the formal sector. In the formal sector, cost of social insurance is statutorily deducted from the salary of the employee and it is the responsibility of the employer to deposit it to the Government. It inculcates the habit of saving amongst the employees and it is easy for the Government and administrator to monitor the scheme.

Secondly, the biggest challenge for the administrators is the lack of data about the workers, for whom the policy is to be framed. Neither the enterprises nor the workers in the informal sector are registered with government authorities. Also, the workers are moving from one employer to another, which makes it difficult for the administrators to fix the responsibility on the employer in informal sector.

Lastly, the level of income earned by the workers is very low. Sometimes, it is just sufficient to cover up the daily necessities of life. Expecting them to save for retirement is challenge for the policy makers which needs to be accomplished for implementation of comprehensive social security system. Thus, the proposed social



security system should be robust enough to address these issues. It should be voluntary and financed by worker's contribution without any intermediation of employers with low level of contribution.

### **Savings**

The classical definition of savings is income minus consumption. It is also increasing net assets. Savings can be real or physical savings (machinery, land, etc.), financial savings (stocks, bonds, mutual funds, etc.), and savings in human capital (training and development, skill education, etc.). Savings refer to postponing current consumption to future consumption.

Part of income not spent is savings ( $Y = C+S$ ). Expectations about future income, interest rates, and life determine savings rates. The basic principles of macro-economic theory by Keynes expresses the relationship between savings and investment: (Production –Consumption=Savings).

Savings in real terms is real income after meeting consumption. Determinants of savings are life expectancy, literacy rate, the Number of dependents, interest rate structure, per capita income, availability of avenues for saving such as banks and institutions (Athukorala and Sen, 2001).

### **Investment**

“Investment is sacrificing a certain present value for the uncertain future reward” (Ajita Gupta and Seema Kashyap, 2018).

“It is putting money into something with the expectation of gain within an expected period” (Graham and Dodd, 2005).

It must be a well-crafted exercise to view Safety, Liquidity, Profitability, Tax relief, and Rate of Return as objectives.

Various options are available ranging from bank deposits, post office accounts, Time deposits, and Post office Monthly saving Scheme, National Savings Certificate and Senior Citizen Saving Scheme, Pradhan Mantri Jan Dhan Yojana for rural people, Sukanya Samriddhi Yojana for protection of girl child, Public provident fund, and Mutual fund tax savings schemes, etc.

## **Economic Growth**

Denison (1962) affirmed that economic growth is the increase of real GDP or GDP per capita, an increase of national product that is measured in constant prices. Economic growth is influenced by direct factors like for example human resources (increasing the active population, investing in human capital), natural resources (land, underground resources), the increase in capital employed or technological advancements. Economic growth is also influenced by indirect factors such as institutions (financial institutions, private administrations etc.), the size of the aggregate demand, saving rates and investment rates, the efficiency of the financial system, budgetary and fiscal policies, migration of labour and capital and the efficiency of the government.

## **Determinants of Economic Growth**

The determinants of economic growth are inter-related factors influencing the growth rate of an economy. There are six major factors that determine growth with four of them been grouped under supply determinants and the other two are efficiency and demand. The four supply factors are natural resources, capital goods, human resources and technology and they have a direct effect on the value of goods and services supplied. Economic growth measured by GDP means the increase of the growth rate of GDP, but what determines the increase of each component is very different. Public expenditure, capital formation, private or public investment, employment rates, exchange rates etc. have different impacts on economic growth.

## **Social Security System in India**

Social Security is not only a concept but also a system encompassing within its protection and assistance offered by the Government working as an agent of the state to the individuals who deserve it. For understanding the meaning of social security, it is necessary to analyze the constituent words of the expression. " Security " means freedom from concern or worry and " Social," refers to political society or state (Stack. 1941).

Therefore " Social Security " can be defined as freedom provided by society from uncertainty. Society in general is concerned about injustice, ignorance, poverty and disorder within itself, about the members who are less fortunate. It might do so because of two main reasons. Either out of sympathy and idealism in addition to the

fear of the disorder that will be created within society. Thus "social security" is the protection provided by the society to its own members for its own existence.

The concepts of social security have evolved over a period of time and used in various parts of the world in different ways. Therefore, achieving definitional clarity is a formidable challenge. In the 1880s, Germany became the first nation to implement a statutory social insurance system. It was made applicable to the whole of its industrial workforce. Thus, the notion of benefits was established as rights in the history of mankind (social security administration-US).

In the modern society the first occasion of its use was made by President Roosevelt when he addressed the Congress of the United States on June 8, 1934 and announced the essential objectives of the new programme. Among these, one of the objectives was security for the individual against the hazards and vagaries of life. The perpetual aspiration of the people which was to be afforded through social insurance. But he advocated that fund required for this programme should be raised by contributions rather than by taxation.

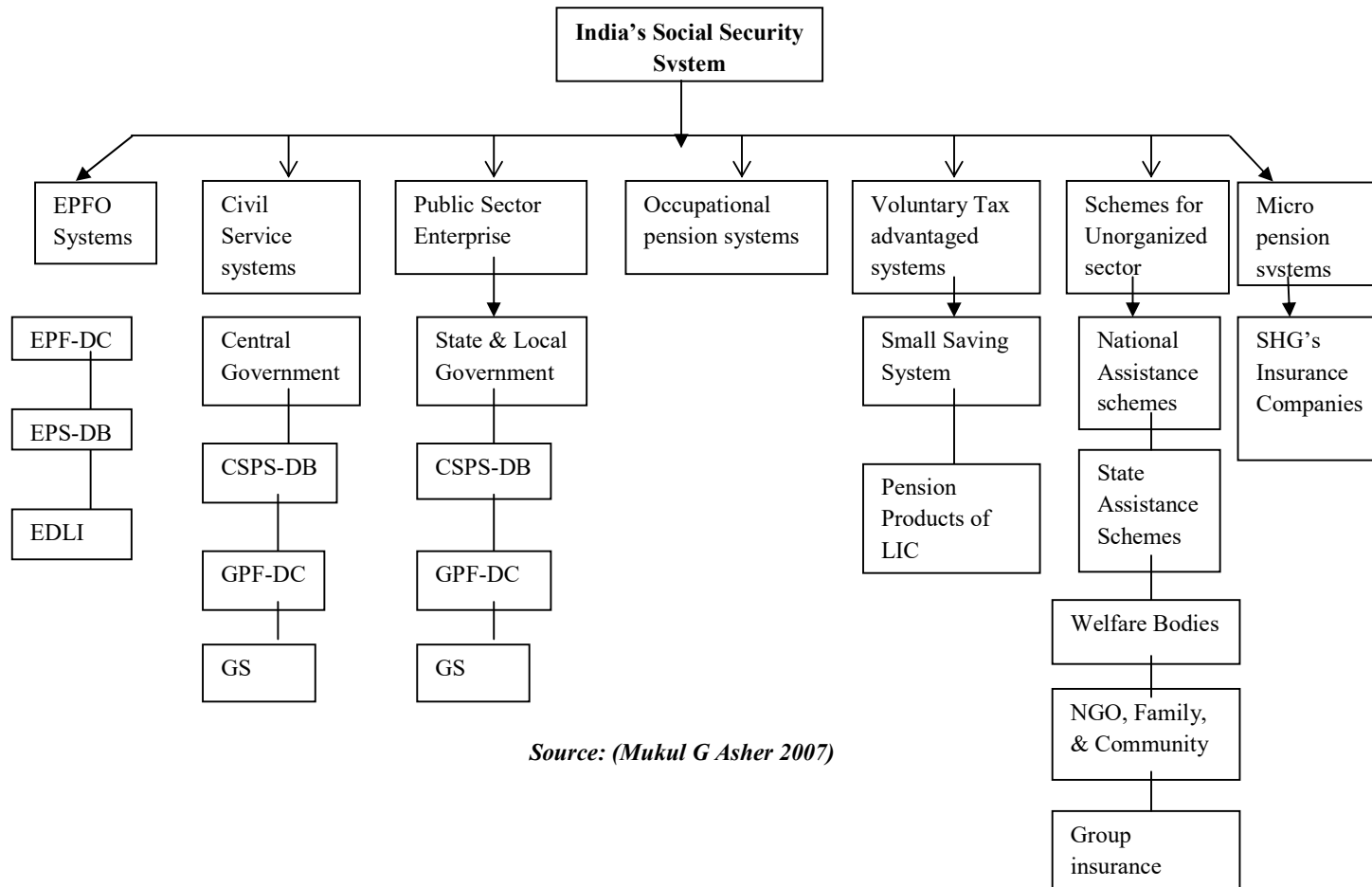
Thus, the represented social security protects not just the subscriber but also his/her family by giving benefit packages in financial security and health care. Social Security Schemes (SSS) are designed to guarantee at least long-term sustenance to families when the earning member retires, dies or suffers a disability. Thus, the main strength of the social security system is that it acts as a facilitator; it benefits public to plan their individual future through assurance and support. The achievement of social security systems however, needs the active support and participation of employees and employers. A worker/employee is a source of social security protection for him and his family. An employer is responsible for providing adequate social security coverage to all their workers.

India has always a joint family system that took care of the social security needs of all the members. The cultural traditions in India have followed the shared responsibility towards one another with their family members and relatives, this is often a best relief for the special needs required by the aged. In the Indian context, social security is a comprehensive approach designed to prevent deprivation, assure the individual of a basic minimum income or himself and his dependents and to protect the individual from any uncertainties.

In India social security scheme is provided over guidelines. Workmen's Compensation Act-1923 imposes the employer to offer compensation to a working man for any personal grievance caused by an accident, loss of earning etc. In 1948 the employers impose Employee's State Insurance Act to offer disease benefits, maternity supports to women workers, Disablement benefit, dependent's benefit, unreal support and also medical reimbursements. In 1952 the employer enforces the Employee's Provident Fund and Miscellaneous Provisions Act and deposit-linked insurance Act etc. The Payment of Gratuity Act-1952 offers for the payment of gratuity at the time of withdrawal. The old age and Retirement assistances like deferred income plans, pensions, gratuity, provident fund, old age assistance etc. The benefits range to job security i.e. The 1936-Payment of Wages Act, the 1948-Minimum Wages Act and the 1965-Payment of Bonus Act, these are the schemes provides income safety to the employees.

India is a developing economy; pension funds play a very vital part in encouragement the sustainable development in Indian equity marketplaces. Pension funds yield benefits due to a variation in the regulatory problems and in investment attitudes. This attitudes an enormous impact on capital marketplace and on the economy as a complete. But India embraces low equity extents which hamper the development of pension funds. The low equity amounts mean, the low hazard and protection for pension funds.

**Figure: 1.1**  
**India's Social Security System**



*Source: (Mukul G Asher 2007)*

From the above social security schemes is considered largely into seven fragments. In 1<sup>st</sup> January, 2004, all recently employed civil servants at the Centre (except for armed services) are come under defined contribution scheme. Nineteen states have also delivered announcement for a move to a new pension scheme, but their opening dates are differed.

### **The Organized Sector Scenario**

Formal sector employment is one in which terms are secure and consistent, and the employees in the association get guaranteed work. In informal sector denotes to one which the employment conditions are not secure and consistent, the initiatives are not recorded under the government. Even though the formal sector books for a minority of workers in the nation, it has been healthy enclosed by pension agendas.

Government workers, who form two-third of the work strength in the formal sector, are qualified for an indexed defined-benefit pension proposal, although contributing six% of their salary towards a provident fund. Under the Employees Provident Fund Union scheme, employees in firms that employ more than 20 workforces contribute to the Employees Provident Fund, the Employees' Pension Scheme and the Employee's Deposit Linked Insurance scheme. While the EPF is a DC scheme which giving a lump-sum amount at retirement, the EPS is in Central government scheme 3.5 million, state governments 7.5 million, quasi-government six million; total formal sector employ is about 27.5 million in DB System that providing a pension after retirement. Employees save 25.67% of their income through this above-mentioned system jointly.

The temporary authority, which will become a legislative regulator on one occasion the Pension Fund Regulatory and Development Authority Bill 2005 is passed in the legislature. So far 19 state governments have delivered announcements construction the NPS relevant to future workers. All employees except those in the Indian armed services and those who combined the central government before January 1<sup>st</sup>, 2004 are listed under the NPS. The PFRDA Bill 2005 is still awaiting in assembly, however, different passionately by the parties of the left, who fight the move from the DB to the DC pension scheme, which they see as an appropriation by corporate sector market services. They request a return to the old scheme for all workers. The NPS is not without its boundaries. The circumstance that individuals can select only between the 6 pension fund managers nominated under the new pension scheme restrictions freedom of choice for the consumer. It would have been fit to allow individuals to choose between any public or privately managed funds, with the government's part being

only to regulate the fund benefactors. Instead, the New Pension Scheme does not sufficiently address the problem of those who are financially uneducated: those who cannot select between the schemes are, by default, placed in the plan whose selection has the maximum level of government securities and with the fund manager who had the maximum returns the previous year. A well option would have been to place these people with funds that have the lowest administrative charges.

The creation and studies have shown that, while it may be achievable to maintain that a sound system can exist in philosophy, it is nearly impracticable to permit them to run properly' (Dave, 2006). This is basically the political system is not skilled of reacting to a developing demographic and economic condition properly and speedily. There has been no growth at all on reform of the EPFO. There are numerous structural mistakes that necessity to urgent modification and the 'Reinventing the EPFO scheme' expressed by the society itself contains the provision of a single identification number to followers; upgraded coordination between workplaces; better treasury management processes; upgraded accounting systems and restoring the human resource progress strategies and organizational culture (ADB, Dave (2006).

### **Demographic and Elderly Population**

The miracle of ageing people is becoming a key concern for the policy producers all over the world for both developed and emerging nations, In past two years. The problem aroused owed to lack of consciousness concerning the pension restructurings, social security, retirement assistances and welfare initiatives for the elderly society. Ageing population is affected due to descending tendencies in richness and mortality that is due to low birth rates attached with lengthy life expectancies.

Economic liberalization in India and current developments in foreign development investment movement have resulted in affected changes in functioning of several economic events particularly in the sectors like banking, insurance, aviation, , retail, pension and other capital market contributors such as commercial bankers, mutual funds, stock exchanges investment bankers etc. The stream of pension reforms includes complex enquiries of public finance, separation of labor market, political budget, income delivery pattern, behavior psychology, socio culture, economic reforms and its post outcome on the overall society.

India is expected to be most populous nation by 2024. By 2030 India reached the population of 1.5 billion and by 2050 1.7 billion. Population ages 65 and above in India is

5.8079% in 2016 (Trading economics) and 6.5739% in 2020 according to the World Bank. Nearly one eighth of world's elderly population lives in India. The vast majority of this population is not covered by any formal pension scheme. Instead, they are dependent on their own earning and transfer from their children. These informal systems of old age income security are imperfect and are becoming increasingly strained. People above the age of 60 years have grown at an annual rate of growth of 3.8 percent (75.9 million in 2001 and 55.3 million in 1991), during the period 1991-2001, as against the annual growth of 1.8% for the general population. And 173 million in 2002 with the share in total population rising from 6.9 percent to 12.4 percent (ORGCC-2006 Office of the Registrar General and Census Commissioner, India). The burden of provision of financial security to old persons is becoming more severe over years as increasing life expectancy.

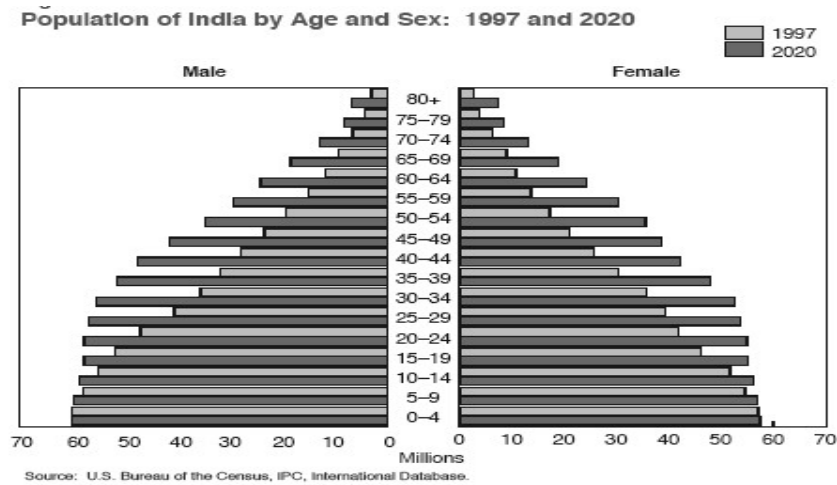
The population of India according to 2016 estimation was 1,324,171,354, the life expectancy in 2009 raised accordingly as 68.89 years male by 67.46 and female by 72.61 years. During 1975-2010 the population doubled to 1.2 billion. India is projected to be world's most populous country by 2024. The government of India has spent about 2,688 billion Indian Rupees on pension and other benefits as on 2014-2015 (2018 statistics). India's elderly (above 60 years) population according to 2011 census there are 104 million in which 53 million are females and 51 million are males. This is projected to more than double to 200 million by 2030 and rise from the current 8% of total population to 19.6% by 2050. India is one of the fast countries in the world where males outnumber females. The phenomenon among elderly is intriguing because female life expectancy at age 60 to 70 is slightly high than that of male (Irudaya 2006).

The age pyramid of the Indian population has started changing from the typical pyramid of a rapidly growing population to a pyramid of a stationary population. The latter is characterized by relatively constant numbers up to age 50 whereas afterwards most social security benefits are provided in India through legislations. reality has "a larger effect" (Goldstein 2009: 11)



**Figure: 1.2**

**Population of India by Age and Sex: 1997 and 2020**



**Source: Adlakha 1997: 1**

The pattern of aging in India has just started unfolding. In 2005, India reached the threshold according to which the UN defines a country as “aging”, i.e., at least seven percent of the population is 60 and older (Prakash 1999: 2). Thus, now is the right time for the GoI to approach pension policies for the majority of the workforce before the pressure of an aging population becomes more severe in the next two to three decades. In 2010, the median age is projected to be 25 years and is projected to rise to 38.4 years in 2050 (UN 2008). The 60+ cohort is growing the fastest within the population. The number of the aged has risen by 300 percent from roughly 20 million to about 80 million from 1950 to 2005 (Bhattacharya 2000: 5). In the next 10 years, the share of elderly is projected to grow to 10 percent of the total population and to 20 percent in 2050, accordingly with 134.5 million elderlies in 2020, 200 million in 2030, and 315.6 million in 2050 (UN 2008, Asher 2005: 14).

Socioeconomic development has led to a rapidly increasing life expectancy at birth (L E (0)). For the period 1950 to 1955, the L E (0) was only 37.1 years for females and 38.7 years for males. Both have risen to 63.5 years for both sexes, 65 years for females and 62.1 years for males, in the period 2000 to 2005 and they are projected to further increase to 75.4 years for females and 71.4 years for males for 2045 to 2050, which has mainly been caused by decreasing infant mortality (UN 2008). However, LE depends on the financial status of the household (Mohanty, Ram 2010).

**Table 1.1**  
**Demographic and Labor Market Trends in Asian Countries**  
Demographic Trends in Selected Asian Countries

<i>Country</i>	<i>Total Population</i>		<i>Average Annual Rate of Change in Population</i>		<i>Total Fertility Rate</i>		<i>Median Age</i>		<i>Life Expectancy at Birth</i>	
	<i>2007</i>	<i>2050</i>	<i>2005-10</i>	<i>2045-50</i>	<i>2005-10</i>	<i>2045-50</i>	<i>2005-10</i>	<i>2045-50</i>	<i>2005-10</i>	<i>2045-50</i>
World	6671.2	9191.3	1.17	0.36	2.6	2.0	28.0	38.1	67.2	75.4
<b>Asia</b>										
China	1328.6	1408.8	0.58	-0.32	1.7	1.8	32.5	45.0	73.0	79.3
India	1103.4	1592.7	1.55	0.30	3.0	1.8	24.3	38.7	63.1	75.9
Indonesia	231.6	296.9	1.16	0.10	2.2	1.8	26.5	41.1	70.7	78.6
Korea, Rep. of	48.2	42.3	0.33	-0.89	1.2	1.5	35.0	54.9	78.6	83.5
Malaysia	26.6	39.6	1.69	0.41	2.6	1.8	24.7	39.3	74.2	20.1
Philippines	87.9	140.5	1.90	0.50	3.2	1.8	21.8	36.3	71.7	78.7
Singapore	4.4	5.0	1.19	-0.38	1.2	1.6	37.5	53.7	80.0	84.6
Sri Lanka	19.7	18.7	0.47	-0.55	1.9	1.8	29.5	43.4	72.4	77.6
Thailand	63.9	67.4	0.66	-0.27	1.8	1.8	32.6	44.3	70.6	78.1
Vietnam	87.4	120.0	1.32	0.21	2.1	1.8	24.9	41.6	74.2	80.3
Japan	127.9	102.5	-0.02	-0.78	1.3	1.6	42.9	54.9	82.6	87.1

(Source: UNDESA -2009)

The retirement payout is also limited. Social security is the responsibility of the state and the government needs to provide financial backup for retirement savings of these workers. Existing post retirement schemes available in the country cover large chunk of population because of its lack of awareness inappropriate fund management, governance, accountability and transparency in the system. The existing system of pensions which leaves more than 88 percent of Indian workforce uncovered is unlikely to act as a social security umbrella for the aging Indians. Even for those that the system covers, the defined benefit is strictly not guaranteed as the DB schemes are unfunded or under-funded schemes. Improvement in healthcare facilities leading to increase in life expectancy, evolution of nuclear family systems and rising expectations due to increase in per capita income, education etc. are some of the factors likely to compound the problem in future. The new pension system, based on defined contribution and funded liability is a traditionally, social protection systems have been based on employer and employee relationships. India's

combined public sector deficit exceeds 10 percent of GDP, while total public debt is around 85 percent constitutes an important reason for social security reform.

The Indian economy is currently enjoying the collateral benefits from the dependency ratio a demographic dividend with a crucial ratio. In India, till 2005, the dependency ratio was 0.6, in 2017 the elderly dependence ratio is 8.6 and total dependency ratio is 52.2%. This is expected to decline as the demographic dividend effect the non-earnings ratio over the next 20-30 years. With fertility rates dropping in the past 20 years, from 3.8 in 1990 to 2.9 in 2007, 2.43 in 2017 and expected to fall in the number of new-borns. This will further bring down the people not earning to a situation where the bulk of the population will be earning. A lower dependency ratio that is working population has many economic benefits with a larger savings and consumption levels in the economy increases, providing vector forces for higher growth for economy but unfortunately this is not permanent. Over time, this huge working force of economy is expected to retire. If the economy fails to implement a proper pension system today, the economy will have fewer people in the working age group to support the old. At the same time, the lower dependency ratio will be joining the workforce, resulting in a greying of the economy that is non-working ratio increases. The expected people are now retiring in few years. If the retired people do not have access to regular income streams for which they need to save for future uncertainties.

### **1.3 Research Gap**

An indication of literature review states that a number of studies have been commenced related to pension fund systems of both formal and informal sector in Karnataka, India and overseas. However, in India most of these studies were directed by the central and state governments and corporate sector. The elements of these studies were alike but methods diverse. Most of these studies mainly attentive on cost benefit analysis of pension schemes, pension fund system in India, gender wise investment awareness in pension schemes, and new pension scheme related mechanism, but there is no indication that any of the previous research has studied on the objective of the topic which is chosen in this current study. The detailed review of literature of the study mentioned in the chapter three in the study.

### **1.4 Statement of the Problem**

Pension reform is important not only to achieve social objectives, but also to reduce the government's contingent liabilities. Pension reform will have limited effect in the short

term, but is critical to protect government finances in the medium to long term. Government and state-owned enterprises as employers are finding it difficult to fund their pension liabilities. For a long time, pension provision targeted only central and state government workers and organized sector employees based on financing through company and worker contribution. Besides choices offered by private and society administrations, there were no pensions for the huge population, i.e., employees in unorganized sector including the economically underprivileged sections of the population. In the past era, the government of India started a pension reforms procedure towards a more comprehensive multi-tier pension scheme, which commonly is the most effective option to meet the demand of many groups. The proposed system is expected to relieve employers from their pension liabilities. The study is prepared to analyze the impact of pension reforms on saving, investment and growth of the country.

### **1.5 Need for the Study**

Many research studies have been directed in the area of pension reforms. In the present scenario, study can see the pension beneficiaries who are working in formal sector. India is facing a demographic conversion, lower total fertility percentage, improved life expectancy etc. There are considerable variations among regions and states in fertility rates, life expectancy, and patterns of internal migration, saving, investment, inflation, changes in GDP rate of the country its impact on growth factor. Pension restructuring and a pension system with greater reach will not only ensure nationals' welfare in their golden years but it will help to both the central and state governments cut their future obligations. A comprehensive study of the pension reforms and its impact on saving investment and growth of Indian economy will help the government, advisors, policymakers in changing the social security system and also the need for pension holders.

### **1.6 Research Questions**

The study tries to answer the following questions:

1. What are the social security system and pension reforms in India?
2. What is the level of awareness about pension reforms among the beneficiaries?
3. What are the differences in the perception of beneficiaries towards defined benefit and defined contribution pension schemes?
4. What is the attitude of beneficiaries towards pension schemes?
5. What is the impact of pension reforms on savings?

6. What is the impact of pension reforms on investments?
7. What is the impact of pension reforms on growth of Indian economy?
8. What is the level of satisfaction among the beneficiaries regarding pension reforms?

## **1.7 Objectives of the Study**

The present study provides greater insight into the pension reforms and its impact on savings investments and growth of Indian economy. Following are the concise objectives of the study:

1. To study the social security system and pension reforms in India.
2. To know the level of awareness about pension reforms among the beneficiaries.
3. To evaluate the attitude and perception of beneficiaries towards defined benefit and defined contribution pension schemes.
4. To examine the impact of pension reforms on savings.
5. To examine the impact of pension reforms on investments.
6. To analyze the growth of Indian economy after the pension reforms.
7. To know the level of satisfaction among the beneficiaries about pension reforms.
8. To offer the suggestions based on the findings of the study.

## **1.8 Hypotheses of the Study**

1. There is no significant difference in the Attitude of beneficiaries towards Defined Benefit and Defined Contribution pension schemes;
2. There is no significant difference in the perception of beneficiaries about pension schemes.
3. There is no significance difference in the contribution of Pension scheme after the Pension Reforms to GDP;
4. There is no relationship between equity investment and pension reforms;
5. There is no relationship between bonds investment and pension reforms;
6. There is no relationship between Government-Securities investment and pension reforms;
7. There is no growth in the Private Sector investment by the Pension schemes after pension reforms;
8. There is no growth in the Public Sector investment by the Pension schemes after pension reforms;

## **1.9 Research Methodology**

The present study is engaged in a detailed understanding of pension reforms and its impact on savings investments and growth of Indian economy.

The study deals with covering of awareness, problems of beneficiaries, attitude, perception of beneficiaries towards defined benefit and defined contribution pension schemes, impact of pension reforms on savings, investments and growth of Indian economy, level of satisfaction about pension reforms. The following section covers the research methodology of present thesis. It includes research design, sources of data, sampling design and statistical tools and techniques,

### **1.9.1 Source of Data**

The present research was carried out with the help of both primary and secondary data.

#### **a. Collection of Primary Data**

The essential and related primary data collected from organized sector employees in the study area. The researcher designed a well-structured questionnaire consist of close-ended and five-point Likert Scale questions based on the research objectives to accumulate the data from the sample respondents. Initially, study was pre-tested with 25 respondents and later pilot study was carried out among 100 employees of organized sector in Bangalore district of Karnataka state. Restructuring of words and efficiency of replication in data done, later data collected from the sample respondents of the selected sample area.

#### **b. Collection of Secondary Data**

The secondary data were collected by various reports, such as, annual reports of world bank, pension bulletin, NPS trust annual reports, NSDL annual reports, CRA reports, CRISIL reports, SEBI annual reports, SEBI bulletins, NSE and BSE annual reports NSEIL reports, and Published reports of various Ministries, and Various Authorities, Books, Journals and periodicals, Research Papers, Published Theses, Articles, and Websites and from previous studies.

### **1.9.2 Sampling**

#### **a. Sample Area and Sample**

Employees who are working in organized sector from departments of Central Government, State Government are sample respondents of the study. The data being collected

from pension beneficiaries among the four districts namely Bengaluru, Mysuru, Belgaum and Kalburgi state of Karnataka in India. It includes organized sector employees located in the four districts of Karnataka. The population is quite different with various factor such as qualification, religion, caste, occupation, etc.,

#### **b. Sampling Method**

In the present study convenience or purposive sampling technique have been used to collect data from organized sector employees in sample area.

#### **c. Sample Size Determination**

To determine the size of the sample, a pilot study has been conducted. 100 respondents who are the employees working in organized sector in Bangalore district of Karnataka state were taken, based on the data collected from pilot study standard deviation of sample computed using SPSS software.

In order to determine the sample size, following formula (Godden 2004) has been used. The formula is shown below:

$$SS = \frac{Z^2 P(1-P)}{C^2}$$
$$SS = \frac{(1.96)^2 0.5(1-0.5)}{0.05^2}$$
$$= 384$$

SS = Sample Size

Z = Z-value (e.g., 1.96 for a 95 per cent confidence level)

P = Percentage of population picking a choice, expressed as decimal (max=0.5)

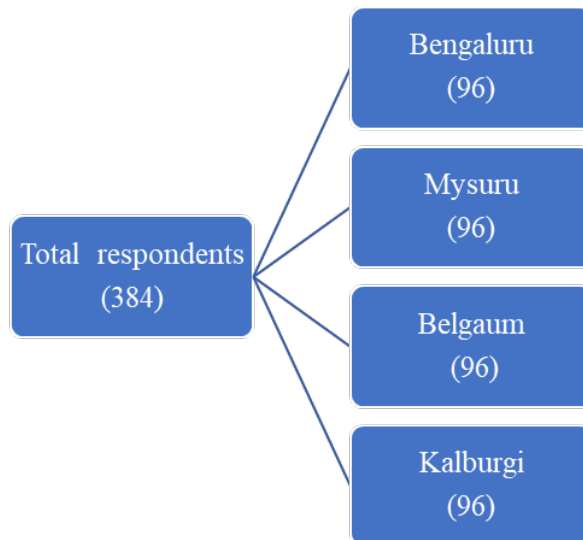
C = Confidence interval, expressed as decimal (e.g., .05 = +/- 5 percentage points)

A total of 384 sample respondents have been taken of the study. A brief classification of sample size is as following below: -

#### **d. Sample Design**

From the following four districts of Karnataka, the samples were collected and the distribution of sample presented below:

**Figure: 1.3**  
**Distribution of Sample Respondents**



### **1.9.3 Statistical Tools and Techniques**

The analysis of the survey data done through statistical tools with the support of SPSS software 24 version. The tools used in the study for analysis purpose includes cross tabulation, frequency, percentages, GR, CAGR, mean and standard division, one sample t-test, independent sample t-test, paired sample t test applied to prove the framed hypothesis.

### **1.9.4 Pilot Study**

In Karnataka, Bangalore district has been selected for pilot study with a total of 100 respondents who are the employees of organized sector. Articulation of words and effacing of replication in data done. With pilot study data reliability of questionnaire responses measured using Cronbach's Alpha, and the overall score of alphas for total scaled items works out to 0.904 which indicates data is highly reliable, for all scaled variables taken individually with a certain number of items was greater than 0.7 which again shows high reliability of data.



**Table No. 1.2**  
**Reliability Statistics**

<b>Reliability Statistics</b>	
Cronbach's Alpha	No of Items
0.90	61

Source: SPSS Output

### 1.9.5 Reliability Analysis

To ensure the validity of responses and to measure reliability effect, a reliability test was conducted by using Cronbach's Alpha test for individual scaled variables, and details of the same are presented below:

**Table No. 1.3**  
**Reliability Test Analysis Result**

<b>SI No</b>	<b>Variables</b>	<b>Cronbach's Alpha</b>	<b>No. of Statements</b>
1	Level of Knowledge and Awareness	0.922	2
2	Influencing Factors for enrolling to Pension Schemes	0.744	10
3	Perception of DB beneficiaries	0.742	11
4	Perception of DC beneficiaries	0.757	15
5	Attitude towards Pension Scheme	0.758	8
6	Level of Satisfaction towards Pension Reforms	0.921	2
7	Problems faced by the Pension Beneficiaries while Enrolling to Pension Schemes	0.735	13

Source: SPSS output

### 1.10 Scope of the Study

The present study focused on pension reforms in India. The study reviews the impact of pension reforms on savings, investment and growth of Indian economy and focused on Indian social security system. The study analyzed the perception, attitude of the organized sector pension beneficiaries and influencing factors for enrolling to pension schemes. The beneficiaries of the pension holders were selected in four districts in Karnataka, namely, Bangalore, Mysore, Belgaum and Kalburgi district. The secondary data required for the purpose of analysis taken from 2008-2021.

### 1.11 Limitations of the Study

1. The present study is restricted only to pension reforms in India.
- 2 The study conducted only on impact of pension reforms on savings, investment and growth of Indian economy.
- 3 The study covers only organized sector pension reforms.
- 4 The geographical area is limited to four districts of Karnataka namely- Bangalore, Mysore, Belgaum and Kalburgi district.
- 5 The secondary data required for the study is restricted to 2008-21.

### 1.12 Chapter Scheme

<b>Chapter Number</b>	<b>Title of the Chapter</b>
I	Introduction and Research Design
II	Review of Literature
II	Pension Reforms in India - An Overview
IV	Pension Reforms Impact on Savings Investments and Growth of Indian Economy – An Analysis
V	Summary of Findings, Suggestions and Conclusion.
	Appendix-I Bibliography
	Appendix-II Questionnaire

# CHAPTER-II

## REVIEW OF LITERATURE

### 2.1 Introduction

The main objective behind survey of related literature is know the area of different studies made so far to perceive the gap in a specific field of research.

Review of literature summarizes the various theoretical work and research contributions towards the core concepts of the study undertaken. It provides sound knowledge on aspects relating to the present study. It helps to understand the problem better and provides the basis for understanding the scope of further research in the field of study that has been taken. In this chapter, an attempt is made to review the literature can be divided into four parts reviews pension reforms in India and abroad, savings and investment, economy, and DB and DC.

### 2.2 Review of Literature

#### **Review of Literature on Pension Reforms in India and Abroad**

**Ajit (1996)** the study examines proposing far-reforms to the pension systems, the world bank has suggested that the existing pension scheme pay-as-go is in many rich as well as poor countries, should be replaced by fully funded, mandatory, preferably private pensions, as the main pillars of the new system. It argues that these reforms will not only benefit the pensioners, but also enhance savings, promote capital formation and economic development. The study provides a critical examination of the bank's these and concludes that it has adopted a one-sided view of the relationship between the key critical variables. The proposed reforms may therefore neither protect the old nor achieve faster economic growth.

**Robert (1997)** the study highlights the theoretical ideas of the reforms and presents empirical data and preliminary econometric testing of the conjectured reforms effects on financial market developments, as well as the impact on total factor productivity, capital formation and private savings. The empirical evidence is consistent with most but not all claims. In particular, the direct impact of reforms on savings was low and initially even negative.

**Urjit (1997)** the study describes the agenda for changes in the Indian provident or pension fund system is provided by the compelling need to these are increase the number of people who have access to old-age financial security, enhance the flow of long-term institutional savings, and give a boost to the healthy development of financial markets. After analyzing the present pension system in India, the study suggest that policy and regulatory changes needed to achieve those goals on a long-term sustainable basis are put forward. And it makes an attempt to draw some lesson from changes taking place in this sector with the help of international case studies.

**Olivia (1998)** the study examines the forms of risks facing by the contributors in retirement schemes. It inspects the financial regulatory and labour market societies which appear most supportive for retirement system. Retirement system are planned to handle four main risks confronting individuals in old age individual risk, retirement system risks, country wide risk and non-diversifiable risk. Thus, pension system is strengthened by collateralization of the retirement capacity.

**Thomas (1998)** the study identifies how optimal pension policies can change in small counties, defined as having one million or fewer contribution to pension funds. After exploring optimal pension reform design given this one small country characteristic, other stylized assumptions about small country are incorporated into the discussion include relatively greater international mobility of labour and capital, greater scarcity of human capital specialized in financial supervision and risk over long time horizons. An important conclusion of the study, which rests only on the assumption of a small contribution base, is that the “Chilean model” should be modified to include greater reliance on international trade in financial services.

**Monika Queisser (1999)** the study explains the pension reforms in Latin America. The empirical result of this study shows that government arguments that radical reforms of social security is only possible to sell except as a response to Imminent crisis. It also found that in Latic America, many countries have moved away from unfunded state-run pension schemes that pay for pensions out of present taxes to privatized funded individual pensions where benefits are financed by the capital accumulated by each person during her/his working life. The investigator also found that in more or less each case, these reforms were a reply to a looming or actual fiscal crisis but contends that the region demonstrates that the reforms can be politically successful as well as economically

required. The study concludes that Latin America's experience of pension reforms is both desirable in itself and potentially popular electorally better.

**Larry Willmore (2000)** the study examines the three pillars of a pension system are defined in varied ways. The author focuses on a definition provided by the world bank in its 1994 report. it argues that with a universal pillar one there is no need for pillar two. Pillar three should not receive tax subsidies, which are regressive and also have not been shown to have any significant effect on private savings. Such a pension scheme may appear utopian, but it is effect in New Zealand.

**Robert (2000)** the study examines the multi-pillar pension system that translating three sections, a publicly managed, unfunded and defined benefit pillar, a privately managed, fully funded defined contribution pillar and voluntary savings for old age. A set of initial hypotheses such as the poor, independent, transaction costs, system design issues and system credibility explain that low rates of involvement in reformed social security system, with special prominence on reforms in Chile and Argentina and their suggestions on economy. These hypotheses claim that the working poor and self-employed continued to have a detailed and strong balanced for avoiding participation in the multi-pillar pension system because of its high transactions costs, systemic and design issues, and difficulties of credibility negatively influence the labour force. These outlines are not enough toward making formal retirement security portable, elastic and cheap and second tendency of structural adjustments to changed retirement security systems.

**Ajay shah (2000)** the study examines the problems of income security in old age in India associating with other country limitations, pension system and its problems. The study estimates the current programs in the pension sector, EPFO. Ideally discovers DB pension scheme and DC pension scheme movement in the present range. It positions essentials of single national identify number and individual choice and the risk of payment is important. New pension scheme plays a vital role in India but the construction of this is insufficient for investors due to the lack of fund practices and in choosing the asset class. The role and rules of DB and DC pension system are emphasized for the additional pension restructurings.

**Robert (2001)** the study analyses the recent state of the pension system in India, as well as devices to reform it. Problems with the existing system are recognized and within this

framework, the proper role of the government in retirement savings is debated. Lastly, the OASIS reforms suggestion is evaluated additional reforms option are presented.

**Goswami (2001)** the study analyses the present state of the Indian pension system on practice that could hypothetically influence policy decisions in other emerging nations, particularly those with comparable reliance on the national provident fund system. It is claimed that low coverage level, loss of provident fund schemes due to investment boundaries, financial problems in unfunded public pension administering programs and disparity between organized and unorganized pension system have concentrated the existing system useless and unjustifiable. The pension system is passing through a emergency of confidence. The financial, demographic and labour market tendencies of the existing system are moving in upsetting directions.

**Vaidyanathan (2001)** the study debates the issues and challenges fronting the pension corporate in India. Conversation of current pension systems mainly the government pensions and the mandated pensions for the formal sector employee's provident fund, information on the three-pillar system supported by the world bank. Issues relating to the coverage of people and the capacity of the state to endure its existing schemes for government employees.

**Boeri & et.al (2002)** the study describes the pension reforms and the opinions of European Citizens, most of the economists would subscribe to the view that the public pay-as-you-go pension systems in many European countries are unsustainable and in need of reform. Yet, such reforms are politically very difficult. The study tried to understand the nature of these difficulties by analysing the citizens' opinions on different aspects of the welfare state and its redistributive programs. The study designed an identical questionnaire for the two countries, and found that there is widespread awareness of the unsustainability of the pension system, and of the need to reforms. The study suggest that preferences reflect the economic interests of individuals, as presumed by the theoretical literature on political economics.

**Wasana & et.al (2002)** the study analyses the formal social security system of India and Sri Lanka. The study says many of the social, demographic and economic indicators differ markedly between the countries, the structure of the social security systems, challenges and reforms directions are quite similar. Thus, the provident fund organization in both countries need to modernize and benchmark their governance, operations and

investment policies. This dualism in their systems, which has resulted in relatively generous no-contributory pension being provided to civil servant civil services pension arrangements lend urgency to reforms in this area in two countries.

**Gupta (2002)** the study delivers the impression of multi pillar system in India, with old pay as you go pension system which is almost non-existent. It clarifies two distinct mechanisms a defined contribution element and elements of a defined benefit. It observes the political and real role of mandatory pension scheme (EPF and EPS) as an individual account. These pensions are collected to avail the benefit and security after the retirement to meet old age outlays. It assesses the requirement for pensions reforms in India with defined benefit and defined contribution movement it includes longevity, recession extended illness, investment yields, inflation, interest rate. Contributors should be concerned about differences in investment choices risks.

**Manish & et.al (2002)** the study examine present pension reforms schedule tends to emphasis narrowly on the government and individual parts and occupational devices like gratuity, superannuation and provident fund are hazardously neglected. The reforms package required to make the leap that science made from classical physics to significant physics and flip about the existing over regulation and under direction. Most significantly, it is time to attack the dissimilar and politically sensitive matter of reforming provident fund.

**Stanford (2002)** the study describes that the debate taking place about the most appropriate way for states to provide for retirement income for their citizens. The main doctrinal approaches reflected in this debate are analyzed in relation to the actual outcomes of state practices. The key issues are argued in this study is to be one not of economic or social policy but of political culture. Result says that reforms efforts are surveyed on this basis of the starting points and paths followed in particular countries.

**Monika (2002)** the study explores and compare the ideas on pension policy held by the international labour office, the international social security association, the world bank, the international monetary fund and organization for economic co-operation and development. Although, study says that initially, the discussion of pension reforms was characterized by fierce debate with a marked ideological bent and all the participants are now aiming at mutual understanding and in particular co-operation and co-operation in

member states and recipient countries. The previous dogmatic approach has given way to a predominantly pragmatic position.

**Basudeb (2002)** the study identifies measures for estimating the current pension system in India and far exactness a pension system for following era. The study estimated the existing system in terms of the values and measures set out and debated possible reforms for the upcoming.

**Mukul (2002)** the study analyses the decision to predominantly rely on a single mandatory savings pillar instead of constructing a multi-pillar system has resulted in an inadequate system of financing retirement. These limitations have been exacerbated by the weakness in the governances' structure of central provident fund. This study suggests establishing of pensions authority to help develop a multi-tier pensions system; and to require the CPF board to bring its governance practices in line with international best practices.

**Srinivas & et.al (2003)** the study identifies retirement income plans in India face one or more of three common problems like poor funding, inadequate diversification and weak governance. The study discussed policy issues raised by these problems in the context with the help of three case studies such as the Indian railways pension fund, the employees provident fund and the seamen's provident fund. It examines means to reform these pension funds, drawing upon both Indian and international evidence and experience. Using these case studies as a basis and it offers general recommendations for pension reforms in India.

**Giuliano (2003)** the study reflects some broad trends of pension policy analysis in Western Europe. The study result found the emergence of two different types of multi-pillar systems, one of them consisting of reformed social insurance systems that will contain a small private pension supplement. Chances are the policy decisions taken some one hundred years ago will continue to matter for a while.

**Moneer (2004)** the study focuses on three major income security plans for the aged reveals that the government is instead working to dilute much of its responsibilities. The study strongly argues for strengthening of the social assistance programme for older persons and modification of the ceiling formula used for capping the size of its beneficiaries, providing a guarantee against diminution of investments in the reformed



pension policy and devising long-term old age savings instruments with higher terminal yield.

**Mitchell (2005)** the study analyzed the emergence and spread of the new pension reforms, a set of privatizing reforms that is part of a broader neoliberal agenda for global economic policy. The new pension reforms are significant both because they revolutionize the post-war social contract and because global policy actors have been involved directly in their implementation in more than 25 countries around the world. In this study defined the scope of global policy, explores the content of the new pension reforms and shows the new pension reforms to be a global policy in their development, transfer and implementation.

**Dupont (2005)** the study gives a brief presentation of the legacy of pre-transition pension system and the demographic context. The general framework of reformed pension systems is then set out. The early stages of the reforms in some countries are then presented and the difficulties discussed. Finally, a few long-term issues are commented upon.

**Surendra (2006)** the study investigates the brief survey of India's story of pension reforms, which distances many agencies and has made amazing improvement in putting sound foundations of a modern, well planned pension system. The study concludes by attempting to draw some lessons about what worked and what did not.

**Dhirendra (2006)** the study places of interest on fundamental issue in refining current pension schemes is the absence of a inclusive national pension policy. In this setup, there is a necessity to define a policy-based target by which the performance of present occupational scheme can be assessed. The government should object to develop an comprehensive and reasonable national pension policy that provides equal chances and identical rights to all peoples, irrespective of their employment status, to achieve a honorable retirement in a safe and well-regulated atmosphere.

**Mukul G (2006)** the study analyzed pension reforms are an essential part of managing India's calibrated globalization, based on open-society, open-economy paradigm. This study argues that there is a strong case for restructuring current provident and pension fund pension and for well design and delivery systems for old age assistance. Three main areas which the reforms should address are attractive professionalism in performing main

functions, a systemic outlook facilitating formation of a multi-tier social security system, improved governance and regulation.

**Peter & et.al (2006)** the study highlights the pension challenges and pension reforms in OCED countries. Recent pension reforms have a number of common themes studied, in this study firstly, pension eligibility conditions have been tightened. Second, the indexation of pensions in payment has been become less generous. Third, some pension schemes link benefit levels to changes in life expectancy. Finally, a number of countries have introduced defined contribution pension privately managed schemes where the pension benefit depends on contributions and investment returns. The study concludes with a discussion of lessons that can be earned from experience to date.

**Renata & et.al (2006)** the study estimates the effect of pension reforms on households' expectations of retirement outcomes and private wealth accumulation decision exploiting a decade of intense Italian pension reforms as a source of exogenous variation in expected pension wealth. The study found that workers have revised expectations in the direction suggested by the reform and that there is substantial offset between informed about their pension wealth.

**Mukul G (2006)** the study highlights the pension issues and challenges facing in India. The success in pension reforms will depend on a greater degree of professionalism in the design and governance of provident and pension fund organizations such as the employee provident fund assess their suitability, scalability and sustainability. The study indicates greater financial literacy so that pensions are not considered a welfare measure without due regard for financial and fiscal analysis is also essential.

**Mukul G & et.al (2006)** the study examines various components of India's social security system; pension reforms requirements and regulatory structures. It mainly emphasizes on measuring new pension scheme to meet the challenges of social security system in India. The existing provident fund schemes, acts, rules and organizational governance structure has to get re-oriented to balance state and marketplace. India's labour market, human resource expansion policies are growing from decades, globalization has made active social safety to help maintain the legality of monetary, social, governance reforms and to boost the risk. The speed of ageing denote huge task for social security has a system. The need for the monetary flexibility and financial consolidation has needed to reforming the existing non-contributory DB price and wage

induced pension schemes for civil forces. The study says that there is an important to create the consciousness to provide financial knowledge for retirement and tax treatment has to be upgraded to increase the savings schemes.

**Mukul G (2007)** the study exposes on the Indian pension reforms. The necessity for reforming the pensions, financial pension literacy is evaluated. It as well improved the demographic and monetary consolidation and existing social security system in India, for rational reforms of pension by forecasting durability trends with elastic signing limitations. It computes the life expectancy to provide safety and sustainable retirement income.

**Meena (2007)** the study examines the pension program in India has conventionally been based on funding through employer and worker contribution. Thus, the coverage has been limited to the organization sector employees and a majority of the labor force in the informal sector has been unused to access to formal channels of old age financial provision. Additionally, the current mandatory and voluntary isolated pension system is categorized by restrictions like fragmented regulatory framework. This study elaborates on the current originalities and reforms in the pension system in India, including setting up of the Temporary pension fund regulatory and development authority, introduced new pension scheme system.

**Rafael & et.al (2008)** the study describes the structural reforms in the 1980-1990 were targeted on improving the long-term fiscal sustainability of the system and their institutional design, while transferring part of the economic and social risks from the state to participants. However, in recent years authorities in both countries coincide on identifying insufficient coverage among the elderly and adequacy of benefits as the most critical problems. As a result of differences in political economy and institutional constraints, responses were different. In Chile, a long and participatory process resulted in a large reform that focuses on impacts on the medium term, through a carefully calibrated adjustment. In Argentina., instead, reforms were adopted through a large number of successive normative corrections, with little public debate about their implications and immediate impacts on coverage and fiscal demand.

**Esteban Calvo (2008)** the study investigated on the old age pension reform and modernization pathway in China. The study found that their families are not in a position to provide the needed support and the need for formal institutional pension coverage will

be increasing rapidly in the year ahead. It is also found that corruption and lack of transparency aggravate the coverage and compliance problems and constitute as the major challenges in China. Further, it is also found that the fiscal burden had been another problem for China because of low-income country. It is concluded that the low-income countries faced lot of problems with respect to old age pension reforms particularly in China.

**Ogwumike (2008)** the study examines the prospects and challenges of the 2004 pension reforms drawing from the Chilean experience. The major prospects of the new pension reforms scheme include increase in liquidity in the economy which is expected to have favorable multiplier effects on the value of interest rate, investment types, availability of funds for organizations and infrastructural development etc, the study concludes by advising that efforts should be made by all stakeholders to maximize the prospects of the new scheme and minimize its challenges.

**Mukul G (2009)** the study analyzed a current social security system can empower India to cushion the problem on employees of restructuring public and private body to increase the acceptability of further reforms and to inspire individuals and organizations to involve in private enterprise and make inspired career choices. This is followed by debate on India's existing social security system and the specific actions that can be taken to growing the working of provident and pension fund organization. This study end with four broad reform's themes designed to construct and sustain a modern social security system for raising India.

**Edward & et.al (2009)** the study describes the reform packages that have taken place in 38 industrialized economics, some of them involving incremental changes to existing provision, and overhaul of the entire retirement income system. The changes had many objectives such as improved coverage of pension system, especially of voluntary private pensions, was a common goal, some reforms aimed to improved the adequacy of retirement benefits to combat old age poverty, increases in pension eligibility ages and adjustments to pension incentives to retire and finally, some reforms aimed at streamlining the administration of retirement income provisions and to improve the security of benefits in the face of different risks and uncertainties.

**Olayinka (2010)** the study examines the before the adoption of the new pension scheme in 2004, In Nigerian social security provision for the retirees and aged was awkward. Most

private sector establishments did not accord any priority to their retired workers after years of service. This study examines, some salient issues about the pension scheme and people expectations of it. By assessing its benefits and challenges, the study underlines the need for a strong structural and institutional framework to achieve the objectives of the scheme.

**Olurankinse (2010)** the study critically analyzed the impact of the current pension scheme reforms in the public service in Nigeria. The study revealed the public concern over pension matters and focused on ways to improve quality of life after service and how to increase life expectancy of pensioners in Nigeria. The study recommended the use of a uniform pension scheme for both the employer and the employee. Also, strict regulation of the activities of pension fund administrators and national pension commission is to be established and charge with the responsibility for the regulation, supervision and effective administration of all pension matters in Nigeria.

**Cheolsu & et.al (2011)** the study proposes the establishment of a South Asia Pension Forum. The SAPF is intended to Liam Foster and support intensive policy analysis, research and consultation on pension reforms and social security within South Asia and undertake a number of key initiatives to build both regional and country specific capacity and knowledge in this area. The study proposes the establishment of an SAPF secretariat in order to foster ongoing dialogue on pension reforms and implementation issues and serve as a dedicated resource to provide off-the-shelf research, training, information and technical assistance for pension reforms to countries in South Asia.

**Nyong B. C & et.al (2011)** the study examined the PRA 2004 and its significance on retirement planning in Nigeria. It investigated the current status of the PRA 2004 in attaining the objectives for which it was promulgated as perceived by 3000 serving teachers and teacher pensioners. Results revealed that the objectives were yet to be achieved since retired persons still suffered trauma, pains and even death before they received their pension packages in Nigeria while its sustainability was questioned.

**Fredriksen & et al. (2011)** the study attempts to find the difference and explain the term as DB versus DC is discussed related to the new pension system in Norway. The new system fulfils several criteria for a DC scheme and it may thus be characterized as quasi-actuarial. In this system neither pension benefits, nor contribution rates statistics Norway are exogenous. Earnings from all years in work count in the accumulation of entitlements

and an actuarial rule converting the final balance into an annuity is introduced. The study results say that given these restrictions it is of minor importance if the new pension system is described as defined benefit versus defined contribution. One modification follows from the treatment of inheritance of entitlements from persons who die before the lower age limit of treatment.

**Luis Ferruz (2011)** the study describes the demographic trends in Western countries have shown the need to reform public pension systems, mainly represented by pension plans, have experienced global development. This is particularly remarkable in countries such as Italy, where, after some reforms of the public pension system, a mixed system has been adopted, which has made contributions to occupational pension plans compulsory. In this, study shows how these reforms influence the Italian pension market and are able to stimulate the national economy, even during times of crisis, like the present.

**Elekta & et al. (2011)** the study seeks to examine and analyzes the contents of the pension reform Act 2004. It equally tries to analyze the implications of the pension reforms act and its contributions towards the retirements social benefits of employees both in the public and private sector.

**Robert Holzmann (2012)** the study debated the continuing key variations that are activating reforms and recognizes few extents on which pension reforms community emphasis to make modification. It frameworks the major movements in pension reforms crosswise pension pillars that twenty-nine nations followed Chilean model to saving from financial emergency. This mainly focusses on modification strategy reforms, moving reform wants and allows the actual fluctuations in environment. This makes a policy evaluation on making solution for execution after marginalization and keeping elderly labour market in addressing the un-certainty about the longevity in pension product.

**Odia & et al (2012)** the study examines the history of the Nigerian pensions administration dates back to the 1950s. the pension reforms act of 2004 brought into limelight the new pension scheme in Nigeria which is a defined contributory scheme unlike the old scheme which was largely defined benefits. Although the new scheme is being adjusted to be better than the old scheme in that it expected to help remedy the deficiencies and inadequacies prevalent in the old scheme, it is advocated that only proper co-ordination, supervision and regulation of the pension industry in Nigeria will make to happen.

**Goswami (2013)** the study work on the reforms in the Indian pension system as a part of restructuring the institutional framework of various schemes such as pay-as-you-go, EPF and EPS. There is a gradual collapse of the traditional old age support mechanism with a rise in the elderly population in India. There is a definite requirement for firming the formal networks of retirement funds. The coverage from the traditional channel is limited and skewed. Informal sector employment is on the rise. There are considerable costs and increasing liabilities in unfunded plans. There is a need for developed annuity markets and an increase in the domestic rate of savings through higher contractual savings,

**Azad (2014)** the study examines the political economy of pension reforms in India. India's far-reaching civil services pension reforms in 2008 provided its fragmented and diffuse pension system a unifying organizing framework. The study assesses India's pension reforms and identifies challenges for the national pension system in providing old age income security. The study also presents estimates for universal social pension scheme and argues that its implementation is constrained by political factors and not necessarily by fiscal constraints.

**Sukhen Khali (2014)** the study makes comparative study about the India and Chile government workforces pension assistances. Individual capital account, private fund administrators' elasticity in pension system administration is resolute. The important change of pension benefits of India and China are associated with DB and DC pension system with group A workers. This study discovers the significant increase in new pension scheme with that of the Chile model. It shows that the early retirement average pension assistance in India is more than the average benefit of Chile model pension benefit.

**Masinde & et al (2014)** the study examined the impact of pension reforms in Kenya. The study used contribution rate model to find the national social security fund. The empirical result shows that these reforms are directly linked to the general economic growth of the country and asserts that the set six percent contribution is sufficient to meet the welfare conditions of Kenyans. It is also found that it has been supported by majority of the stakeholders. However, good implementation strategies need to be put in place in order for the public to realize the good effects of the same. This study therefore seeks to identify the main social welfare reforms put in place and to find out the effects and challenges toward implementation of these reforms on the performance of the industry.

**Kit (2015)** the study aims to provide a review on the disadvantages of a PAYG pension scheme and key features of recent overseas pension reforms. It includes of five major sections first on to introduces different types of pension schemes and definitions of some key terms, secondly, it examines the disadvantages of a PAYG pension scheme including its sustainability problem of an economy with an aging population etc., it reviews the evolution of world bank's multi-pillar pension framework, forth one it summarizes main features of pension reforms of overseas economics on their national pension as well civil service pension schemes and lastly, it discuss the advantages of establishing a defined contribution scheme and pension fund.

**Ebere (2016)** the study examines Nigeria pension administration dates back to the 1950s. the pension reforms Act of 2004 bring into limelight the new pension scheme in Nigeria which is a DC scheme unlike the old scheme which was largely DB. The issue of pension has received more attention in many countries over the past decades.

**Xinmei (2016)** the study explores some of the reasons why reversal is often taking place in developing countries. As part of study analysis study propose a new pension reforms typology that goes beyond the commonly used dichotomy between pay as you go and pension privatization. The study identifies and discuss four factors that are particular relevance to those seeking to understand the pension policy reversals that have been taking place in many developing countries, low pension coverage and etc.

**Viola & et.all (2017)** the study focusses on the transparency of eligibility criteria that can be reformed at relatively low cost. India's social security pension reforms in the last 2000s provide the opportunity to examine the effect of a change in these criteria. Using two rounds of the India human development survey along with extensive administrative information. The study test whether increasing the transparency of eligibility criteria reduces the mistargeting of social pensions. The result confirms the relationship between specifications of the transparency measure and the introduction of a tolerance bond.

**Asian Development Bank Institute report (2017)** the report examines the targeting performance and access to a social welfare scheme for an increasingly vulnerable group-India's elderly poor. The result shows that during a time period of social pension reforms, exclusion and inclusion errors were successfully reduced but exclusion of elderly poor continues to be extremely high. The study says the reforms aimed at increasing the transparency of social pension allocation were indeed achieved, such as possession of the



BPL ration card has become the primary determinant of access to social pensions. However, this focus on the ration card has its own weakness.

**Analytical Report (2017)** the study analyses the attitude of the population of Georgia to the drafting of a reform of the pension system and further identifying compliance with the new pension system with the social political value based and state-oriented positions of citizens.

**Huoyun & et.al (2018)** the study highlights the pension reform in China and its effects on different social groups over the past three decades. An important aspect of social stratification has been reshaped into five distinct pension scheme classes. The new pension model has strengthened the link between benefits and contributions, which privileges the better off. In this newly stratified pension system, those with high human capital and family capital and who are in the more developed regions are the clear winners. The tackle of these inequalities future pension reforms in China should focus on promoting equalization and de-stratification.

**Prasad & et.al (2018)** the study gives a detailed analysis on pension reforms theories such as economic theory, multi pillar model by world bank, theory of utility and preferences and life cycle theories. It further discusses the three-retirement decision model, two third retirement decision model, the option value retirement decision model and one year retirement decision model used in explaining various decisions relating to retirement and the forms of retirement benefits payments. Finally, it discusses the four approaches by which pension reforms can be analyzed.

**Aaron (2018)** the study argues that in order to correctly assess the sustainability of pension reforms, one needs to adopt a more holistic framework that encapsulates the interaction between pension system goals and constraints. In number countries reforms focused solely on reducing future spending were followed by reforms that restored generosity.

**Agbaji Benjamin (2018)** the study attempted to investigate the effect of new pension reforms on the lives of Nigeria retirees. The aim of this is to explore the need for better retirement welfare and ensure prompt payment of retirement benefits. The study concludes all retirees under civil pension scheme can at least receive fifty percent of the last salary they received before retirement.

**Sabu (2019)** the study review the importance of pension systems and its typology as a social security that provides income security to people to understand the environment in which the pension systems operate, how far current and future demographic, economic and labour market conditions influence the pension system in the design and performance to highlight the issues of faced by developing nations in sustainability and solvency of traditional pension which are based on PAYG and evaluate the value and feasibility of pension reforms from the experiences reforms pension system around the world.

**Carmelo (2020)** the study reviewed in 1980 to 2005, eleven American countries implemented structural reforms in their pension system, totally or partially shifting them from DB, pay as you go and public administration toward DC, fully funded financing and private management. This study reviews the implemented re-reforms, as well as those under discussion and extract useful lesson for region and the world

**Amina & et.al (2020)** the study assessed the pension reform policy in Kaduna and Niger states public service. The study result leads to the clarity about the current contribution pension scheme in the public service for effective pension administration. The study recommended that the banks and private financial institutions involved in PFA should show how ways to facilitates transparency and prudent accountability by publishing the rate of return, regular statements of contribution and interest for the various contributions to keep them abreast with their contributions.

**Samuel & et.al (2021)** the study analysed pension reforms in Europe have a significant impact on the way and extent to which public pensions provide retirement income. This departmental paper takes stock of where European pension system stand and assesses their key characteristics. The authors present a novel measure of the balance between lifetime benefits and contributions the proportionality measure to examine pension systems long term sustainability, fairness and intergenerational equity.

**Kawamura (2021)** the study focused two pension reforms in Egypt in order to understand the dynamics of social policy reforms under authoritarian rule. One supported by the world bank and promulgated in 2010. It consists drastic changes, such as the introduction of a DB scheme and ultimately failed. Another one successfully implemented in 2019. The study suggests that perception of authoritarian leaders as having wide ranging discretion in decision making concerning public policy and being

able to more decisively implement harsh social reform compared with democratic political leaders need to be reconsidered.

### **Review of Literature on Pension Fund Savings and Investment**

**Beck's (1984)** the study highlight that who were more interested for retirement plans were the economically and socially lucky employee who could have simply got chance to get into such plans. The thing is found that people advancing most from the retirement preparation plans were the older workers and those were less educated with low professional status, no allowance scheme coverage and accordingly with low retirement revenue.

**Fillenbaum & et. al. (1985)** the study describes that actual incentive to plan retirement comes from insight of suitability of individual pay by high income set of people to take action in preserving their status as respects to the standard of live and expenses in retirements. The individuals with low income don't forecast variations in their live standards and those who come under middle class sense stuck in retirement planning or any other financial investment because they are continuously and having very less savings.

**Malroutu & et. al (1995)** the study examines the effect of the social demographic factors for this purpose consumer finance survey data was used, to check the adequacy of the retirement income of the pre-retiree employee's human capital and objective variables were used to examine the factors. After accumulation of subjective variable quantity to the analysis of pre-retirees' perception was absolutely related to planning to save within five years with of having suitability retirement income.

**De Vaney & et. al (1997)** the study highlights that woman received 57.2% of their total income from the social security whereas men received 36.6% of their income from this source. Even though women receive a high fraction of their retirement income from social security than men but in the way on monthly benefits they receive less. The lower level of social security benefits as was the case pensions earned by women has been accredited to lower pay scales in their career history and frequently interrupted or intermitted work patterns.

**Klaus (1998)** the study explores substituting a fully funded system for a PAYG regime provides potential efficiency gains in factor markets, can contribute to higher savings and hence could raise growth. But pension reformers face significant uncertainty about the size and timing of these benefits. The study outcomes say that Chile's pension reforms system have upgraded better labour market presentation and increased saving, investment and factor efficiency, contributing to one quarter of the nation's progress increase.

**Andrew (2000)** the study analyses the effect of social security on saving using a panel of countries over 25 years. The variation in the characteristics of social security systems is used to determine whether less reliance on a PAYG, unfunded system is associated with higher national savings. The study found that there are little evidence countries that implement DC reforms have higher trends in saving rates after the reform. Cross-sectionally countries with PAYG systems tend to have lower saving rates and this effect increases with the coverage rate on system.

**Norman (2000)** the study discussed the basic design of the research project, its core database and the world saving database. It then summarizes the main project results and places them in the context of the literature on savings, identifying the key policy and non-policy determinants of private saving rates. Special attention is paid to the relationship between growth and saving and the impact of specific policies on savings rates. The study concludes by introducing the studies included in this special issue.

**Goswami (2001)** the study examined the greater equity return and the connected excess volatility attitude a policy problem of whether retirement saving should be invested into equity market or not. The study result indicates that an all-equity collection policy of its much greater mean terminal accumulation value, may entail considerable risk taking. Well-adjusted portfolios, instead perform much better in terms of underperformance risk but fare poorly in low inflation regime. The designs show that if allowances are actuarially faire, the underperformance risk is marginal for well-adjusted portfolios and failures to further with rise in real interest rate. Therefore, it says that equity revelation could pension funds to provide well returns to the pensioners.

**Wills & et. al (2002)** the study states that experimental learning series shows the fundamentals investments that are grounded in it. Knowledge is lacked on the basis of little participation or non-i participation. Individuals do not study to save for the retirement drives till they take any investment choice. The personal retirement savings are

compulsory for financial purpose. It is significant for individuals to be elaborate in the decision to experience the art of strategic savings. Since the life expectancy has elevated people live longer and equally important is the increasing number of the people in retirement leading to reduced labor force. It is important for the individuals to be enthusiastically joining in investment for their retirement.

**Orazio & et.al (2003)** the study examines the pension wealth and household savings evidence from pension reforms in the United Kingdom. In this study there are three major UK pension reforms are using as natural experiments and the study investigate the relationship between pension saving and discretionary private savings. The study analyses found that earning related tier of the pension scheme is found to have a negative impact on private savings with relatively high substitution elasticities the impact of the flat rate tier is not significantly different from zero.

**Sadhak (2004)** the study inspects the impact of Chilean kind of pension reforms on savings, capital market and economic growth. OASIS report suggested Indian pension system. The study indicates that pension reforms in Chile model did not have significant growth and savings effect, while they provided boost for capital market growth but at a higher cost. The nations like Sweden, Singapore and Malaysia with the substitute measures and pension system recorded for better growth in GDP, savings and capital markets. Hence, taking the experience of other nations in scheming any pension model, India has to avoid fund management activism for determining sustainability of monetary programme.

**Barry & et.al (2004)** the study argues that the contrasting results for united states and OECD nation states can be traced to differences in the governance of the pension systems and the degree of effort that is made to separate the pension funding from other budget activities. It also examines the cross-national evidence on saving response within the private sector to fluctuations in pension fund and private insurance accumulation. It found substantial evidence that pension savings substitutes for other forms of private savings.

**Lai (2008)** the study identifies the perception of the earlier generations and several aspects such as situation, age, information and performance factor which marks in perceiving the retirement and impact the choice of pension creation and its decision making. The findings determine that through the difference in age shows the difference in the observation about the retirement but a similar model of pension obtaining is followed.

The results substitute studies that helps in encouraging the pension providers to promote pension products even more resourcefully and effectively by educating the people for better preparation of retirement when the customer identifies the possible assistances of pension for retirement.

**Rakesh (2008)** the study reviews the overall macroeconomic performance in India since independence and then assesses the likely prospects for growth in the medium term, it argues that India's growth has been largely enabled by the availability of domestic savings, which have increased steadily over the decades. Further, the efficiency of resource use has been high with a long-term incremental capital output ratio of around four, which is comparable to the best in the world. The study found that it is important to that this period has been marked by a relative decline in public investment. A revival of public investment, accompanied by higher public savings, would be necessary to improve and expand public services.

**Gort (2009)**, the study uses over Swiss pension scheme, pension scheme that favoured dynamic supervision over indexing in application of their strategic asset distribution were inspected. The study shows that their victory has been below expectations, because the performance of Swiss pension scheme in universal equities and local was under than market indices. The study decision makers of Swiss pension system throw some light on why popularity dynamic management is still kept.

**Rono et. al. (2010)** the study discovers the return of investments for pension plan and pension funds which arises under the impact of RBA rules and analysing it. The study highlights that return for yearly investment for retirement benefits plan in the previous 3 years series from 10% to 27.52 percentage and sometimes lowering below the annual inflation.

**Imam (2011)** the study inspected the possible and real role played by government in pension fund plan administration. The government plays an important role in the performance of investment in terms of risk and return and by correctly placing the pension funds in taking rewards of the assistances. Classically pension funds hold low proportions of equity in their portfolios which touches the development of pension funds and low equity sizes it means further safety for the pension funds holders. To some amount of home bias arise because, it is not needed for regulators to lay strict parameters

on the proportion of equities and thus, a considerable level for improvement in the status of existing pension system is possible. Further issue which needs attention is the tax behaviour for making the NPS equitable.

**Croce, R.D. (2011)** the study discovers that a high proportion of pension funds plan that are not presently invested is not been concerned towards organization investments. In order to attract pension fund investment in various infrastructure and assurance the achievement and sustainability of the investment in the long-term barricades have to lectured. Additionally, there is a requires to raise the local base of financial professionals with an infrastructure proficiency.

**James et.al (2011)** the study provides a comparative account of the evolution of private saving in India and Malaysia, and analyze how policy changes in the financial sector and pension system help explain differences in their saving performance. The study found a fairly robust long-tun relationship between private saving and its determinants in both countries. The result provides some support for the hypothesis that financial liberalization results in lower private savings in both countries. The evidence also indicates that expected pension benefits tend to stimulate private saving in India, but that the revers is found in Malaysia.

**Ramesh (2011)** the study analyzed the existence and nature of the causal relationships. The study analysis focused on India, where saving rate has been the most pronounced. The co-integration analysis suggests that there is a long-run equilibrium relationship. The results of Granger causality test shows that higher saving and investment lead to higher economic growth, but the reciprocal causality is not observed. Further, it is empirically evident that saving and investment led growth is coming from the household sector. It may be inferred from the results that India is not too close to the technological frontier and hence not catching up with the new technologies.

**Ranji Nagaswami (2012)** the study lays out a framework proposed in the city of New York to address the three shared investment challenges faced by many public funds across the US one is create a new starting point for investment planning based on understanding risks and another is drawing an investment policy roadmap with clear steps to get to long term balanced policy portfolio and lastly, get governance right. The solution

to some of the most difficult problems of pension stewardship are visibly within the grasp of everyone involved.

**Tsunao & et.al (2014)** the study says that more Japanese in their early fifty's expect their level of public pension benefits to decline compared with those in their late fifties and early sixty's and also found that recent pension reforms that raised the pensionable age affected the Japanese population by increasing the age at which they expect to claim their benefits by almost the exact same amount as the increase in the pensionable age. The reforms have also decreased the population's expectations about receiving public pension benefits, although this effect is not necessarily significant. The evidence that anxiety about the public pension programme's future increases private savings.

**Sapna Singh & et.al (2015)** the study finding out the attitude of the investors towards investment in pension schemes in Lucknow. The present study investigates outlined that the investors have positive approach towards investing in pension scheme. The investors opt pension scheme for old age safety and investing collect the information from expert advisors then only invest the money. Mainly investors select the different type of market linked schemes for their investment in pension schemes.

**Marta et.al (2015)** the study found that one additional polish zloty or PLN of pension wealth crowded cut about 0.24 PLN in household saving. It also finds heterogeneity in responses. For the middle-aged cohorts, the study says a large public pension crowded out of private saving, while the crowded out for younger cohorts equals about 0.30 PLN of private savings per 1 PLN. Finally, says that a close to complete crowded out among highly educated households.

**Stefan (2017)** the study analysed the effect of an increased ERA on monthly private savings. For Germany, it also is the first study analysing the effect of reduced pension benefits levels on private savings. A particularly series of reforms of the German statutory pension scheme allows for a clear identification strategy along male and female birth cohorts using data from household account books.

**Bomikazi Zeka (2017)** the study results indicated that there is significant relationship between retirement age decisions and financial preparations on the one hand and the attitudes of individuals towards retirement on the other. The retirement attitudes of individuals were assessed in terms of the perceived losses in entering retirement, the gains



in entering retirement and the gains in leaving work. The findings of study also revealed that the respondents had a positive attitude towards retirement.

**Hua & et.al (2018)** the study reviews the effect of demographic change on national saving, global interest rates, and international capital flows, focusing the role of the public pension system. The study develops a small open economy overlapping generations model to illustrate the channels through which demographic variables and pension system generosity interact to affect the both private and public saving behaviour. The study then extends this framework to a two-country setting and simulate scenarios of demographic change and pension reforms. The study found the generosity of the pension system plays an important role in determining the movement of the global interest rate and patterns of international capital flows.

**Hui & et.al (2019)** the study reveals role of savings and the labour supply in self-insurance channels over the life cycle when one faces not only idiosyncratic income risks, but also changes in longevity risk and pension benefits. The study found that both savings and the labour supply are quantitatively important self-insurance channels in responding to changes in longevity risk and pension benefits and the responses via adjustment to savings and labour supply have significant macroeconomic implications. Applying the model to China, the study found that the pension reform and rapid aging together contribute 55% of the increase in the household saving rate from 1995-2009 and they jointly capture about 64% of the drastic increase in the labour supply for the same period.

**Remya & et.al (2019)** the study explores the retirement planning has become an essential part of one's life owing to the increased life expectancy and cost of living. The government of India started the national pension system under the PFRDA to take the citizens under the affordable social security scheme. New pension scheme is a low cost, tax sufficient, flexible and portable scheme. Employee and employers both contribute to the scheme. The wealth generated from the scheme depends on the investment growth derived from the contributions made. Consequently, the greater the investment achieved.

**Pushpa B V (2021)** the study results highlight that pension are still considered as secondary preference as against savings for immediate liquidity and long-term asset funds. While pension is a necessity at the core of the consumer adequacy of returns, long

term size of savings, income adequacy, cost of pension schemes, low awareness, lack of perceived transparency and higher investment spending under exceptional and normal situation contribute to low level of acceptance of pension plans and schemes.

### **Review of Literature on Impact on Indian Economy**

**Holzmann (1997)** the study examines economic development of financial marketplaces in Chile model that correlates with strong progress of the real side of the budget via growing total factor production and capital growth. The study estimated that long term growth in Chile is 1-3 percent higher owing to the effects of the pension modification functioning vis financial marketplaces, while study arguments that the restructuring of the conversion may have played a significant role. The tight fiscal stance may have contributed to monetary presentation by crowding in isolated investment and submitted higher credibility to the pension reform programmes inside and outdoor the nation.

**Frank T Denton & et.al (1999)** the study says that population changes affect not only to the demand sideways of the nation, but also the supply side the economy's creative capacity. A significant assumption is that while other inspirations will no doubt play a very important part, demographic effects by themselves are likely to reason of government outflow increase more than the rate of development of the population and by less than the rate of development of the GDP.

**Ajay Shah & et.al (2000)** the study shows that there is a considerable rise of index funds over twenty-five years. The emerging countries are considered by important concerns around stock marketplace liquidity, low skills in current financial economics and mature derivatives markets. The equity premium offers powerful inspiration for equity investment by pension funds plan, mainly when seeing the long-term prospects faced in pension investment. There are different avenues through which policy creators in emerging countries can make index fund more practical for pension investments.

**Faccio & et.al (2000)** the study statuses that the monitoring part of United Kingdom pension funds is focused among mature and under-performing companies and that in the long term, the companies in which pension funds have wider stakes decidedly recover their share returns.

**Catalan (2000)** the study discovered to recognize whether there is a Granger interconnection relation among equity markets and contractual savings. They used 2 stock

market indicators, share market capitalization and share market value operated across twenty-six countries, between which six are EMEs. The likely benefits of emerging such contractual saving segments are stronger for emerging countries with insignificant markets than for advanced countries, rendering to their work. However, they also argument that there is no Granger interconnection in Singapore and Malaysia where there are national pension funds that not invest deeply in local share market.

**Walker & et.al (2002)** the study results is strong when pension funds are proxied by 4 groups of variables, specifically, the share of stock in pension portfolio, , a dummy variable, pension fund assets to GDP and pension investment in shares and private bonds to total market capitalization. Further descriptive variables are per capita income, dummy variables, bank assets and inflation for the region. But when they variation their economic reform in different zones of the economy, some of the relationships become irrelevant, the study signifying the impact of pension restructure may be overstated if complementary monetary reforms are overlooked.

**Brigitte & et.al (2002)** the study examines the link between capital market reforms and saving. The empirical validity of the effect of pension reforms on domestic savings in United Kingdom has been investigated using an auto regressive distributed lag model capable of testing for the existence of a long-run relationship. This study concludes that there is no firm evidence that aggregate savings increase considerably as a result of privately funded pension schemes.

**Charles (2005)** the study highlights that the equity hazards of capitalizing in equities rather than bonds, are replicated in the equity risk premium when there is a well-functioning of stock market. Moreover, there is no strong evidence supporting time variation. Under these circumstances pursuit of the cult of the equity does not lead to rise in the value of the pension amount. The study shows those equities stock is poor match for pension obligations and the cult of the equity has no prevarication merit. The stock price of the company is genuine by the asset distribution of the pension fund. The similarity drawn among immature investors and immature pension fund schemes is not valid, so is non-argument in favor of the trendy equities.

**Frederiksen (2005)** the study argues that funded pension fund schemes cannot improve the economic impact of ageing population if combined with direct and indirect means verified decreases in public annuities. Even though funded pension suggests a way of

refining temperately the long-term financial outlook, it is also likely to involve a loss competence due to improve in life time progressiveness of the complete tax and outflow package. Thus, a favorable tax action of institutional savings grasps the potential for discouragement the process of monetary consolidation thus requiring either further tax get increase or decrease the expenditure.

**Poirson (2006)** the study inspects the broad constraints of the NPS looking in line with worldwide best performs, factors such as, partial mandatory participation, absence of first pillar, concentration of pension portfolios in government safeties and higher management levies have partial impact of pension restructuring on financial markets. In Indian pension reforms can underwrite for stock market growth through exempting formal employees to shift to the new pension scheme system.

**Nicke & et.al (2006)** the study gives an overview of demographic trends and their impact on public finances in transition countries. It also describes the pension reforms that have been carried out and the impact of multi pillar pension reforms on capital market developments. The study argues that multi-pillar pension reform is not a cure all the problem. Multi pillar system are costly to introduce, as pension contributions previously used to finance the public pension liabilities are diverted to the funded pillars.

**Helene (2007)** the study describes the pre-conditions for the pension reform to kick- start monetary development, including the build-up of dangerous mass, adequately flexible investment rules and guidelines including on investments in foreign and concurrent reform in stock markets. Given the limited scale of the strategic reform, the main challenges to India are to achieve adequate serious mass early on. Choices to address this challenge include surrendering permission for current employees to switch to the new pension scheme system or subcontracting all or part of the funds of private segment provident fund to the new pension fund manager.

**Jacob & et. al (2007)** the study examines the impact of stock market performance on the investment policy of pension funds. The study found that stock market performance affects the asset allocation of Dutch pension funds in two ways. In the short term, outperformance of equities over bonds and other investment categories automatically results in a higher actual equity allocation, as pension funds do not continuously rebalance their investment portfolios. In the medium term, outromance of equites induces pension funds to increase their strategic equity allocation. It also finds that rebalancing is

much stronger after negative equity returns, indicating that pension funds respond asymmetrically to stock market.

**Uthira & et.al (2009)** the study talks about pension in general, the last group of people who come to anybody's mind are the poor people. But considering that life expectancies are increasing, joint families are breaking up, government are slowly moving out of providing income security to poor, it becomes the onus of each individual to save for his/her old age, during their earning years itself. Thus, this study is an attempt to understand the trends in the pension sector for the informal sector workers, globally and found solutions to the problems faced by the informal sector with regards to pension and thereby the lessons that can be picked up by India.

**Channarith & et.al (2010)** the study investigates the impact of pension funds on capital market development, both for stock markets and bond markets. For the overall sample of countries, the study says that pension fund financial assets have positive impacts on stock market depth and liquidity as well as private bond market depth. Pension funds do not impact capital market development in the countries with a low level of financial development. The study result suggests that countries with low financial development should reconsider the management approach and investment strategies for their pension funds.

**Yuwei (2012)** the study pursues to recognize the impact of Asian pension funds on certain key transmission mechanism from pension restructuring to financial growth. Utilizing a panel error correction model, it finds numerical relationship among pension asset progress and growth of financial and stock markets. The main policy implication is that government in Asia should continue and strengthen pension reforms towards more prefunding of future liabilities, since it brings beneficial impact on the financial market.

**Milos (2012)** the study aims at providing new empirical evidence for the connection between pension reform and domestic stock market development, in the case of the old member states of European Union. The study seeks to measure the impact of private pension funds assets on the capital market development, using a panel data regression and after controlling for other explanatory variables. As predicted in the literature, the results show a positive connection.

**Salihu (2013):** the study aimed at examined the impact of Nigerian's pension reforms on its capital market development from 2004 to 2008. Nigerian government prior to 2004 was faced with myriad of problems associated with its pension scheme. The problems included inability to pay retirees pension on time, decreased revenue base and increasing workforce. The government to curtail this decided to reform its pension and changed it from a PAYG system to contributory scheme. The study found that pension reform has contributes to the development of the Nigeria's capital market through revamping of the moribund bonds sector, increase market capitalization and improving the performance of stocks in market.

**Mukul & et.al (2013)** the study suggests that fundamental rethinking of these premises is needed to enhance sustainability and fairness of Singapore's pension system. The study suggests that improvements in the design and governance of the CPF system such as a shift away from administered interest rate to crediting members with full returns earned on ultimate deployment of central provident fund balances and reforming age-based premiums for health insurance and central provident fund life.

**Shouji & et.al (2014)** the study found that the impact of pension fund on financial development is very significant especially in civil law and underdeveloped countries. This empirical study results indicates that legal origin and endowment. But it can change pension policies and reform social security system. A funded pension system with accumulates pension assets could promote a country's financial development and economic growth.

**Michiel (2014)** the study discussed the growing pension savings lead to deeper capital markets. This can have a positive effect on economic growth by allowing firms that are more dependent on external finance to grow faster. The study takes into account unobserved heterogeneity by including country time, industry time and industry country fixed effects. The study found a significant impact of higher level of pension savings on growth in sectors that are more dependent on external financing. The financial crisis doesn't significantly affect this relation.

**Ashok & et.al (2016)** the study examines the worldwide reforming process of pension system triggered by the demographic transition and globalization has led several countries to implement multi pillar pension systems and enhance pension funds. For this reason, the studies on effects that pension fund exert on markets performance have been flourishing

in the last decades. This study provides an updated review of the empirical advances in this field of study, with particular focus on the effects that pension funds produce on labour markets, financial market and economic growth.

**Inese Mavlutova & et.al (2016)** the study leads to conclude that intensifying ageing of population is a global phenomenon. The objective of study is to investigate whether the existing Pension system in Latvia is working effectively under changing economic environment to reach the goal of providing appropriate pension level for the retired persons. The study analyses the role of Private voluntary pension schemes, the current demographical situation with a flow of emigration and impact of new tax incentives for employees. The study evaluates efficiency of Private voluntary pension schemes and Latvian pension managers in providing appropriate pension level to future retirees in actual financial markets situation. Necessary action scenarios to provide wholesome standard of living in the future are analysed.

**Baridoo Friday et.al (2019)** the study aims to examine the relationship between contribution pension fund and economic growth in Nigeria. The findings of the study revealed the positive and significant relationship between public sector pension come contribution with gross domestic product and per capital income but a negative and insignificant relationship exist between private sector pension contribution with real gross domestic product and per capita income. Thus, an increase in public sector pension contribution accelerates an attendant growth in the real GDP and per capita income. The study recommended that pension come should ensure adequacy compliance of PRA 2014 as amended especially in the private sector to mitigate against leakages in the economy.

**Uwakwe et.al (2020)** the study examined the post 2014 PRA on Nigerian economic growth. The study specifically sought to ascertain the effects of post 2014. Retirement savings account portfolio performance, closed pension fund administration portfolio performance and contributory pension scheme portfolio performance on Nigeria economic growth. The study recommended amongst others that policy makers, especially, the pension regulators such as pen com, etc. should make concerted efforts at expanding and regulating the investment outlets for pension fund custodians in the country.

**Kazeem & et.al (2021)** the study explores the impact of accumulated pension funds on the investment level and economic growth in South Africa using Bayesian linear regression model. The empirical study findings from BLR model estimation suggests that

the mean effects of pension funds on economic growth and investment level in South Africa are approximately zero. The study concludes further corroborated by FMOLS results, which show that accumulated pension funds have no significant impact on the overall investment level and economic growth in South African economy. The study recommends that policy makers and pension funds regulators have to come up with workable means by which pension fund can be invested to significantly benefit the economy, at the same time ensuring the safety of the invested funds so as not to jeopardize the interest of pension funds owners.

### **Review of Literature on DB, DC (Old & New Pension Scheme)**

**Robert & et.al (1985)** the study examines some of the main trade-offs involved in the choice between defined benefit and defined contribution pension plans. The general conclusion of the study is that neither plan type can be said to wholly dominate the other from the perspective of employee welfare. The study found that defined contribution scheme has the rewards that employees can more easily regulate the accurate present value of the pension assistance they earn in any year, although they may have more in certainty about upcoming pension assistance flows at retirement. Measurement of present value ensuing defined benefit pension scheme is difficult at best and enforces severe informational necessities on employees, such problems could lead employees to misvalue their total reimbursement and outcome in mis informed behaviour.

**Ambachtsheer & et.al (1998)** the study described that fund after adjustment for the incremental costs and risks they undertook, underperformed their passive policy benchmarks in the period from 1993 to 1996 by an average point a year. The study discusses three drivers of fund performance fund size, proportion of assets passively managed and quality of the fund's organization design and offer suggestions for improving pension fund performance by improving elements of the fund's organization.

**Heller (1998)** the study discussed with some significant risks, limitation and complications associated with reliance upon mandatory defined contribution, fully funded schemes as the dominant public pension pillar. Policies to limit risks may result in the government being reinjected into playing an important financial role in the provision of social insurance. For many countries, the principal source of old age support should thus derive from a well formulated, public defined benefit pillar, with a significant amount of



prefunding. A DCIFF pillar can play a useful supplemental role in a multi pillar system for the accumulation of pension savings.

**Peter & et.al (1999)** the study says that privately managed defined contribution pension scheme is come under another pillar pensions may or may not have an adverse effect on savings, well-being, labour supply or the economic balance. In emerging economics, there is no presumption in favour of conventional wisdom for privately managed defined contribution pension system. Further lack of industrialized in stock market, less knowledgeable investors and with less regulatory capacity, makes the choice of possible abuse all the grater. The presence of superior volatility and absence of satisfactory market makes assurance provide by traditional defined benefit pension scheme more respected.

**Ministry of Finance (2001)** the study highlights the report projected likely outflow on the payment of pensionary benefit of government employees in the short and medium term and suggested appropriate plans or information system to help accurate valuation of the pensionary obligation in future. Since a system similar to pay as you go is now used for making budget assessment of the pension payments, forecast of future payments becomes dangerous for simplifying fiscal preparation, specifically in the short and medium term. This study found that total unresolved liability of the government arising from pensionary obligation in admiration of retirees.

**Dave (2002)** the study examined the nature of defined contribution pensions system that is established by of new institutions in specific supervisors, record keeping agencies and pension fund executives setting them up in systematizes method is a great challenge. This study discussed two important pension system achievement conditions one is it can efficiently channel capitals from savers to the progressively dynamic private sector organizations that can encourage economic development and second condition is that it will affect in demand for longer term gadgets including government and even mortgage-backed securities. Together, the impact on government finances and stock market liquidity can generate indirect assistances for the rest of India's vast people. In order to reap these prizes, the pension system must be based on a sound plan and be well executed. Both will need a concerted effort and support from various shareholders of the civilization.

**Davis (2002)** the study assessed about investment issues in pension fund in details. The defined benefit and defined contribution funds are a fiscal intensive to maximize tax advantage. The suitable investment approaches to be framed to protect the labor force. The issue under several pension fund plan is effective only on indexation, investment policies, benefits are examined and statistically verified. The portfolio guideline on pension fund is illustrated by linking with OECD countries and the required portfolio modification and tax control imposed under the measurable restrictions of the overseas investment.

**Pronab (2002)** the study is highlights on the salary and pension responsibilities of the government. The study offers balanced estimates of the future behaviour of the government employment and pension obligations and highlights the weakness of the pension management. There is a high retirement from twenty years thus, increases the pensioners and low erosion rates with lengthy exposure under pensions.

**Richard & et.al (2003)** the study offers a summary of the current pension system in India. Their controlling frameworks, a valuation of the efficacy of the pension system and the potential future character for private pension funds. It delivers a argument of the principles of management of private pension funds, international best performs in the area and their possible request to India, mainly in the context of the proposals for pension restructuring made in the recent years.

**RBI (2003)** the report discovers the pension of the state government and make suitable approvals. This report has basically presented the pension obligations by defining theoretical subjects and alternative methods to pension fund schemes. It also debates in detail the development of the social security system in the world, in India and also the evolution of civil force pension system in India. This deliberates the issues in pension restructuring of state government workforces and specifies the approvals pertaining to proposed structural variations and proposed parametric variations.

**Bhattacharya (2003)** the study discovers the current pension scheme of the state government and the trends in pension expenditures and their economic implications in the present pension scheme. It is documented that the civil force pension service pension system varies from the universal social security pension schemes in several aspects. The report determined that while inspecting the social security system across the globe,

despite some difference in the features there are numerous comparisons that could be defined.

**Sampad (2004)** the study deliberated all the probabilities faced by the defined benefit pension schemes have its individual unique determination of existence, this scheme is still appreciated by many companies and workers. With the current fluctuations in the social security structure, specifically breakdown of family patten has created standing for pension for all sector of society. Governments are encouraging its people to save their own old age with several pension schemes, which are in the nature of defined contribution saving scheme. Even though DC pension Plan and other personal pension scheme have its own advantages, some limitation such as doubt of pension amount, inflation, longevity risk and adjusted pension flow evidently, they cannot complement the defined benefit schemes altogether.

**Mukul G & et.al (2004)** the study suggests that there is an urgent need to extend the new pension defined contribution scheme to employees of the state govt as well as public financial institutions. The central govt has provided a lead. Each state needs to urgently consider their own version of such a scheme. The flow of new entrants has slowed considerably in recent years and therefore the scheme will initially impact a very small number of central govt employees. The current system, therefore, unless reformed will lower standard of living of future generation and encourage distribution centred politics.

**Tongxuan (2004)** the study observes a exclusive dataset to discover worker decisions to shift from a DB to DC pension scheme, the effect of defaulting options and the saving behaviour or workers who converted into the defined contribution plan. The study examines that new generation, female and higher income employees as well as those with fewer service were more likely to select a defined contribution plan. Further the study says that social security system restructuring have to reflect the workers characteristics it includes gender, salary, services, age, education and background which have an impact on the probability of setting up an account.

**Madhava P (2005)** the study presents the overview the concepts of social security systems, the administration of existing provident fund and pension scheme system. It explains the different phases of dependency of old age deprivation and susceptibility. The aim of the study is providing social fairness and standard of life for public. The multi-

dimensional sustainability of several systems and their difficulties in funding are protected through the organizational reforms under EPFO.

**John & et al. (2006)** the study aggregate pension sector data available for Australia, Canada and United State shows that asset allocations are quite similar for defined benefit and defined contribution plans, particularly in Australia where there are no differences of note. Both defined benefit and defined contribution plans hold most of their assets in equities and fixed income securities. One key difference noted in the asset allocations of United State and Canadian plan are the defined contribution plans tend to hold a greater share of assets in mutual fund while defined benefit plans tend to have higher weightings in directly held securities.

**Mukul G (2007)** the study says that there is a robust case for reforming current provident and pension fund system and for well-designed and delivery system for old age population. There main areas which are reforms should discourse are enhancing expertise in performing core functions and well governance and parameter. The study shows stresses the need to encourage financial and pension knowledge.

**Gayithri (2007)** the study examined the spending by govt under the current pension scheme of retirement benefits accessible to central government workers under thought made forecasts thereon and suggested ways to meet this obligation. The study evaluated the liability likely to arise towards terminal benefits of workers who had joined on or before 1<sup>st</sup> January, 2004 in the next 3 to 4 decades. The study recommended several decisions by which the responsibility on this account can be controlled in the future and devise appropriate and self-sustaining models of pension of central government workers for financing with the final purposes that the funds so planned are able to meet substantially the whole pension obligation of the government.

**Blake & et.al (2007)** the study examined the key differences between outcomes depend on the strategic asset allocation strategy chosen, it also found that defined contribution plans benefit most those workers who have the highest career average salary relates to final salary or whose salary peaks earliest in their careers. Thus, low skilled workers and women do relatively well from defined contribution plans, the largest median pension difference between occupation difference between women and men in the same occupation is 45%. The study concludes that key aspects of plan design should be occupation and gender specific.

**Alok Pande (2008)** the study conveys the review of the available literature in pension scheme which deals with the behavioral measurement of the contributors of the pension scheme in US, in exercising optimal and find out the suggestions for the new pension scheme in India. The new pension scheme would cover all central government workers who have joined on or after 1<sup>st</sup> January, 2004 as well as workers of sixteen state governments. The importance of understanding the behavioral selections in the Indian context is diverse on one hand it will benefit policy creators and regulators in being aware of the behavioral dimension while designing policies, it is also useful to investors themselves while making decisions about retirement planning.

**Fiona (2008)** the study suggests that some of serious cases of governance failures could be solved through a more balanced representation of stakeholders in the governing body, higher levels of expertise and the implementation of codes of conduct addressing of conflicts of interest. The absence of governance arrangements for DC style pension plans also needs to be addressed, potentially via management committees, increased fiduciary responsibility for relevant parties or vis a strengthened role for pension supervisory authorities. Consolidation of the pension industry in some countries may also be required to achieve economies of scale and reduce costs, which in turn would allow pension funds to dedicate more resources to strengthening their internal governance.

**Yu-Wei Hu & et.al (2009)** the study analyzed serious of problems given in the pension group are often low-income earners, vulnerable to economic volatility and change. However, since the turn of the millennium, efforts in a range of countries have increasingly highlighted improving pension coverage for informal sector workers. the study provides an overview of selected country experience in this regard and provides some suggestions for govt in developing countries considering implementing their own pension reform to ensure that informal sector workforce receive the retirement income they need.

**Mukul G (2009)** the study reviews the current status of the coverage provided under social security programmes in the countries of Asia and the Pacific. The review includes selected country case studies and examines national policies and approaches in the region and suggests measures that countries could adapt to suit their specific context and objectives. Such adaptation is seen as essential, not least because the region's countries

are heterogeneous in terms of their development, fiscal capacities, social security system and institutional capabilities in delivering social security service.

**Michael & et.al (2009)** the study results shows that an extremely high weighting is attributed to property and land as assets for retirement. One major finding that came out of the study that there are cultural alterations among the United Kingdom and Barbados, where in the United Kingdom there is an original culture in contrast to the communist culture of Barbados.

**Franzen, D (2010)** the study discovers that risk taking measurements is a key component of defined benefit pension funds. In depth examination was conducted on the growth of risk management in different segment of the financial industry by taking relative views and the exercise of risk management at DB pension funds scheme on relevant issues facing pension fund in terms of dimension regulation and governance. The study observed that general risk management has become greatly sophisticated, but it is frequently driven by regulatory and accounting system than by pension fund's specific risk profile. Pension fund aim is to pay the promised pensions to its followers where money can be seen as an in-between target, as a tool of risk management.

**Mukul & et.al (2011)** the study aims to fill a gap in the social security literature on India by examining the role of micro-pensions. This study discussed two case studies of recently initiated micro-pensions schemes in India, which reveal the need for rigorous analytical research on the micro-pension sector, particularly concerning the structuring of pay out options and innovative delivery mechanisms. The study concludes that micro-pensions have the potential to be one of the most useful components in India's multi-tiered social security system and should be encouraged.

**Mukul G & et.al (2011)** the study addresses the pension systems longevity and inflation risks in various ways. As a result, longevity and inflation risks are mitigated only for a small proportion of the labour force. The study discusses the need for robust annuity markets in India, along with an overview of annuity products and providers. The study also outlines challenges facing the development of the industry in India along with reform direction.

**Joao & et.al (2011)** the study shows how expected earnings growth and risk affects the benefits of final salary DB pension Plans, relates to pension plans that are DC in nature.

The study used micro data on the pension choices of individuals to provide the evidence consistent with the model predictions such as individuals who expect a higher growth rate of earnings are more likely to choose defined benefit final salary schemes and individuals who face a higher variance of persistent income shocks are less likely to choose defined benefit final salary schemes. The study control for cohort and age fixed effects in the empirical analysis.

**Robert Holzmann & et.al (2012)** the study examines across the world pension systems and their pension reforms are in a constant state of flux driven by shifting objectives, moving reform needs and a changing enabling environment. The study reviewed three-fold, to briefly review recent and ongoing key changes that are triggering reforms, to outline the main reform trends across pension pillars and to identify a few areas on which the pension reforms community will need to focus to make a difference.

**Ayanendu & et.al (2013)** the study analyzed the new pension scheme, the investigation of auto choice option under new pensions scheme and the demographic change reveals potential future imbalances in the investment structure among the different asset classes. The study says that, the NPS does not even promise a minimum pension amount, thus, defeating its wellbeing positioning.

**Sanyal & et.al (2013)** the study discusses on universal pension scheme in India, old age social security plays a pivotal role in a welfare state and one of the major components of old age social security is pension. The study proposes a worldwide pension scheme that will carry relief to the working people in the informal sector and argues that it will rise the coverage of pension without disturbing the fiscal condition. The main drive of pensions is smoothing of consumption and justifying longevity risks, poverty and inter-intra generation disparity. Common pension scheme would do this successfully for people in nation.

**Christopher (2013)** the study gives a unique opportunity to trace the longitudinal changes is defined contribution retirement account contributions of a sample of private sector workers who participated in a defined contribution plan in 2007 and remained with the same employer throughout the recursion. The study concludes that several job characteristics most notably a decline in real earning were linked to decline in participants contributions to DC retirement plans discussing the recursion of 2007 to 2009.

**Kalu & et.al (2015)** the study analyzed the impact of contributory pensions scheme on savings and investment in Nigeria. The empirical analysis reveals that majority of the respondents prefers to save outside any pension scheme implying that they are participating because it is compulsory. Again, most of the respondents are not aware of their employer's own contribution to their contribution pension scheme. The study concluded among others that the Nigerian govt should create more awareness and enlighten campaign on the workers contributory pension scheme geared towards retirements.

**Rappaport (2016)** the study discussed pension plan design range from those that place virtually all of the risk on the individual covered by the plan. Traditional plans include designs that are at both ends of this spectrum, but there is increasing attention to plans that share risk. The study identifies different risks and discusses methos of sharing risk, both traditionally and in recent plan designs. Two case studies illustrate recent developments.

**Ananth.S & et.al (2016)** the study discussed on the NSP scheme, introduced by the government of India, aiming to lead a comfortable life after retirement. The NPS is extended to all the citizens of India. The scheme is governed and monitored by an established autonomous body set by the govt of India. Very few people are aware the NPS, not much of them showed interest. To recognize the performance of the new pension scheme fund provide various businesses are taken, the study advise which fund to invest to get higher returns.

**Amlan (2016)** the study assesses the overall awareness level of national pension scheme services and other aspects that impact the individual behaviour concerning everyday financial choices. The study additionally relative significance of these aspects on voluntary contribution in the NPS and found out the future financial concern and financial guidance are very important aspects that influence the decision making of the people. But the financial literacy is pivotal for awareness of the availability of such schemes for old age security.

**Boyd & et.al (2017)** the study shows that pension plans increasingly take higher investment risks by shifting more investments to equities. Insufficient contributions and inappropriate benefit design further add to the level of solvency risks for pension plans.



Recent efforts have assessed the appropriate level of risks for public plans and provide policy advice to better communicate risks with stakeholders of the pensions.

**Subhro & et.al (2017)** the study discusses the NPS with respect to company bond, equity and government securities. The current state of pensions in India is the result of individual plans developed and amended over several decades, rather than of a comprehensive and coherent approach to old age income security and social protection, based upon a guiding set of principles. This has resulted in gaps of coverage in several areas, and duplication within various programs in other areas. Similarly, income generated through existing programs is inadequate for many retirees, and often does not provide for protection against the risks of longevity and inflation. India is undergoing major demographic shifts, in which the elderly population will double from its 1991 level by 2016. India does not have a comprehensive old age income security system. There are however, some mandatory schemes for employees of State and Central governments, employees of public sector banks, employees in firms with a staff of 20 or more and some others. In recent years, the insurance and the mutual fund industry in India has also started offering pension plans. In 2004, a new defined contribution individual account pension system was constituted for Central government employees recruited after January 1, 2004.

**Sukhen & et.al (2017)** the study aims to point out the various aspects of pension reimbursements available under the traditional old pension scheme and under new pension scheme and also instrument, performance of NPS. An attempt has been made to provide a brief idea about the pension benefits under the OPS and NPS of the govt employees.

**Don Boyd (2019)** the study examines with the increasing costs and risks in public DB pension plans, state and local govt have sought to share investment, inflation and longevity risks with employees. Risk sharing could protect employers from cost increase and reduce contribution volatility, but it could also create benefit risk or increase contribution burden for employees. The study results shows that the specific design of a risk sharing policy will have large effects on its impact.

**Ipigansi, Pretoria (2019)** the study examined the challenges facing in the new contributory scheme in Nigeria. The main purpose of this is to investigate the need for the better retirement welfare and to proffer possible solutions for prompt payment of retiree's

benefits. the study found that there is a shortfall in the retirement savings account. Therefore, it suggests that the new pension reform act should be fully implemented by all federal and state govt.

**Prashant (2019)** the study highlights the performance of national pension scheme tier-I in India. India has one of the world's fastest growing economies. In population India is on 2nd position. India doesn't have any comprehensive old age income security system. There are however some mandatory schemes for employees of Govt. employees and not see employees with a staff of 20 or more. In recent years, insurance and mutual fund companies also have started various pension plan schemes. National Pension Scheme (NPS) is an easily accessible, low cost and flexible retirement savings account for citizens. It was launched in January 2004 for government employees, later on in 2009 it was open to all section. To understand the performance of NPS offered by various fund managers are taken for the study. The empirical analysis focuses on tier-I schemes of NPS based on findings and discussion, researcher provides a well motivated recommendation for investors to invest to get more income.

**James Nwebianke (2020)** the study examined the concept of contributory pension scheme as it relates to lecturers' job commitment in the university system. The study recommended among others that it is important for employees to see clearly the reward process at work. Concrete acts must accompany statements of intent since lectures have expectations for good pension package after many years of service to the university.

**Krishna Murari (2020)** the study assesses the performance of the listed PFMs under different NPS schemes based on risk-adjusted performance measures viz. Sharpe, Treynor and Jensen's alpha. Our analysis reveals that LIC Pension Funds Ltd has dominated and performed better than other PFMs under Sharpe ratio & Jensen's performance measures. The performance of PFMs under Treynor's ratio indicated the variation in different NPS schemes. However, HDFC pension fund managers outperformed over the other PFMs in the equity and fixed income segment of NPS schemes. The findings of the study imply the holistic comparison of the performance of all the pension fund managers listed under various NPS schemes in India. Besides, the application of risk-adjusted performance measures makes it relevant to catch the attention of the stakeholders such as PFRDA, subscribers and especially the PFMs.

**Nandakumar (2021)** the study analyses the national pension scheme functions and performance. The study highlights functions of national pension scheme and performance of pension fund managers in terms of its return in 2020. ANOVA tool is employed for analysing differences in return by pension fund managers. The study is concluded that HDFC pension fund gives more return other than pension fund.

**K. Krishna & et.al (2021)** the study describes the effect of new enrolment and asset size on fund performance: evidence from Indian NPS equity schemes. The study is focused on finding out the relationship between the number of subscriber and AUM on return from the NPS all citizen equity schemes. the study also included diversification effect and year of experience of these schemes as independent variables. We observed in short term AUM and Number of Subscriber will influence fund performance but not in the long term. Whereas fund experience and portfolio holding are not significantly impacting fund return both in short and in long term.

**Baneshwar & et.al (2022)** the study examines the performance of new pension scheme as comparative study on Nifty 50 and equity funds under tier-II. The study result show that, LIC PF and ICICI PF are the best performance of equity funds during the study period. The performance of SBI PF is poor among other equity funds under tier-II of NPS during the study period. In terms of risk, LIC PF is the higher risky equity fund and UTI PF is the lowest risky equity under tier-II of NPS. It can be said that investors need to be high-risk taker to invest in that LIC PF.

**Ramakot & et.al (2022)** the study describes the return analysis of national pensions scheme in India. The Central Government and the Pension Fund Regulatory and Development Authority (PFRDA) are in charge of the NPS India, a voluntary long-term investment scheme for retirement. A government-sponsored pension program is the NPS. Throughout their working lives, participants of the plan are able to make consistent contributions to a pension account. A share of the corpus may be withdrawn in one lump amount by subscribers upon retirement, and the balance may be used to obtaining an pension to ensure a steady revenue in retirement. The National Pension Scheme is only vaguely known, and few people have shown much interest in it. The performance of the National Pension Scheme funds supplied by different companies is examined in order to determine which funds to invest in in order to increase income. In order to study the performance of the National Pension Scheme in India.

## **2.3 Summary**

To identify the gap prevailing in literature, this chapter reviews earlier prominent studies. The review of earlier works covers aspects such as pension fund plan in India, NPS related mechanism, cost and revenue benefit analysis of pension plans, and gender wise investment consciousness in pension plan. More studies concentrated on organized sector relating to pension schemes, moreover the concentration was prolific on organized sector employee's savings and investment pattern but less audacious about savings, investment and growth towards pension reforms.

## **CHAPTER-III**

### **PENSION REFORMS IN INDIA - AN OVERVIEW**

#### **3.1 Concept of Pension System in India**

The pension system in India was introduced by the British Government after the Indian Independence struggle in 1857. This is a reflection of the pension system that prevailing in British. The pay scales in the government service in India were planned to enable the native employees of the British government to meet their normal substance, leaving very negligible margin for them to make provision for their post-retirement life. The service conditions did not allow the government employees to earn any extra income by doing business or by carrying any other profession. So, the provision of pension system providing some sure income for the employees after their retirement was aimed at, to discourage them from resorting to malpractices for creating money cover for their post retirement life. The pension system thus, started in India was finalized by the Indian Pension Act of 1871.

It appears that the British government had the conception of providing its pensioners increase in their pension to neutralize the effect of inflation. Accordingly, the British government granted temporary increases in pension in 1921 to compensate the rise in prices after the first world war. Therefore, for a long time no rise in pensions was sanctioned even though the prices were rising. But serving employees were given some dearness allowance from time to time and part of that was treated as pay for calculation of pension. No real benefit could be got by pensioners up to 1945.

The first pay commission was appointed in 1946. The pensioners association tried its best to bring the problems of pensioners into the orbit of the pay commission but in vain. The commission clarified that the pensioner's problems could not be examined as the same were not referred to even though the retirement benefit were being given by the government from time to time, they were not incorporated in fundamental rules made effective from 01/01/1922. It was later decided by the government to make revised pension rules governing the cases of post 1938 entrants. These rules were actually out only in 1945 giving rise to many problems providing for death cum retirement gratuity (DCRG) and commission of pension. Family pension scheme came into force with effect from 01/01/1964 on a writ filed, Supreme court rules that pension is binding obligation of government. It was only in 1972

that the government brought out a consolidated publication of all scattered pension rules under the title “New Pension Rules 1972”, after the issue of fundamental rules in 1922, which is after half a century.

In 1985 central government health scheme (CGHS) was made applicable to pensioners including their dependent. A non-statutory committee called Standing Committee of Voluntary Association (SCOVA) was constituted in 1986 in the ministry of pension and pensioners welfare to discuss problems of pensioners and make recommendations to the government. Many pensioners organization is nominated to the committee by the ministry and quarterly meeting are held under the chairmanship of the minister. The period of 7 years for grant of family pension in the case of absconded pensioners was brought down to one year in 1977. Widows of retirees covered by central provident fund 1986 (GPF). Below are stated some of events in pension scheme.

Indian pension act introduction in 1871. This comprises all the act regarding the pension system in India including the cases. First increase in pension made in 1914 to 1918 when first war was over. Second temporary increase was sanctioned in 1943-1945 second world war is over, due to high inflation. Due to increase in high rate's and other some portion of pay dearness pay (DP) was ordered to add while fixing pension with effect from 01/01/1946. This was affected with effect from 23/03/1947. This concession was extended up to 21/12/1952 made effect from 01/01/1922. But pension rules were not consolidated up to 01/10/1938. Liberalized pension rules 1950 were formed and made effective from 17/04/1950. Pension rules 1972 were framed on the basis of liberalized pension rules 1950. As per supreme court decision dated 17/12/1982 in writ petition NO 5939/80 that pension is binding/ obligation on government. It is not a gift/reward/bounty. Liberalized pension rules 1950 had provided DCRG or family pension for restricted period. One third commutation of pension amount was allowed and provision of nomination. Supply of calculation sheet to pensioners started by order dated.26/12/1970. Dearness allowance committee granted following temporary increase with effect from 01/04/1958. Ex-Pakistan pension cases since 1948 to 1965. Late P M Shri Lal Bahadur Shastri granted relief with effect from 01/10/1963. Family pension scheme introduced with effect from 01/01/1996 reducing two months death cum retirement gratuity. Reduction of two months DCRG with effect from 22/09/1997. Spouses alive on were granted family pension with effect from 22/09/1977 in pursuance of the supreme court decision. When such record is not available affidavit was accepted as a

proof with efforts of Shri B S Vaaze. Recommendation of committee submitted this on 19/12/1968 to the government. Minimum pension Rs.100/- fixed from 01/01/1973, Rs. 375/- from 01/01/1986 and Rs. 1275/- from 01/01/1996 i.e. equal to minimum living standard. Provision of medical aid introduced through central government health schemes in 1985 by the formation of standing committee of voluntary association (SCOVA) in 1986.

The central administrative tribunals (CAT) were formed in 1985 for central government pensioners to get their grievances solved through it. Restoration of full pension is expected after 15 years of retirement. This is because pension commutation is for the period of 15 years. However, in many cases disbursing authorities did not take appropriate action and wanted specific orders from pension fixing authority. Association filed writ petition in supreme court and decision obtained in favour of pensioners. Government of India has issued appropriate orders based on NAYAKA case for pension scheme, old age emoluments and other benefits to the pensioners. After this case government made provisions of eligibility for physically and mentally handicapped children and widowed daughter of pensioners for family pension. Government accepted this and the decision is in force since 1974. Further family pension is now admissible for unmarried and divorced daughters. There is no age limit for daughters but annual income limit is applicable. The association took up a case for granting of family pension to the spouse where pensioners abscond for one year and earlier this limit had been for seven years. This decision is implemented since 1997 and parents of deceased pensioner are eligible for family pension provided that the parents have no other children and their annual income is less than Rs. 2250/-. This is based on recommendation in memorandum submitted by the association to fifth central pay commission. This was accepted by central pay commission and included in their recommendation to the government of India.

In the beginning there was no specific rule for payment of retirement benefit to an employee only the provident fund benefit was provided to government servants with fixed retirement age. The private organizations did not have retirement age and they could continue job until they are capable of working. The government intervened in 1925 to bring parity in retirement benefits among the employers. The aim was to provide lump sum amount to retirees as provident fund which was a voluntary and this was widely accepted in the country. The amendment of the income tax Act 1925 brought this change which then posed a compulsory investment by employer to support the retirees. Over the period in 1952, the

government made payment of provident fund mandatory by enacting “the employees provident Fund and miscellaneous provisions Act 1952”. This act framed a limit coverage for earnings of employees Rs. 1000/- and later changed to Rs.1600/-, Rs.2500, Rs.3500, Rs.5000, Rs.6500 pm till 2012 and currently to Rs 15000 pm. As this Act was not adequate to support retirees the government further introduced “the payment of gratuity Act 1975” which made provisions of payment of lump sum depending on the employee service I e minimum five years. Over the period this act augmented to monthly income and government of India introduced “The employee pension scheme 1973” this was first implemented for non-government employees paying Rs.200/- on death of an employee to his widow life. The government made 1.16% of salary of each employee s government contribution. This was later diverted as 1.16% from employer and to fund 1.16% from Employee provident fund as contribution. Thinking over to comfort and support the family of retiree or on his death the introduced “The Employee Deposit Linked Insurance Scheme 1976” (EDLI) an additional amount paid to employee family above the provident fund and gratuity and family pension in such case. Although the EPS as declared full pledged pension scheme it took 23 years to fulfil then “The employees’ pension scheme 1995” came into force.

### **3.2 PENSION SYSTEM IN INDIA**

Since independence the concept of pension system was in existence. There has been a tremendous change in the economic growth activities in terms of employment and earnings. The pension reforms involve complex questions of public finance, income distribution pattern, socio cultural economy and also includes the major sector like pension, insurance banking mutual funds, merchant bankers, investment bankers and stock exchange etc. The national accounts statistics (NAS) uses the classification of organized and unorganized sectors in presenting the national income data.

India has followed with rest of the countries in opting for Chilean model of pension scheme provisions trough denied benefit scheme over the defined contribution scheme. As per the population census 2011, the elderly population accounted for around 8.6% of total population 2011. With increase in per capita income, better quality of life and better medical services, life expectancy is gradually increasing and consequently both the share and size of elderly population is increasing over time. In fact, the rate of increase elderly population (60+years of age) is higher than the general rate of growth in population. The elderly population (60+ years of age) increased at the rate of 35.10 percent between 1991 and 2001



and the rate of 35.51 percent between 2001 and 2011 against the increase of total population of 21.53 percent between 1991 and 2001 17.64 percent between 2001 and 2011. Consequently, the share of elderly population in total population has increased from 6.8 percent in 1991 to 7.4 percent in 2001 and subsequently to 8.6 percent in 2011. There are nearly 138 million elderly persons in India in 2021, including 67 million men and 71 million women, according to the report. An increase of nearly 34 million elderly persons was seen in 2021 over the population census of 2011. This number is expected to increase by 56 million by 2031. Om aggregate, the elderly population is projected to have risen by 32.7 percent between 2011 to 2021.

As per the report on aging in 21<sup>st</sup> century jointly brought out by united nation population fund and help age international in 2012, the number of elders, who have attained 60 years of age, will shoot up by 36.0% between 2000 and 2050. India had around 100 million elderly population up to 2012, which is expected to 323 million constituting 20% of the total population by 2050. Pension policy in India has traditionally been based on the employment contract/ service condition and financed through employer and employee participation. As a result, the coverage has been restricted to the organized sector and a vast majority of the workforces in the unorganized sector has remained outside the formal channels of old age financial support around 2.96 crores people are employed in organized sectors, which is around 8% of the main workforce of the country. The remaining working population is engaged in the unorganized sector and majority has no access to any formal system of old age economic security.

A report published by the city of London corporation (insurance companies and pension funds as institutional investors- global investment patterns) has broadly classified Indian pension system into four segments.

- **The National Social Assistance Program (NSAP):** A limited-first pillar; the central government has launched poverty alleviation program aimed at the aged under this umbrella scheme. It is a pay as you go pension scheme (unfunded scheme with current revenue receipts used for paying out retirement benefits). Under this scheme, the government pays out Rs.200/- to Rs.1000/- every month to 15.7 million poor citizens aged 65 and above. This is an income security plan for aged.
- **The Employees Provident Fund Organization (EPFO):** It is the India's largest defined contribution and publicly managed plan is an example of the typical pillar-

second arrangement. Employees in the administered by EPFO. These include a defined benefit pension plan and defined contribution provident fund that covers only 14 percent of the workforce.

- **Private pension and annuities:** Regulated by the insurance regulator, these are various schemes administered by life insurance companies. In 2010, IRDA directed all insurance companies, which had launched unit linked pension plans to provide a guaranteed return indexed to interest rates.

India is the last major economy to attempt a large-scale pension reform. We have a large young workforce that is still some decades away from retirement. Hence its feasible to join NPS for old age benefit through well-regulated capital marketed and use their accumulated savings at age 60 to achieve a dignified retirement.

A fund established by an employer to facilitate and organize the investment of employee's retirement funds contributed by the employer and employees. The pension fund is a common asset pool meant to generate stable growth over the long term and provide pensions for employees when they reach the end of their working years and commence retirement. Pension funds are commonly run by some sort of financial intermediary for the company and its employees, although some larger corporations operate their pension fund in house. Pension funds control relatively large amounts of capital and represent the largest institutional investors in many nations.

Pension broadly divided into two sectors: A-formal sector pensions B- Informal sector pension formal sector that come under an Act or statute, government, public, public pension schemes have long been recognized as having major economic and social implications. In addition to their obvious social welfare objective of providing adequate retirement incomes for the aged, public pension scheme can influence economic performance and capital accumulation through their effect on taxes and intergenerational transfers. For many countries, the implicit liability to fund public pensions is by far the most significant unorganized liability in their public accounts. Pension funds are a unique situation where individual invest over multi-decade horizons, in order to obtain consumption in old age.

Government pensions in India are defined under the directive principles of state policy and are therefore not under a statute. The government amended the regulations to

implement new pension system. The old scheme continues for the existence employees i.e., those who joined service prior to January 01, 2004. Pensions for government employees would include employees of the central as well as the state government.

### **3.3. Multi-Pillar System in India**

In India the first pillar is almost non-existent. The government does have some poverty alleviation programs but they are too insignificant compared to the country's needs and their implementation is mostly political in nature. In case of need, old people generally rely on immediate family members and private charities. With the breaking of the joint family system, it has become inevitable that people plan for their old age financial security while they are young and working.

All the three reports have extensively referred to the first pillar of social security but none contains any recommendations provide for it. Some mistakenly believe that pensions paid by the government to its employees constitute the first pillar since they are paid on pay as you go basis from current tax revenue.

Pension to civil servants is more akin to deferred wages paid by the employer and according to the world bank's guidelines should be included in the second pillar of the multi-pillar pension system. The second pillar is found mostly in the organized sector and is in the form of employment-linked schemes. Against a working-class population of 400 million, only 35 million have access to a pension system. Of these 35 million 11 million are in civil service (Central and State Government) and 24 million are members of various employee provident fund and pensions schemes.

The **I-Pillar** is the older one and includes the pensions for central and state government employees. Pensions were defined under the directive principles of state policy. The directive was amended in 2003 to implemented the new pension scheme (NPS) in 2004, which meant a change from the formerly defined benefit scheme into a defined contribution scheme. Employees have to contribute a minimum of 10% of salaries and there is a matching 10% government contribution. Civil servants employed since 2004 have to enroll in the new pension scheme. The old scheme still provides pensions for employees who joined the civil service prior to 2004. There are further special schemes for employees of the public enterprise Indian Railways and Indian post.

The **II-pillar** comprises the pensions for formal sector employees. There are several schemes with different target group. According to the Employee Provident Funds and Miscellaneous provisions Act 1952 (EPF&MP), the employees provident fund organization (EPFO) compulsorily covers formal sector workers with monthly earnings of Indian Rupees (INR) 6500 or less at firms with 20 or more members in defined industries. The two most important schemes managed by EPFO are the employees provident fund and the employees' pension scheme. The EPS was created in 1952 and has a defined contribution rate of 16% and addresses workers with high salaries. The EPS is a defined benefit scheme and was introduced in 1995. It requires an employer's contribution of 8.33% and includes a government contribution of 1.16% of the wage. "Firms not covered under EPFO may run their own pension and provision fund for the benefit of their employees subject to certain regulations". There are special schemes for coal miners under of gratuity Act 1972.

The **III-Pillar** is a social pension, the Indira Gandhi National Old Age Pension Scheme (IGNOAPS), launched in 1995, under the IGNOAPS, Indian citizens aged 60 or higher and living below the poverty line receive a pension every month. The central contribution of the pension is INR 200 per month for every beneficiary up to 79 years and INR 500 every month per beneficiary from 80 years onwards. The state governments can contribute to the above-mentioned amount. At present old age receivers' avail between INR 200 to INR 1000 depending on state contribution. For example, the beneficiaries in Jammu and Kashmir avail INR 400 per month. The scheme is a non-contributory process and the beneficiaries do not have to contribute any amount to receive the pension. The pension is available for all the members who are 60 years of age or older in a below poverty line family and not restricted to only one pension.

The **IV-Pillar** includes voluntary defined contribution pension available to all citizens. In 1968 the government of India introduced the public provident fund, which is not a typical pension scheme but a voluntary tax-advantaged defined contribution saving option using personalized accounts. This scheme has been open to all citizens but since it uses income tax rebates as incentives for customers, it has mainly attracted formal sector workers, who pay income taxes. Annual contributions can range from INR 500 to 70000 and are tax exempt. The government of India fixes the rate of interest annually, currently at 8%. Accounts can be opened at India post and state bank of India. Withdrawals are possible after five years. 15 years of contributions give entitlement to a pension. The combination of tax-

exempt contributions and easy withdrawal opportunities likely leads to the system being used for tax evasion by wage-earning, tax paying individuals and not for old age provision.

**Table: 3.1**  
**Components of Retirement Provision**

First Tier Pensions	Universal Pensions Resource-Tested
Second Tier Pensions	Defined benefit, Points Defined Benefit Notional Defined Contribution Funded, Defined Contribution.
Third Tier Pension	Voluntary Savings

*Source: Compiled from EPFO annual reports*

### 3.4 Existing Pension Framework

The pension scheme in operation in India currently can broadly be divided into the following categories:

#### Scheme of Employees Covered

- **Civil Services Pension Scheme (pay as you go)**

The civil servants' pension is a traditional defined benefit scheme which runs on the basis of pay as you go pension system for employees of central government who were recruited up to 31<sup>st</sup> December, 2003 and employees of state governments recruited up to the effective date mentioned in notifications issued by those governments. CSP is an unfunded scheme and there has been no attempt at building up pension assets through contribution or any other provision.

CSP scheme is indexed to wages and inflation. A modified one rank one wage principle applies to it wherein all retired employees of a certain rank get the same pension. Pension payments are revised periodically to reflect the growth in wages and consumer price index. Growth in pension benefits in old age is typically higher than inflation.

The main problem under CSP is that of fiscal stress. CSP was designed at a time when going by the pattern of life expectancy most of the employees who retired at the age of sixty

were expected to live up to the age of sixty-eight or so. The value of the annuity embedded in the CSP has gone up due to elongation of mortality in the recent years. The mortality characteristics of government employees, who belong to the relatively higher income group than the average is more or less in line with the OECD populations. The fiscal stress at the sub-national level has been more acute. Some of the state governments have not made timely payment of pension benefits. one state government choose to cut benefits by reversing recent increases in the pension benefits due to hike in the wages of existing employees. If the pension from the earnings-related schemes is below a particular minimum amount, it is topped up. These are a part of the first tier in the sense of their objective of ensuring a minimum standard of living but institutionally are a part of the second-tier system. Spain is one example of a country that provides a minimum pension.

- **Employees' Provident Fund**

Employees' provident fund also act as an emergency source of funds while being in service and for building permanent assets like a house. The provident fund scheme is supplemented by a defined monthly pension scheme, which the government pays upon the employee's retirement. The defined benefit is totally un-funded and is paid from current revenue. In recent years, a few countries such as Sweden, Italy and Poland have transitioned to a national defined contribution system where individual contributions are recorded and credited with a national interest rate. At retirement, the national capital is converted to a pension payment according to a predetermined formula mostly dependent on the life expectancy at the. Such schemes labelled "National Defined Contribution" are also managed by the state.

- **Special Provident Funds**
- **New Pension Scheme (NPS)**

A new pension Scheme which is essentially a defined contribution scheme has been made compulsory for new recruits in the central government from 1<sup>st</sup> January 2004. 19 of the 28-state government have also notified similar schemes for new recruits.

### **3.5 An Indian Perspective on Pension Practices**

Pension is a mandatory social system and is a quasi-mandatory under Employee Provident Fund Act. Minimum employee criteria for companies or organizations for pension or social security coverage is twenty or more employees in a company or organization.

Statutory retirement age is employee pension scheme sixty years employee provident fund scheme fifty-five years. Contribution rates in mandatory schemes EPFS and EPS 12% by employer and 12% by employee EDLIS 0.5% by employer. There is no threshold limit on salary for social security. Salary cap for social security contributions monthly of INR 15000. Employees earning more can contribute voluntarily. No salary cap for international workers and newspaper employees. Subject to certain conditions there is a possibility to withdraw the lump sum amount from their individual account. Coverage of self-employed persons and their contribution rates not covered under mandatory EPF regime. However, self-employed person entitlement is ten years of services to avail the monthly pension benefit under EPS. Minimum eligibility age for receiving monthly pensions is 50 years under EPS. Availability of employer sponsored pension plans have to get the details of employee and employer contribution rates. Yes, NPS and Singapore Armed Forces (SAF) contribution rate are flexible in both EPS and EPFS. Automatic enrolment in voluntary employer pension plans in NPS, the employees have to choose explicitly where as in SAF usually all in a class of employees.

**EPF:** In EPF covered establishment, employees with salary of up to INR 15000 are required to become members. However, the salary cap does not apply to international workers and employees of newspaper establishments. The contribution rates in general are 12% of salary, by the employer and employee. The benefits of lump sum withdrawal at resignation, retirement or death, partial withdrawal for specific purposes such as house construction, higher education, marriage etc. monthly member pension at retirement or permanent disability. Survivors' pension and assurance benefit on death of employee. Tax benefits on contribution. The accumulations are invested by the board of trustees of EPF, as per the norms laid down by ministry of labour employment, government of India. Tax implications on maturity or withdrawal, withdrawal is tax exempt.

**NPS:** Membership any person who is a citizen of India, whether resident or non-resident, aged 18 to 60 years can become a member of NPS, contribution rates are flexible in new pension scheme. Benefits are partial lump sum or phased withdrawal annuity. Tax benefits subscribers may choose their own investments from three classes i.e corporate bonds, government securities and equity. The investment in equity is capped at 50%. Tax implications on maturity is lump sum withdrawal and annuity proceeds may be taxable.

**Table: 3.2**  
**PENSION CONTRIBUTIONS (IN BILLIONS)**

<b>SCHEMES</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>
Funded Scheme EPF EPS	461	696	1023	1498
Of which voluntary of total contribution	85% 39	9.3 64	10.1 103	11.0 164
GPF	133	201	295	431
PPF	84	127	186	272
Individual Pension	183	306	513	756
Group pension	708	824	968	1108
<b>Total contribution</b>	<b>1569</b>	<b>2154</b>	<b>2986</b>	<b>4064</b>

*Source: Dhirendra Swarup (2006)*

However, a more conservative estimate is that the pension market will be worth about Rs. 1808 billion by 2025.

### **3.6 Development of the Public Pension System in India**

For a long time, pension provision targeted only central and state government employees and formal sector workers based on financing through employer and employee participation. Besides options offered by private and civil society organization, there were no pensions for the vast majority of the population, i. e workers in the informal sector including the economically disadvantaged segments of the population. In the last decade, the government of India started a reform process towards a more comprehensive multi-tier pension system, which generally is the most effective option to meet the demands of various groups. The debate on the new pension scheme reform process started in 1998 because the government of India wanted to improve the financial sustainability of the pensions for civil servants for civil servants and to extend pension coverage to the informal sector. In 1998, the ministry of welfare, later renamed the ministry of social justices and empowerment, commissioned the invest India microeconomic foundation with the first comprehensive study on old age social and income security.

The government of India and international Index of erectile function set up on inter-ministerial OASIS expert committee, which produced two final reports with concrete policy proposals. The OASIS report became the basis for the development of NPS. The PFRDA bill



has not been passed by parliament since 2005, the NPS reforms have been implemented. Today, the Indian public pension system consists of four pillars.

This is a defined contribution scheme managed by government under government savings bank Act 1973. There is no separate authority to supervise it. A fixed rate of return and tax benefit is being offered under the scheme from the investment made by the individual in his/her account. The beneficiary can avail withdrawals only after eight years of their investment. PPF rules are hugely beneficial for people who deposit their instalments on 5 of every month, the current interest rate is 7.6% and is calculated every month of 5 from last 15 years the interest is gradually increasing. The PPF interest from 1968 to 69 to 1970 was 4.8 percent 1970 to 73 was 5 percent then it slowly rose for a peak at 12% during 1986-2000. But this rate was not far to the government and then it reduced to 8.7% during 2016. It offers EEE (Exempt-Exempt-Exempt) and is tax deduction under section 80C up to Rs. 1,50,000. The coverage under the public provident fund is about 3.5 million. In addition to globalization, demographic trends and need for fiscal consolidation are two major reasons for social security reforms in India.

## **1. Gratuity**

Gratuity is an important form of social security and a form of gratitude provided by the employer in monetary terms for the services rendered by the employee in the organization. It is a defined benefit plan and is one of the retirement benefits offered by the employer. The payment of gratuity Act is administered by the central government in establishments under its control. Gratuity Act is a statutory benefit provided to the employees who have rendered continuous service for at least 5 years. Based on the duration of total service the lump sum amount paid to an employee. Gratuity is payable to an employee by taking the last drawn salary as the basis for the calculation on cessation of employment. Payment of gratuity Act 1972 is entitled to employees engaged in ports, oilfields, railway companies, factories, plantation, mines, shops and other establishments.

In the case of death of the male employee, gratuity payable to him shall be paid to his nominee or his wife, his children, his dependent parents, to his heirs and if minor the share shall be deposited with the controlling authority who shall prescribed, until such minor attains majority. In case of female employees, family includes her husband, her children, dependent parents and the dependent parents of her husband and the widow and children of her

predeceased son. If any. Where the personal law of an employee permits the adoption by him of a child, any child lawfully adopted by him shall be deemed to be included in this family.

## **2. Employee Deposit Linked Scheme 1976**

It is social security benefit extended provident fund and provides lump sum amount of 2.5 lakh to the assured in the event of death of a subscriber. Currently the dependents of deceased get Rs. 6 lakhs. Every employee is covered under EDLI who is the member of provident fund with no limit of service. It includes the insurance coverage of pay of the employee with upper limit of 15000. EDLI covers all the organizations registered under EPF and miscellaneous Act 1952. Subscriber's EPF contribution extends to EDLI and employer contribution must be 0.5% of basic salary or a minimum of Rs. 75 per employer for per month. It works with the combination of EPF and EPS and extent of benefit will be decided by last salary drawn bonus amount.

## **3.7 Pension Reforms in India**

India does not have a universal social security system. A large number of India's elderly are not covered by any pension scheme. Pension reforms and pension system with grater reach will not only ensure citizen's welfare in their golden years but will also help the central and state governments cut their future liabilities. With these broad objectives in mind. The government of India set up an expert committee in 1998 to devise a new pension system of India. Project OASIS, which was chaired by S. A. Dave. Submitted its report in 2000. The report recommended setting up a new pension system in India. It recommended creating a pension system based on individual retirement account (IRA). An individual would save and accumulate assets through his entire working life. Upon retirement, the individual would be able to use his pension assets to buy annuities from annuity providers and obtain a monthly pension. The pension amount be governed by what the employees' pension fund could earn from market investments.

In India, absence of a country wide social security system, ageing population and social change on account of breakdown of traditional family support system are important considerations for introducing pension reforms in unorganized sector. Whereas in the public sector fiscal stress of the defined benefit pension system applicable to the employees of the government sector was the major driving force for pension reforms. Since 2001 to 2002, a

number of measures have been adopted by the government for underlying need for pension reforms for both central government and for unorganized sector for different reasons.

For a decade pension reforms has been high on the agenda of many governments. Population ageing and declining fertility rates require reforms which also need to pre-empt, where possible, adverse social and economic effects of making pension system more financially sustainable. Although the recent economic crisis has heightened the pressure for decisive action, it is important to consider long-term scenarios rather than short-term views.

### **Objectives of Pension Reforms**

- **It is always important to emphasize that despite the broader potential benefits in higher efficiency and economic growth.**

That may ensure, the development of financial markets is not, and should not be the primary objective of pension reform. Rather the basic objectives of pension reforms. Achievement of these objectives and role that funded and privately managed pension plans can play in this, have far-reaching implications for the efficiency of financial markets. But these are side effects. They are highly welcome because of their beneficial impact on growth and development but they do not constitute the primary reason for pension reform.

- **The second objective is the creation of a strong link between contributions and benefits in order to minimize.**

Any incentive distortions on the functioning of labour market and avoid capricious and perverse redistribution caused by volatile inflation and inconsistent eligibility requirements. Attainment of this objectives does not require the creation of funded plans but only the institution of defined contribution plans or the use of lifetime earnings, less backloaded benefits and full vesting and portability rights in the case of defined benefit plans.

- **The third objective is the generation of long-term savings that would help simulate the development of capital markets.**

It is often argued that use of funded pension plans would increase the rate of saving in a country. Although this is possible under certain conditions, it is by no means certain. But financial assets and increases the supply of long-term contractual savings. Pension reform can take three different forms: parametric, NDC and systemic. Parametric reforms such as increasing the normal retirement age, tightening conditions for early

retirement and disability pensions, lowering benefit rates, raising payroll taxes, combating evasion and enhancing the administrative efficiency of social security institutions aim at preventing the financial collapse of traditional unfunded social security systems. They deal with fiscal imbalances but they do not address the distortions and benefits. Reforms based on national defined contribution (NDC) plans aim at eliminating the labour market distortions that result from high evasion and growth of informal labour markets.

NDC reforms link benefits to contributions and weaken the incentives for evasion and strategic manipulation that bedevil unfunded defined benefit plans. By reducing the size of the informal labour market, NDC reforms raise labour productivity and lead to higher economic growth. Neither parametric nor NDC reforms generate long-term savings or have any direct effect on the development of financial markets. Only systemic reforms that involve the creation of funded pension plans have such effects. To the extent that better developed banking and securities markets make an independent and additional contribution to higher economic growth, then only systemic reform would accelerate economic growth beyond what could be achieved by reducing the size of the informal labour market.

### **Key Goals of Pension Reforms**

- Pension system coverage in both mandatory and voluntary schemes.
- Adequacy of retirement benefits.
- The financial sustainability and affordability of pension promises to tax payers and contributors.
- Incentives that encourage people to work for longer parts of their lifetimes and to save more while in employment.
- Administrative efficiency to minimize pension system running costs.
- The diversification of retirement income sources across providers (Public and Privat), the three pillars (Public, Industry Wide and Personal) and financing forms (PAYG and Funded)
- A 7<sup>th</sup> residual category covers other types of change, such as temporary measures and those designed to stimulate economic recovery.

## **Need for Pension Reforms in India**

The IRDA report identifies the following reasons for reform in the pension sector

- The growing burden of civil service pensions
- Measures needed to meet pension liabilities of the state-owned enterprises
- Liberalization of the insurance sector and entry of potential players who can offer pension products
- Recognition of the need for the reforms in the functioning of EPFO

According to IRDA, the needs for reforms arises from the following reasons

- Government and state-owned enterprises as employers are finding it difficulties to fund their pensions liabilities and the proposed system will relive employers from their pension liabilities.
- EPFO and employers' managed fund are return inefficient, service deficient and not in a position to meet their liabilities.
- Private companies particularly insurance and fund managements are waiting in the wings at the prospect of handling investible funds and presumably would offer better old age security to retirees for the contribution they make.

## **Proposed Pension Reforms**

To reform the pension system, the government appointed the Bhattacharya and IRDA committees to make suggestions for government employees and the non-governmental sector respectively. They made the following recommendations.

### **Bhattacharya Committee Recommendation for Government Employees**

- An unfunded defined benefit, PAYG or pure defined contribution scheme is not suitable for government employees, instead, a hybrid defined benefit or defined contribution scheme is recommended. This is a 2-tier scheme, in the first tier, there is mandatory contribution of 10% each by employer and employee. The accumulated funds would be used to pay pension in annuity form. The second tier is to promote personal savings and there is no limit for employee's contribution but employer contribution would be matching and limited to 5%. Accumulated funds can be withdrawn in lump sum or converted into annuity at the time of retirement. These payments would be tax exempt and portable if an employee changes job before retirement.

- Funds collected in the first tier would be deposited in a separate fund and would be invested in both debt and equity. Some funds can be earmarked for active fund management including for short term trading for better returns. However, irrespective of fund performance, government would remain liable for pension to its employees based on predetermined benefit formula.
- Contribution obtained in the second tier will have a separate institutional structure and employee would have a choice of funds to invest in. Employees may decide to continue, quit or swap among funds while in service. Government will not guarantee any specific rate of return.
- The new schemes would be applicable to new employees only, IRDA Committee Recommendations for non-government sector. The IRDA committee's recommendations for reforms in the non-government sector are largely based on the OASIS reports. The recommendations are as follows:
  - Establish a system based on privately managed, individual funded defined contribution accounts. Lump sum payments and or annuity on retirement would be actuarially determined based on funds available.
  - Private assets management functions of EPFO and exempt funds and allow private insurance firms to provide annuities. Increase coverage by covering more firms and by eliminating the present salary ceiling of Rs. 6500. Phase out the government subsidy of 1.16%.
  - For persons not covered by any scheme. Allow a limited number of private asset managers to operate, each offering three investment portfolio options. Participants would have choice among fund managers selected through a competitive bidding process by regulatory authorities.
  - Employers' and fund managers responsibility to participants would be that of principal and agent and fiduciary in nature. Fund managers would work for a fee with no performance guarantee. However, it is opened that with expert managerial skill and wider investment choice, participants would be better off than presently available through publicly managed funds.
  - Government would need to provide tax subsidy to encourage acceptance of privately managed funds. The suggested tax measures are increasing entitlement of contributions towards pension for tax rebate up to Rs.80000 and providing for tax exemption on the income earned by pension funds, commuted value and

annuity amount received as pension. Existing deduction under section 80 CCC of Rs.10000 should be withdrawn as it only defers the tax, since annuities received from these funds are taxable.

- Government should allow facilitated access to the system through its postal and banking network throughout the country to keep the administrative cost low.
- To supervise and regulate the system, an independent regulatory authority called the Indian Pension Authority should be set up.

### **3.8 Milestone of Pension Reforms**

Each year major or minor amendments are made to the statutory pension system and other social insurance that is closely linked to pensions. The changes are presented below in chronological order.

#### **1956**

- The Seafarer's Pension Act (MEL) comes into force.

#### **1957**

- New National Pensions Act (KEL) comes into force.

#### **1962**

- The Employees' Pensions Act (TEL) and the Temporary Employees' Pensions Act (LEL) come into force on the 1st of July.

#### **1964**

- The Local Government Employees' Pensions Act (KVTEL) is introduced.

#### **1966**

- The pensionable wage is calculated by considering the wages of the two best years (in terms of earnings level) of the last four years (previously the regular income in the final year of employment and the year before).

#### **1967**

- The State Employees' Pensions Act (VEL) and the Evangelical-Lutheran Church Pensions Act (KIEL) come into force.
- A new pension benefit is introduced in the earnings-related pension system: the survivors' pension.

#### **1969**

- The general Survivors' Pensions Act (PEL) comes into force.
- The State's Survivors' Pensions Act comes into force.

**1970**

- The Self-Employed Persons' Pensions Act (YEL) and Farmers' Pensions Act (MYEL) come into force.

**1973**

- A new benefit is introduced: the partial disability pension.

**1974**

- The Farm Closure Pension Act (16/1974; LUEL) comes into force. The pension can be granted to a farmer who permanently stops farming.
- The change-of-generation pension is introduced under the Farmer's Pensions Act. The purpose of this new benefit is to make it easier for viable farms to be transferred to a younger generation. Initially, the benefit was to be valid for 3 years, but the validity period was extended with several fixed-term amendments until the Change-of-Generation Pension Act came into force in 1991.

**1975**

- Discretionary increase, the accrual rate rises from 1 to 1.5 per cent per year.

**1977**

- The grounds for the index increase of earnings-related pensions is changed. The index is based on the average of changes in wage and price levels (previously it was based only on changes in wages).

**1978**

- Elected local government officials become covered by pension acts.
- The qualifying age for the unemployment pension reduces to 58 years.

**1979**

- The pensionable wage is calculated by considering the wages of the two middle years (in terms of earnings level) of the last four years (previously the two best years).

**1980**

- The age limit for the unemployment pension is lowered to 55 years.
- The first phase, phase I A, of the national pension reform: changes to the structure and determination of the pensions. Old-age allowances are no longer granted.

**1981**

- Phase I B of the national pension reform: changes to the determination of the pensions.



## 1982

- Sickness allowance becomes primary in relation to the disability pension from the earnings-related pension scheme.
- In the earnings-related pension scheme, an Act on Early Pensions for Front-Veterans takes effect on 1 July. Based on the Act, an early pension for front-veterans can be granted to a male person living in Finland who has a front-veterans' service badge.
- On 1 September in the national pension scheme, also women get a right to front-veteran's pensions. Front-veteran's pensions are paid to women on the same grounds as to men.

## 1983

- Phase II A of the national pension reform: earnings from work no longer affect the supplement of the national pension. The basic amount and the supplement of the national pension become taxable income.
- On 1 July in the earnings-related pension scheme, women get the right to a front-veterans' early retirement pension

## 1984

- Phase II B of the national pension reform: changes to the determination of the pensions.

## 1985

- Phase III of the national pension reform: the basic supplement of the national pension is now affected only by the person's own earnings-related pensions and equivalent compensations.

## 1986

- In the national pension scheme and the earnings-related pension scheme of the private sector, the early old-age pension and the individual early retirement pension are added to the pension benefits.
- In the earnings-related pension scheme of the private sector, the Freelance Employees' Pensions Act (TAEL) takes effect. (In 1998, the name of the act changes to The Pension Act for Performing Artists and Certain Other Employee Groups.)
- The age limit for the unemployment pension is changed back to 60 years so that new age groups under the age of 60 are no longer entitled to an unemployment pension.
- An additional front-veteran's supplement is paid as of 1 November.

## **1987**

- The part-time pension is added to the pension benefits of the private sector earnings-related pension system.

## **1989**

- The childcare allowance becomes a benefit for disabled persons. Thus, it is no longer regarded a pension.
- On 1 July, the early old-age pension, the individual early retirement pension and the part-time pension are added to the public sector earnings-related pension benefits.
- Workers are to be insured as of the beginning of the year in which they turn 14 years.

## **1990**

The survivors' pension reform takes effect on 1 July:

- The survivors' pension is granted according to new rules when the death of the insured occurs on 1 July 1990 or later.
- Widowers and, in the earnings-related pension scheme, also former spouses become entitled to a surviving spouse's pension under certain conditions.
- In the earnings-related pension scheme, pensions for the surviving spouse and for the children are separated.
- The surviving spouse's pension is dimensioned to correspond to the economic loss caused by the death so that the surviving spouse's own income is considered when calculating the pension. In other words, an integration of the surviving spouse's pension is carried out.
- In the national pension scheme, the pension entitlement of a surviving spouse who cares for a child is broadened and, on the other hand, the pension entitlement of childless surviving spouses is made stricter.
- The age limit of orphan's pensions is increased to 18 years.
- The surviving spouse's pension and the orphan's pension become taxable income.

## **1991**

- Pensions awarded by the Seafarer's Pension Fund (MEL pensions) are linked to the common system for division of liabilities with the rest of the earnings-related pension scheme of the private sector.
- A rehabilitation reform in the earnings-related pension system takes effect. The distribution of work of the rehabilitation providers is clarified, and the possibilities for rehabilitation must be examined before granting a disability pension. In addition, the rehabilitation allowance is introduced to the earnings-related pension system.

- The Act on Change-of-Generation Pensions (1317/1990; SPVEL) comes into force on 1 January 1991

## **1992**

- Pension recipients start to pay a national pension contribution.
- The Farm Closure Act (LUEL) ends at year-end. However, as a rule, the granted pensions are paid for the rest of the farmer's life.

## **1993**

- In the earnings-related pension scheme, the Act on Employee's Pension Contribution comes into force. The change in the contribution now reduces the TEL index.
- In the private sector, the Act on Farm-Closure Compensation for Farmers (1330/1992; LUKL) comes into force.
- In the public sector, the earnings-related pension accrual time, targeted level and retirement age are harmonized with those in the private sector. In new public-sector employment relationships, the general retirement age is 65 years.

## **1994**

- The lower age limit for the individual early retirement pension is increased from 55 to 58 years for persons born after 1939.
- The recipient of an individual early retirement pension may return to work without losing the right to the pension. Depending on the amount of earnings, the pension may be paid either to half the amount or be left dormant completely.
- The age limit for the part-time pension in the private sector is lowered to the same as in the public sector, that is, from 60 years to 58 years.
- The entitlement criteria for the unemployment pension are tightened and the rules on the unemployment pension in the national pension scheme are harmonized with those of the earnings-related pension scheme.
- In the earnings-related pension scheme, the annual accrual rate is increased to 2.5 per cent for persons aged 60–64.
- The national pension scheme requires a minimum time of residence of five years in Finland before a pension can be awarded.
- The national pension and the survivors' pension paid by the Social Insurance Institution are made proportional to the time of residence in Finland.
- The EEA legislation takes effect in Finland.
- The index adjustments of earnings-related and national pensions are waived for this year.

- The increment to an earnings-related pension extends. It now applies not only to periods of the unemployment allowance but also to periods of adult education and rehabilitation benefits.

## **1995**

- In the private sector, the Act on Farmers' Early Retirement Aid (1293/1994; LUTUL 1995) comes into force.
- The change-of-generation pension system of farmers (SPVEL) ends at year-end. The already granted pensions in this scheme may continue to be paid until the pension recipient turns 65 years.
- The farm closure pension system (LUKL) ends at year-end. The already granted pensions in this scheme may continue to be paid until the pension recipient turns 65 years.

## **1996**

- The national pension becomes fully deductible from the earnings-related pension. Pensions which begun before 1 January 1996 and which did not include an addition were gradually phased out over five years.
- National pension contributions are no longer levied from the insured and the pension recipients.
- The temporary disability pension becomes a cash rehabilitation benefit.
- Two TEL indices are implemented in the earnings-related pension scheme: the index for persons of working age and the index for persons of pensionable age. The index for persons of working age considers half of the development of real earnings. The equivalent rate in the index for persons of pensionable age is 20 per cent. It is used to adjust the pensions of those who have turned 65 years.
- In the earnings-related pension scheme, the entitlement criteria for the projected pension component are tightened and the accrual rate for the projected pension component is lowered for persons aged 50 or more to 1.2 per cent of the gross wage for people between the ages of 50 and 59 and 0.8 per cent for those between the ages of 60 and 64.
- The calculation of the wage that forms the basis for the pension is gradually changed to being based on an individual's earnings for the last 10 years.
- The employee's earnings-related pension contribution is reduced from the pensionable wage for the first time when calculating a pension (the act came into force in 1994).

## **1997**

- Receiving the pensioners' housing allowance, the pensioners' care allowance, the child increase or the front-veterans' supplement is no longer dependent on receiving another national pension.

## **1998**

- All employment contracts lasting for less than one month or in which the minimum earnings limit under TEL is not reached, as well as all work where a private household is the employer, are insured under TEL.
- As of 1 July, the eligibility age for the part-time pension is lowered to 56 years. The change will be in force until the end of 2002.

## **1999**

- As of 1 August, disability pensions under the National Pensions Act are not granted to persons aged under 18 until the person's prospects for rehabilitation have been clarified.
- As of 1 August, and under certain conditions, a disability pension under the National Pensions Act may be left dormant for 6–24 months.

## **2000**

- The age limit for the individual early retirement pension increases from 58 to 60 years for persons born after 1943. In the public sector, the age limit may also be 58 years for persons born in 1944–1946 and 59 years for persons born in 1947.
- In the earnings-related pension scheme, the required right to a projected pension component linked to the unemployment pension in 1994 is abolished. The projected pension component is no longer added to the unemployment pension but is paid when the unemployment pension becomes an old-age pension or a survivors' pension.
- The reduction for early retirement in the early old-age pension decreases from 0.5 to 0.4 per cent for each month that the pension is taken early.
- The increment for deferred retirement in the old-age pension decreases from 1.0 to 0.6 per cent for each month that the pension is deferred.
- The validity of the Act on Farmers' Early Retirement Aid is extended with a legislative amendment (1326/1999) for the years from 2000 to 2002. Reindeer herders are also covered by the Act.

## **2001**

- The spouse supplements and the transition period for the gradual abolition of the base number of national pensions ends on 1 January 2001.

## **2002**

- The earnings-related pension system adopts the euro.
- As of 1 April, the age before which a disability pension under the National Pensions Act is not granted until the claimant's rehabilitation prospects are examined is raised to 20 years.

## **2003**

- Parliament passes the pension reform package; one of the aims is to postpone retirement.
- The retirement age for the part-time pension is restored to 58 years for those born in 1947 and later. Simultaneously the pension accrual for old-age pension rights during the part-time pension is weakened somewhat.
- The individual early pension is no longer granted to persons born after 1943. However, in the public sector, individual early pensions may still be granted to persons born between 1944 and 1947.
- As the flat-rate base amount of the national pension for all pensioners was abolished in 1996, it is compensated to those pensioners receiving earnings-related pension, whose pension had started between 1975 and 1995. During that time, the base amount reduced the earnings-related pension if the pension exceeded 60 percent of the previous wage.
- The validity of the Act on Farmers' Early Retirement Aid (LUTUL 1995) is extended with a legislative amendment (593/2002) to cover the period from 2003 to 2006.

## **2004**

- The principle of the last pension provider extends to the public sector.
- The right to rehabilitation becomes a subjective right (with certain conditions).

## **2005**

The pension reform comes into force. The old-age pension is determined under the new rules, but the disability pension is determined under the old rules if the pension starts in 2005.

- The worker must be insured between the ages of 18 and 68. As of this year, the pension is calculated based on the earnings of each year between those ages. Pension accrues for all work done between the ages of 18 and 67, also for work done while drawing a pension.
- Pension accrues also for certain periods of social security benefits (unsalaried benefits).

- The pension rights for employments that continue after the turn of the year (2004/2005) are determined under former laws until the end of 2004. The new accrual rates come into force at the beginning of 2005.
- The earnings-related pension index (previously index for persons of retirement age) is applied to all pensions in payment. Earned pension rights and pensionable wages are adjusted with a new wage coefficient, in which 80 per cent of real adjustments to wages are taken into consideration. The halfway index (previously index for persons of working age) is used to determine pensions in such cases in which the pension is determined under the rules valid before 2005.
- The retirement age is flexible, from 63 to 68 years.
- The old-age pension can be drawn as of age 63, without any reductions made to the pension.
- Integration between the earnings-related pensions is discontinued completely in the private sector.
- The accrual rate is 4.5 on earnings earned after turning 63 years and 1.9 per cent for earnings accrued at age 53–62.
- If the pension is taken out late (after age 68), it is increased by 0.4 per cent for each month that it is deferred.
- If the pension is taken out early (as of age 62), it is reduced by 0.6 per cent for each month that it is taken early.
- The right to unemployment pension is abolished for persons born after 1949. The unemployment pension is replaced by additional days of the unemployment allowance.
- The individual early retirement pension is abolished for those born after 1943, the conditions for an individual early retirement pension is included in the regulations for the disability pension.
- As of 2009, the life expectancy coefficient will be applied.
- The national pension legislation is also reformed, but the retirement age in that scheme remains at 65 and the reduction for early retirement and the increase for late retirement remain unchanged. The age limit for early retirement in the national pension scheme rises to 62 years.
- The employer's pension contribution is increased from 4.6 per cent to 5.8 per cent for persons who have turned 53 years.

- On the 1<sup>st</sup> of May, the Act on Pension Assistance for Long-Term Unemployed Persons takes effect. According to the Act, a person who meets the criteria for the pension assistance is awarded an old-age pension without any reduction for early retirement at age 62, from both the earnings-related and the national pension scheme.

## 2006

The second phase of the 2005 pension reform comes into force.

- In addition to the old-age pensions, other pensions are now determined in a new way.
- The projected pension component is now determined so that as of age 50, the accrual rate is 1.3 per cent until the age of 63 when the period of the projection pension component ends and, after the transition period, the projected pension component is determined based on the earnings of the last five years.

## 2007

- The Employees Pensions Act takes effect. It replaces the Employees' Pensions Act, the Temporary Employees' Pensions Act and the Pensions Act for Performing Artists and Certain Groups of Employees.
- The State Employees' Pensions Act is rewritten and renamed (in Finnish) to VAEL.
- The pension acts for the self-employed and the Seafarer's Pensions Act are rewritten.
- An investment reform is realized.
- The farmers' early retirement scheme is extended with a new act, (The Farmers' Early Retirement Aid Act 612/2006, LUTUL 2007) for the period 2007 – 2010.

## 2008

- Pension records are now sent to all insured once a year by private-sector pension providers.
- A temporary act (valid from 2008 to 2012) to strengthen the solvency of pension providers comes into force.

### **Structural reform of national pensions:**

- The municipal cost-of-living categories are abolished (municipalities in category 2 raised to category 1). The cost-of-living categories of municipalities thus no longer affect the pension amounts. The pension is determined based on what was previously the higher municipal cost-of-living category.
- The national pension concept changes. The care and housing allowances of a pension recipient are no longer considered pensions.
- The lower limit for the smallest payable pension is reduced.
- The amount of a full pension increases.



- Institutional care no longer reduces the pension amount.

## 2009

- Grant recipients start to earn earnings-related pensions. The pensions are regulated in the Farmers' Pensions Act and the grant recipients are insured by the Farmers' Social Insurance Institution MELA.

## 2010

- Returning to work from a disability pension is made easier with a temporary act that is in force from 1 January 2010 to 31 December 2013. A disability pension recipient has the right to earn at least 600 euros per month alongside the pension. The pension may also be suspended for the period of time spent working. This has been possible already in the national pension scheme.
- For the first time, a lump-sum increase to the pension is paid out to those who have become disabled before the age of 51. The increase is paid out to those whose pension has started five years ago or more. The younger the retiree at the onset of disability, the bigger the increase. The increase is made only once to each pension.
- The life expectancy coefficient affects the pensions for the first time. The coefficient decreases the monthly amount of new statutory earnings-related pensions.

## **Social contract reforms come into force**

- The level of starting disability pensions is increased via adjustments to the projected pension component and accrual rates. The accrual rate for the projected pension component rises from 1.3 to 1.5 per cent between the ages of 50 and 63.
- The life expectancy coefficient is introduced in earnings-related disability pensions.
- The widow's/widower's own pension, if over a certain limit, reduces the survivors' pension paid to the spouse. This limit is changed.
- The lower age limit of the part-time pension rises to 60 years. At the same time, pension accrual during time spent in part-time retirement changes. Pension is accrued only from earnings from work, no longer from the part-time pension share. Changes only apply to those born in 1953 or later.
- The accrual for periods of job alternation leave allowance is lowered.
- The age limit for the part-time pension is raised to 60 years and the pension accrual for the earnings reduction is abolished. The changes apply to persons born after 1952.
- The age limit for the additional days of the unemployment allowance is raised by one year for those born in 1955 or later.

## 2011

- The guarantee pension comes into force on 1 March 2011.
- The definition of an entrepreneur in the pension act for self-employed persons changes so that a person in a leadership position of a limited company is a person who owns alone more than 30 per cent or, together with family members, more than 50 per cent of the company shares or the company voting rights.
- The definition of a self-employed farmer under MYEL changes so that a farming entrepreneur is a person who does farming, fishing or reindeer herding and is in a leadership position of a limited company and owns alone more than 30 per cent or, together with a spouse, common-law spouse or family member in a direct ascending or descending line, more than 50 per cent of the company shares or the company voting rights, or who together own more than 50 per cent of the voting rights based on the shares.
- The validity of the Act on Farmers' Early Retirement Aid is extended with a legislative amendment (1787/2009) for the years from 2011 to 2014.

## 2012

- In the future, the integration of the survivors' pension granted after the deceased who had retired under the rules valid before 2005 means, as with other new pensions, that the LITA benefits are deducted directly from the pension.
- A long-term unemployed person born in the 1950s who has turned 62 years can, under certain conditions, be granted an old-age pension without a reduction for early retirement.
- Data on public sector pensions is included on the pension record.

## 2013

- The possibility to retire on an early old-age pension comes to an end for the 62-year-olds who were born in 1952 or later both within the national and the earnings-related pension systems. However, the 63-64-year-olds may be granted a national early old-age pension.
- The earliest eligibility age for part-time pension rises to 61 years for those born in 1954 or later.
- The right to receive an old-age pension granted based on the right of additional days of unemployment insurance at age 62 is abolished for persons born in 1958 or later. In the national pension system, the right remains for those born between 1958 and 1961 at the age of 64.

- As of 2013, the earnings-related pension is no longer reduced by such LITA benefits that were granted based on an accident that occurred before 2004. In addition, a pension that has accrued for work that the pension recipient has done as of the year following the LITA accident will not be reduced by LITA benefits.
- The risk-bearing capacity of pension providers is improved so that the solvency margin and the equalization amount are combined and form the solvency capital.
- The reduced pension contribution for the newly self-employed rises.

#### **2014**

- The act that promotes people on a disability pension to return to work is extended until the end of 2016.
- The validity of the registered TEL supplementary pension arranged by employers ends on 31 December 2016. The act that regulates the validity period came into force on 1 January 2014.

#### **2015**

- As of the beginning of 2015, a change in legislation means that the pension provider is under obligation to establish a disability pension applicant's right to rehabilitation.
- Index adjustments to national and earnings-related pensions is limited to 0.4 per cent.
- LITA compensations are reduced in full also in all those pensions which have been determined based on the pre-2005 pension regulations and which are later amended. However, the pensions may not be lower than they would have been after the integration in line with the pre-2005 regulations.
- The accrual rate (1.5%) for the time that disability pension accrues (amended in 2010) is applied also in retrospect to valid private-sector time in retirement for which new pension accrues for the period 2006-2009
- Pension insurance for grant recipients becomes more flexible.
- An act on additional pension for Olympic medalists comes into force.
- The government bill for the 2017 pension reform is passed.
- The validity of the Act on Farmers' Early Retirement Aid is extended with a legislative amendment (1064/2014) for the years from 2015 to 2018.

#### **2016**

- The reform of the Seafarer's Pensions Act comes into force. The accrual and pension contribution rates are standardized with those in the other earnings-related pension acts. The determination of the State's share of the pension expenditure under MEL

changes. Following a transition period, the retirement age is standardized with that of the other pension acts.

The registered supplementary pension insurance arranged by employers expires on 31 December 2016.

## **2017**

The earnings-related pension reform comes into effect. The reform includes, among others, the following amendments:

- The retirement age (old-age pension) begins to rise progressively (by 3 months/year) as of the age group born in 1955. Persons born in 1962 are the first age group with a retirement age of 65 years. The retirement age of those born in 1965 or later is linked to life expectancy.
- Pension starts to accrue at age 17 (instead of 18).
- The pension accrual rate is standardized to 1.5 per cent of the gross annual earnings for all age groups. However, until 31 December 2025, the accrual rate is 1.7 per cent for persons aged 53–62 years. Their earnings-related pension contribution is 1.5 percentage points higher during this transition period. As of 2017, the employee's earnings-related pension contributions are no longer deducted from the annual earnings.
- The pension of persons who defer their old-age pension beyond their retirement age is increased by 0.4 per cent per month for late retirement.
- The partial early old-age pension and the years-of-service pension are introduced. The partial old-age pension replaces the part-time pension, which is no longer granted. The partial old-age pension can be granted to persons born in 1949 or later who do not receive any other earnings-related pension and who have turned 61 years (for those born in 1964 or later, 62 years). The person taking out a partial old-age pension can choose to take out 25 or 50 per cent of the earnings-related pension accrued at the time of retirement. If the pension is taken out early, the part taken out is permanently reduced by 0.4 per cent per month from the time of taking out the pension to the time of reaching the retirement age. If it is taken out late, the part taken out is permanently increased by 0.4 per cent per month from the month in which the retirement age is reached to the month that the pension is taken out. There are no restrictions concerning how much the person can work while drawing a partial old-age pension.
- A years-of-service pension can be granted to a worker who has turned 63 years and has done work that requires great mental or physical effort for at least 38 years. In

addition, the worker's ability to work must be reduced, although not as much as for a disability pension. The first years-of-service pensions can be paid out in 2018.

- The earnings-related pension reform also affects the retirement age of the national pension, but only for those born in 1965 or later.
- The Local Government Pensions Act (KUEL), the State Employees' Pensions Act (VAEL) and the Evangelical-Lutheran Church Pensions Act (KIEL) merges into the Public Sector Pensions Act (JUEL) which comes into force at the beginning of 2017. Kela's employees are also covered by JUEL.
- The Competitiveness Pact increases the employee's share and reduces the employer's share of the earnings-related pension contribution.
- The Pension Assistance comes into force on 1 June 2017. The benefit is of the same size as the guarantee pension. It can be granted to those born before 1 September 1956 who are long-term unemployed on 31 August 2016.
- The national pension index is frozen and cut by 0.85 per cent of the 2016 level.

## **2018**

- The first years-of-service pensions are paid out in 2018.
- The retirement age for those born in 1955 is 63 years and 3 months.
- The national pension index is frozen to the level of 2017, but the guarantee pension is raised by 15.01 euros per month.
- The Act on Farmers' Early Retirement Aid (LUTUL) expires at the end of the year. However, retirement aids based on this Act continue to be paid out until the recipient turns 63 or 65 years, depending on when the aid was granted.

## **2019**

- The retirement age of people born in 1956 is 63 years and 6 months.
- The national pension index is frozen to the level of 2018, but the guarantee pension and the pension assistance (for the long-term unemployed) is raised by 9.25 euros per month.
- The right to pension assistance for the long-term unemployed is expanded on 1 October 2019 to persons born before 1 September 1958.
- The national Incomes Register is introduced. Employers or other payers must report the details of earned income paid to the Incomes Register after each payment. The register is utilized also in the earnings-related pension system. Among other things, it allows for a more up-to-date monitoring of earnings data.

## 2020

- Those born in 1956 and 1957 may reach their retirement age (63 years and 6 months and 63 years and 9 months respectively) this year.
- No pension accrues for workers' earnings that have deliberately not been insured.
- As a result of the reform relating to the income from work in the Health Insurance Act, the pension that accrues for periods on a parental allowance is based on a higher earnings basis than before, while lower earnings than before give a right to pension accrual for periods on a sickness allowance and Kela's rehabilitation allowance. The change applies to pension that accrues based on benefits granted in 2020 or later.
- Full national pensions are increased by 34 euros and the guarantee pension by 50 euros per month as of the beginning of 2020.
- An amendment to the Unemployment Security Act takes effect as of the beginning of 2020. The qualifying age for additional days of unemployment security rises for those born in 1961 and later from 61 to 62 years. For those born in 1965 and later, the age at which unemployment security ends changes from 65 years to the age group's own retirement age.
- The employer's contribution in the private sector is temporarily reduced by 2.6 percentage points, from 1 May to 31 December 2020.

## 2021

- In 2021, those born in 1957 may reach their retirement age (63 years and 9 months).
- Those born in 1958 who have qualified for additional days of the unemployment allowance no longer qualify for an unreduced old-age pension before reaching their retirement age. Those born in 1957 who have qualified for additional days of the unemployment allowance may qualify for an unreduced old-age pension before reaching their retirement age.
- From the point of view of the person receiving compensation, compensation paid under the Treatment Injuries Act becomes secondary in relation to earnings-related pensions as of 1 January 2021. Earnings-related pension providers always pay out pensions in full to the pension recipient, but the pension provider is entitled to claim the disability pension and rehabilitation benefit it has paid from the Finnish Patient Insurance Centre. The compensation that the pension provider is entitled to can amount to no more than what the patient would be entitled to under the Treatment Injuries Act. Regarding a disability pension resulting from a treatment injury, the effect of experience rating is abolished in the earnings-related pension system.

- The act with the goal to promote the return to work of employees on disability pension is extended until the end of 2022.
- As of 1 January 2021, the employees of the Bank of Finland are covered by the Public Sector Pensions Act and their pensions are managed by Keva.
- Payers of social security benefits report the benefits they pay to the Incomes Register as of 1 January 2021.

### **3.9 Pension Reforms Initiative**

#### **The 1981 System**

The root of the post 1981 system is mandatory saving in a privately managed defined contribution account. Each worker was required to place 10% of covered earning into an account, plus a contribution for disability insurance plus a commission to the firm that administers the individual account, collects contributions, manage the pension fund and purchases disability insurance. Initially, there was no employer contribution, but since 2008 employers have paid the contribution for disability. Legal retirement age was 65 for men 60 for women, with later earnings not subject to the contribution mandate. Benefits can be taken as an inflation-indexed annuity from an insurance company. An alternative is phased withdrawals, with constraints on the rate of withdrawal to reduce the risk of outliving savings. Annuities and withdrawals were subject to mandatory coverage for survivors. The 1981 system included a minimum pension guarantee for people with a t least 20 years of pension coverage.

As commission charges were higher than anticipated, the regulations repeatedly experimented with changes to encourage more competition to try to lower charges. A telling brief summary of the problems of the system came at a seminar in Santiago in 2004, referring to the 7 deadly sins of Chile pension such as low coverage, low pensions, high administrative costs, high fiscal cost, lack of gender equality, little competition and political tests for Boards of Directors of Administrators de Fondas de Pensioners. In other words, reality was far from an idealized model of the capital market.

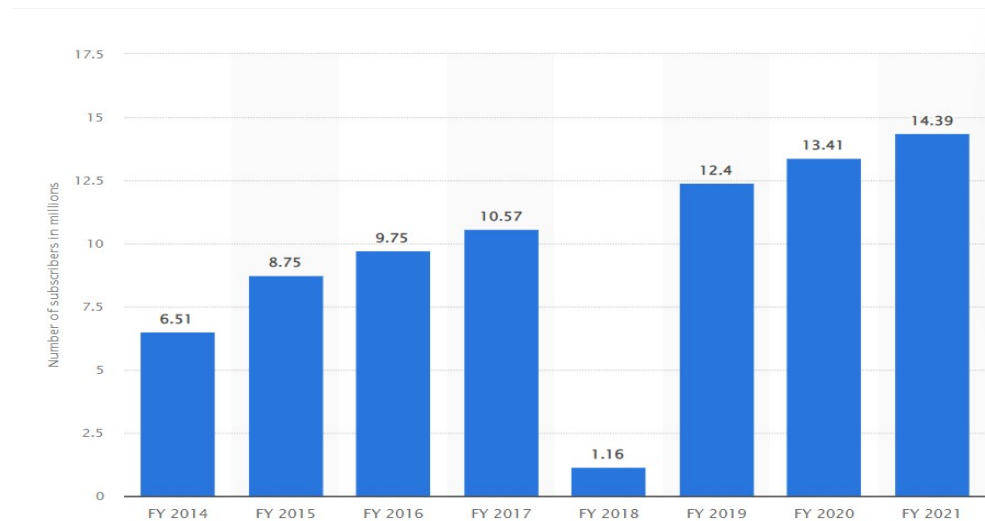
#### **The 2004 New Pension Scheme (NPS) System**

With a view to providing adequate retirement income, the new pension system has been introduced by the government of India with a view to develop the pension sector. It has

been made mandatory for all new recruits to the government (except Armed forces) with effect from 1<sup>st</sup> January, 2004 and also has been rolled out to all citizens with effect from 1<sup>st</sup> May, 2009 on a voluntary basis. The features of the NPS design are self-sustainability, portability and scalability. Based on individual choice, is envisaged as a low-cost and efficient pension system backed by sound regulation. As a pure defined contribution product with no defined benefit element, returns would be totally market driven. The NPS provide various investment options and choices to individuals to switch over from one option to another or from one fund managers to another subject to certain regulatory restriction.

**Figure No: 3.1**

**Subscribers under the National Pension System in India from financial year 2014 to 2021(in millions)**



*Source: Statista Research Department 2022*

The national pension system had approximately 14 million subscribers in financial year 2021 across India. The scheme had succeeded in focusing on an inclusive pension system. However, a large Proportion of India’s population still remains under-reparented in the pension schemes and there is vast room for growth in this sector. In 2004. The national pension system trust was rolled out by the Indian government and became the only universal scheme to handle assets and funds of all subscribers.

**Main programmed and schemes under NPS**

Some of the important programs and schemes of the department during the year were NPS-Lite. Swavalamban scheme a contributory pension scheme was introduced on 26/09/2010, to extend the benefit of NPS to the people from unorganized sector. The NPS



architecture is transparent and web-enabled. It allows a subscriber to monitor his/her investments and returns. The facility for seamless portability is designed to enable subscribers to maintain a single pension account throughout the saving period.

Pension fund regulatory and development authority (PFRDA), set up as a regulatory body for the pension sector, is engaged in consolidating the initiatives taken so far regarding the full new pension scheme architecture and expanding the reach of NPS distribution network. The process of making NPS available to all citizen entailed the appointment of NPS intermediaries, including 28 institutional entities as points of presence (POPs) that will serve as pension account opening and collection Centre's, a centralized record keeping agency (CRA) and 5 pension fund managers to manage the pension wealth of the investors. PFRDA adopted a transparent, non-discretionary, competitive bidding process for selection of NPS intermediaries, in line with best international practice, which ensured high quality service delivery for NPS subscribers at optimum cost.

As of date, 27 states and UT government have notified and joined NPS for their employees. Of these, 26 states and UTs have already signed agreement with NPS Trust and 27 states and UTs have signed agreements with CRA for carrying forward the implementation of NPS. The other states are the at different stages of preparation for roll out of NPS. In addition, over 26.10 lakh employees of the central and various states government are already a part of NPS. The corpus being managed under NPS is Rs. 24720 Crore.

The departmental of posts has been appointed as POP in addition to other financial institutions which will expand the POP-SP network by more than 5 times. While tier-I, the non-withdrawable pension account under NPS has been in operation since 1<sup>st</sup> May, 2009. Tier-II, the withdrawable account has been made operational from 1<sup>st</sup> December, 2009. These initiatives are expected to help realize the full potential of the NPS in terms of economics scale and benefit the subscribers in terms of lower of lower fees and charges and higher returns.

In order to facilitate the organized entities to move their existing and the new employees to NPS architecture, a customized version of the core NPS Model, known as the NPS-Corporate sector Model has been introduced since December 2011. As on 8<sup>th</sup> December, 2012, 340 Corporates and 1.09 lakh employees have been enrolled under this model.

The PFMs manage three separate schemes consisting of three asset classes, namely equity, government securities and credit risk-bearing fixed income instruments, with the investment in equity subject to a capital of fifty percent. The fund supervisors will capitalize only in index assets that replicate either the Bombay stock exchange or Sensitive index or national stock exchange and Nifty 50 Index. The subscriber will have the option to decide the investment mix of his pension wealth. In case the subscriber is unable or unwilling to exercise any optimal selection regarding asset distribution, his involvement will be invested in accordance with the auto selection option with a predefined portfolio.

### **The 2008 Reforms**

Until 2008, with pensions based mainly on individual savings, the system did not provide adequate benefits for people with low lifetime earnings or incomplete contribution histories. This is to expected with any system in which pension benefits are proportional to contributions. Thus, Chile did not have a pension system, but only part of a system. Widespread informality made this problem important throughout Latin America. Two elements of the resulting reforms stand out, the information of non-contributory pension and an auction mechanism designed to reduce administrative charges.

The Solidarity Pension. The reforms introduced the solidarity pension system a non-contributory pension benefit which is gradually withdrawn as contributory pension income rises and withdrawn completely for the top two quintiles of individuals, thus, giving at least some benefit to the bottom 60% of pensioners. Benefits are financed in part from a solidarity fund which is subject to actuarial review every three years.

Since the benefit is non-contributory, in principle anyone is eligible, including formal and informal sector workers, urban and rural employed, self-employed and outside the labour force. Thus, the basic pension assists workers with low or sporadic incomes. By implication, it also recognizes caring responsibilities, someone who cares for young children or elderly dependents will make fewer contributions to their individuals accounts and people with small accumulations are entitled to the full basic pension.

The pension sector reforms were initiated in India to establish a robust and sustainable social security arrangement in the country against the backdrop that only about 12=12% of the total workforce was covered by any formal social security system.

**Table No: 3.3**  
**India - Roadmap of Pension Reforms**

Year	Events
1998	A great deal of policy thinking took place on pension reforms in India,
2001	Road-map for a new restructured DC pension scheme for civil servants and the general public announced
2003	New DC pension scheme for civil servants and other workers introduced in the annual budget
2003	Establishment of the interim Pension Fund Regulatory and Development Authority (PFRDA)
2004	2004 NPS introduced for central (civil) government employees
2007	PFRDA selects three public sector companies to sponsor new pension fund management companies for NPS
2007	Launch of the Indira Gandhi National Old Age Pension Scheme (IGNOAPS) to provide Rs.200 per head for all persons below poverty line and aged 65 and above
2008	Employees Provident Fund Organization (EPFO) select four fund managers (Including three private sector fund managers) for managing EPF
2009	PFRDA says to extend pension funds (now limited to government employees) to all Indian citizens on April 1 2009
2018	On 10 December 2018, the Government of India made NPS an entirely tax-free instrument in India
2021	On August 26, 2021, PFRDA increased the entry age for the National Pension System (NPS) from 65 years to 70 years.

#### **Work in Pension Reforms Since 1998**

A great deal of policy thinking took place on pension reforms in India, starting with project OASIS which was undertaken by the ministry of social justice and empowerment in early 1998. Project OASIS was implemented by invest India economic foundation (IIEF) and expert committee was chaired by Surendra Dave. It was focused on the uncovered sector. In parallel, other arms of government were working on civil service pension reforms. The first

major reform decision came about in the Budget speech of 2001, by then finance minister Yashwant Sinha, who Said “**Pension Reforms** the central government pension liability has reached unsustainable proportions: as a percentage of GDP, it has risen from about 0.5% in 1993-94 to one percent in 2000-2001. As such is envisaged that those who enter central government services after 1<sup>st</sup> October, 2001 would receive pension through a new pension programme based on defined contributions. In order to analysis the current pension system and to deliver a roadmap for the next steps to be taken by the government, I propose to constitute a high-level expert group, which would give its recommendations within 3 months”.

The Bhattacharya Committee was setup to propose this design.

The parallel developments on the civil servant’s pension and the uncovered sector pension came into sharp focus at the ministry of finance in late 2002, where a major decision taken was to merge the two parallel strands of work for the civil service and for the uncovered sector into a single new pension system.

**2001 roadmap for a new restructured defined contribution pension scheme for civil servants and the general public announced**

**2003 new DC pension scheme for civil servants and other workers introduced in the annual budget**

The budget speech of February 2003, by the then minister Jaswant Singh, had the following text. “My predecessor in office had in 2001, announced a roadmap for a restricted pension scheme for new central government employees and a scheme for the general public. This scheme is now ready. It will apply only to new entrants to government service, except to the armed forces and upon finalization offer a basket of pension choices. It will also be available on a voluntary basis to all employers for their employees as well as to the self-employed. This new pension system, when introduced will be based on DC pension scheme, shared likewise in the case of government workers among the government and the workers. This will of course be no influence from the government in respect of people who are not government servant. The NPS pension scheme will be gone into individual pension accounts with pension funds. The ministry of finance will oversee and supervise the pension funds through a new and independent pension fund regulatory and development authority.

On 23<sup>rd</sup> August, 2003, the Cabinet approved the proposal to implement the budget announcement of February 2003 relating to introducing a new restructured defined

contribution pension system for new applicants to central government service excluding to Armed servant from 1<sup>st</sup> January 2004 onwards. The new system will also be available on a voluntary basis to all pension including self-employed professionals and others in the uncovered sector. However, mandatory programs under the employee provident fund organization and other special provident funds and miscellaneous provision Act, 1952 and other special Acts governing these funds. The government approved the basic features of the new pension system and the setting up of an interim pension fund regulatory and development authority.

### **2003 establishment of the temporary pension fund regulatory and development authority (PFRDA)**

PFRDA is the regulatory body under the jurisdiction of Ministry of Finance, government of India for overall supervision and regulation of pension in India. The government of India had, in the year 1999, commissioned a national project titled “OASIS” (An Acronym for Old Age Social and Income Security) to examine policy related to led age income security in India. Based on the recommendations of the OASIS report, government of India introduced a new defined contribution pension system for the new entrants to central/state government service except armed forces, replacing the existing system of defined benefit pension system on 23<sup>rd</sup> August, 2003, interim PFRAD was established through a resolution by the government of India to promote develop and regulate pension sector in India. The contributory pension system was notified by the government of India on 22<sup>nd</sup> December, 2003, now named the National Pension System (NPS) with effect from 1<sup>st</sup> January, 2004. The NPS was subsequently extended to all residents of the country with effect from 1<sup>st</sup> May, 2009 with self-employed professionals and other in the unorganized sector on a voluntary basis.

The PFRDA Act was passed on 19<sup>th</sup> September, 2013 and the same was notified on 1<sup>st</sup> February, 2014, PFRDA is regulating NPS, subscribed by employees of government of India, state government and by employees of private institution or organizations and unorganized sectors. The PFRDA is ensuring the orderly growth and development of pension market.

## **2004 NPS introduced for central government employees' decisions by the UPA government in 2004**

In May 2004, the United Progressive Alliance (UPA) government won the general elections and assumed power. The UPA administration choose to continue with the pension reforms effort. It chooses to disband the interim PFRDA which was intended to setup administrative procedure prior to passage of the legislation. The budget speech of 8<sup>th</sup> July, 2004, by finance minister P. Chidambaram, had the following text, “**Pension Reforms** A defined contribution pension scheme has been introduced with effect from 1<sup>st</sup> January, 2004 for the central government employees recruited on or after that date. A suitable legislation to provide a regulatory framework for the scheme will be introduced in parliament”.

The budget speech on 28<sup>th</sup> February, 2005 by, finance minister P. Chidambaram, had the following text, “PFRDA with increasing longevity, the problem of old-age income security can no longer be ignored. Government has announced a defined contribution pension scheme for newly recruited central government employees which would also be extended to the unorganized sector. I am happy to inform the house that seven state governments Andhra Pradesh, Chhattisgarh, Himachal Pradesh, Jharkhand, Manipur, Rajasthan and Tamil Nadu have introduced similar schemes for their employees. Other states have also evinced interest. An ordinance was promulgated on 29<sup>th</sup> December, 2004 to set up a PFRDA. I propose to introduced a bill to replace the ordinance during this session. Through the new scheme, it is proposed to offer a menu of investment choices to the subscriber and to provide a strong regulatory mechanism to ensure that the interests of subscribers are protected. I appeal to workers all over the country to join the new pension system.

This was a paradigm shift from the existing defined return's philosophy to a defined contributions philosophy. The committee suggested creating a professionally managed system with a large base of pension account holders across all sectors of the economy and centralized record keeping. The proposed system would ensure fair competition among professional fund managers so as to provide a wide range of choices to employers and fair market linked returns to the account holders. In line with the above recommendations, the government set up its new pension system, India's answer to the U.S 401(K) plans. The new pension scheme was established in year 2004 for central and state government workers, who had to contribute mandatorily. In 2009, it was open to all Indian people in the age group

between 18-60. However, it has unsuccessful to take off in the voluntary section given the weak subscriptions from the isolated sector (see table 3.4).

**Table: 3.4**  
**Sector-wise NPS Status as of December 2021,**

<b>Employer/Sector</b>	<b>Number of subscribers</b>
Central Government	21,52,472
State government	50,06,405
Private sector	10,77,273
NPS-Lite All Citizen	14,44,404
NPS Swavalamban	43,09,388
Total	1,39,89,942

(Source: NPS Trust)

**2007 PFRDA select three public sector companies to sponsor new pension fund management companies for NPS**

Pension fund means an intermediate which has been decided a certificate of registration by the Authority as a pension fund for receiving contribution, collecting them and making payments to the contributors in the way as may be definite by the Authority.

**Government Sector:** for managing the contributions of Government employees three pension funds were appointed by PFRDA in April 2012, which are as under:

- Life insurance corporation pension fund Ltd
- State bank of India pension fund Ltd
- UTI retirement resolutions Ltd. The investment management fee charged by PFs is 0.0102 percent per annum.

**Private Sector:** For managing the contributions of non-government employees 8 pension funds were appointed by PFRDA with effect from 01/08/2014.

- State Bank of India pension funds private Ltd
- UTI retirement solutions Ltd
- Life insurance corporation pension fund Ltd
- Kotak Mahindra pension fund Ltd
- Reliance capital pension fund Ltd
- ICICI prudential pension funds management Co. Ltd

- HDFC pension management Co. Ltd
- Pension fund to be incorporated by Birla Sun Life insurance Co. the investment management fee charged by PFs is 0.01% Per annum.

**2007 launch of the Indira Gandhi national Old Age Pension Scheme (IGNOAPS) to provide Rs. 200 per head for all persons below poverty line and aged 65 and above.**

The national old age pension scheme has been retitled as Indira Gandhi National Old Age Pension Scheme and formally launched on 19<sup>th</sup> November, 2007. Under this scheme central assistance is available as per the following criteria.

- Age of the applicant is 60 years or more.
- The applicant is a poor in the sense of having little or no regular means of sustenance from his/her own sources of income or through financial support from family members or other sources.
- Pension under IGNOAPS is now granted to a person who is 60 years or above and belongs to a household below the poverty line instead of only to destitute.
- The central contribution of pension under the Indira Gandhi national Old Age Pension Scheme is Rs.200/- per month per beneficiary up to 79 years and Rs.500/- per month per beneficiaries up to 80 years onwards and the state governments may contribute over and above to this amount. At present old age beneficiaries are getting anywhere Rs 200 to Rs 1000 depending on the state contribution.
- The pension is not restricted to only one person in a family. All the persons who are 60 years of age in a BPL family are eligible to get old age pension.

**2008 employees provident fund organization (EPFO) select four fund managers (including three private sector fund managers) for managing EPF**

The EPFO had appointed multiple fund managers for the first time in July, 2008 for earning better returns on deposits for its 4.72 crore subscribers. The term of the four fund managers, ICICI, HSBC AMC, Reliance Capital and SBI, appointed in 2008 expired on 31<sup>st</sup> March, 2011. SBI will manage 35% of the funds. ICICI Securities will manage 25% of the funds while the other will manage 20% each, central provident fund commissioner S Chatterjee said. The four asset management companies were chosen by the central board of trustees the EPFO's top decision-making body out of five shortlisted by the EPFO's financial advisory committee.



## **2009-PFRDA says to extend pension funds (now limited to government employees) to all Indian citizens on 1<sup>st</sup> April, 2009**

National pension system trust is a specialized division of pension fund regulatory and development authority which is under the jurisdiction of ministry of finance of the government of India. The national pension system is a voluntary defined contribution pension system in India. National pension system like PPF and EPF is an EEE instrument in India where the entire corpus escapes tax at maturity and entire pension withdrawal amount is tax free.

NPS started with the choice of the Government of India to stop DB pension scheme for all its workers who joined after 1<sup>st</sup> April, 2004. While the scheme was initially designed for government employees only, it was opened up for all citizens of India between the age of 18 and 65 in 2009 for OCI card holders and PI's in October 2019.

## **2018 government of India made NPS an entirely tax-free instrument in India**

Where the entire escapes tax at maturity the 40% annuity also became tax-free. The contribution under tier-II of NPS is covered under section 80C for deduction up to Rs. 1.50 Lakh for income tax benefits, provided there is a lock in period of 3 years, the changes in NPS was notified through changes in The Income Tax Act 1961, during the 2019 union budget of India. NPS is limited EEE to the extent of 60%, 40% has to be compulsorily used to purchase an annuity, which is taxable at the applicable tax slab.

Contributions to NPS receive tax exemptions under Section 80C, Section 80CCC and Section 80CCD (1) of income tax Act. Starting from 2016, an additional tax benefit of Rs 50000 under section 80CCD (1b) is provided under NPS, which is over the Rs. 1.5 lakh exemption of Section 80C. Private fund managers are important parts of NPS. NPS is considered one of the best tax saving instruments, after 40% of the corpus was made tax-free at the time of maturity and it is ranked just below equity linked savings scheme.

## **2021 PERDA increased the entry age for the National Pension system (NPS) from 65 years to 70 years.**

As per the revised norms, any Indian citizen resident or non-resident and Overseas Citizen of India (OCI) between the age of 65-70 years can join NPS and continue or defer their NPS account up to the age of 75 years. It is administered and regulated by the PFRDA.

### **3.10 Reason for Changing the Old Pension Scheme**

The cause for changing the old pension scheme was the financial Burdon on the government on account of pension payments for its workers is rising to very high levels. The total pension outlay in respect of central government workers rose from 0.67 percent of gross domestic product in 1993-94 to 1.67 percent of gross domestic product in 2003-04. The expenditure in absolute terms increased from Rs. 5206 crores in 1993-94 to Rs. 23629 crores in 2003-04. The pension expenditure of the central government increased even more sharply during the late nineties. It increased from Rs. 15346 crores in 1998-99 to Rs. 23629 crore crores in 2003-04. As a percentage of net tax income. The total pension spending increased from 9.7 percent in 1993-94 to 12.60 percent in 2003-04. The compound annual growth rate of the pension expenditure of the central government was 21 percent during the 1990s. pension at the stage government level have also risen sharply during the last 20 years. The annual average increase in pension expenditure during the late 1990s was 27.1 percentage. While pension expenditure of the state as a percentage of revenue receipts was 5.4 percent in 1990-941, this proportion rose to more than 10 percent during 2000-01. In 2004 NPS scheme came into existence.

### **3.11 Pension Fund Investment Pattern in India.**

India is experiencing demographic trends, lending to lower total fertility rate, increased life expectancy and greater proportion of aged in population. A provident fund is essentially a saving scheme. While it is primarily used for retirement financing, it can also enable members to obtain withdrawals for housing, education and other purposes. PF schemes may be mandatory or voluntary. They are defined contribution schemes in which contribution are defined but the benefits are left indeterminate. As in any DC pension scheme, individual people bear investment and other risks. And usually get lump sum amount at a specified retirement age, through pension features can be easily incorporated. In several provident and pension fund schemes, a people are permitted to borrow for housing, education or other purposes but the loans require to repaid.

Each provident and Pension fund must achieve core functions with a reasonable degree of capability and productivity. Reliable collection of contributions, taxes and other receipts any loan payments in security systems. Payment of assistances for each of the schemes in a timely and correct way. Securing financial management and creative investment

of provident and pension fund assets. Maintaining an actual communications networks, including development of correct data and record keeping instruments to support collection, payment and financial activities. Production of financial statements and reports that are tied to provide effective and reliable governance and to fiduciary responsibility, transparency and accountability. This modification in the EPF and MP Act 1952 marked an important break from the current policy of the EPFO in two ways such as initially, with this modification, the concept of a mandated pension to the employees of private segment was introduced for the first time, then, it added a new pension obligation to the current obligation with regard to civil force of central and state government.

**Table: 3.5**

**Pattern of Investment in Employee Provident Fund from 1975-2021**

<b>Investment Categories</b>	<b>S.D.S (A) (%)</b>	<b>G.O.I./ Gilt MF @ (B) (%)</b>	<b>State Guaranteed / Gilt MF @ (C) (%)</b>	<b>PSU bonds / Term Deposits/ Money Market MFs (D) (%)</b>	<b>Any of A, B, C &amp; D (%)</b>	<b>Pvt Sector (%) / Index funds</b>	<b>Equity Shares (%)</b>
<b>Before 1975</b>	-	100	-	-	-	-	-
<b>1975-1985</b>	30	70	-	-	-	-	-
<b>1986-1992</b>	Not more than 85	Not less than 15	-	-	-	-	-
<b>1993-1994</b>	70	15	15	-	-	-	-
<b>1994-1995</b>	55	15	30	-	-	-	-
<b>1995-1996</b>	30	25	15	30	-	-	-
<b>1996-1997</b>	20	25	15	40	-	-	-
<b>1997-1998</b>	-	25	15	40	20	10	-
<b>1999-2002</b>	-	25	15	40	20	10	-
<b>2003-2004</b>	-	25	15	40	30	10	-
<b>2005-2008</b>	-	25	15	40	30	10	05
<b>2008-2013</b>	-	25	15	30	30	15	05
<b>2013-2015</b>	-	45	35	05	30	05	15
<b>2015-2018</b>	-	45-50	35-45	05	50	05	15
<b>2019-2021</b>	-	45-65	20-45	5	65	5	15

*Source: Compiled from EPFO Annual Reports*

The above table denoted the funds invested by central board of representatives, EPF. The pattern of investment is invested as per arranged by the central government under EPFS 1952. The investments will be made in Central Government Securities, Public Debt Act, Mutual Funds, Money Market, Equity Shares, Bonds or Securities of Public Financial Institutions according to Companies Act.

In the year 1975 the investments were made only in government securities controlled by government of India. From 1975 to 1985 the investment was made 30 percent in special deposit linked scheme and 70 percent in government securities. From 1986 to 1992 the investment increased by 55 percent for last year and 15 percent in government securities. From the year 1993 to 1995 the investments in special deposit linked scheme decreased to 55 percent government securities 15 percent and 30 percent invested in state guaranteed mutual funds. In the year 1996 the investments were made in other sections as in money marketplace by 40 percent. In 1997 investments special deposits linked scheme was reject and included private sector bonds with 10 per cent of investments and the same investments continued for 2004. From 2005 to 2008 the investments made in equity stock at 5 percent then it increased by 15 percent in 2015. The investments increased in 2015 in all the segments, minimum of 45, maximum of 50 in government securities, 35 to 45 percent in mutual funds, 5 percent in money marketplace, 5 percent in corporate and 15 percent in equities shares. This provided a large investment back up EPF after the introduction of NPS. The investment increased in 2019-20 in all sector expect state guaranteed mutual fund, minimum of 45, maximum of 65 in government securities, 20 to 45 percent in mutual funds, 5 percent in money marketplace, 5 percent in corporate sector and 15 percent in equities shares.

### **3.12 Evaluating the Proposed Pension System**

India does not have the first pillar as suggested by the world bank. The government of India does not have enough capitals to offer a social safety net for the aging population. Funds have to come from the working population who plan their own retirement and thus, the second pillar is the core programme for the population, today, most of the employment related pension schemes are defined benefit plans and incorporate a collective income protection programme for disability and survivor's benefits. There are proposals that retirement benefits should be converted into defined contribution plans and implemented through privatized individual accounts. Before making the switchover, one should ask what should be the form of the core pension programme.

This part explores the issues arising from the suggested pension system. There are certain public policy issues which need to be explored first before answering the question will the new system provide better retirement benefits and grater coverage of the population?

Risk under various pension schemes should be changed the system that create individual funded (defined contribution) accounts or should it remain a single collective fund with a DB formula. This significant question is how would risk be shared between subscribers. The choice between DB and DC pension schemes is not inadequate to selection between a funded and unfunded system but is a large public policy choice issue: who should ultimately bear the risk? One inescapable fact about pensions is that they represent very long-term promises. From start to finish the time span may be more than half century. When promises span so many years, risks are inescapable. However, defined benefit and defined contribution plans distribute the risk in very different ways. The effect of unexpected pensions relevant events and who bears in risk under different plans are shown below:

**Table No: 3.6**  
**Who bears the risk Under?**

<b>Risk</b>	<b>DB</b>	<b>DC</b>
Inflation	Govt/EPFO/Employer	Individual
Longevity	Govt./EPFO/Employer	Individual
Investment Return	Govt./EPFO/Employer	Individual
Interest Rate	Govt./EPFO/Employer	Individual
Recession (no job)	Partly shared	Individual
Extended illness (long absences)	Partly shared	Individual

*Source: Pension Reforms in India-Ramesh Gupta*

Participants in defined contribution plans face a variety of risks. Contributions usually depend on salary and duration of employment. One contribution is made, the rate of accumulation depends on interest rate, dividend pay-outs and movement in assets prices. Fluctuation in all three can be large and of considerable variation. While the average over long periods of time shows less variation than year to year changes, the pension that an employees will ultimately be able to claim depends largely on the timing of contributions and even more on the timing of purchase of an annuity when one retires. Participants would be retiring when the market value of assets is low or the cost of annuities is high. There are large

inter-temporal variations in yields. To these variations one should add even larger interpersonal variations in returns if employees were free to choose their own portfolio.

Thus, individual can departure from new pension scheme people can normally leaving at or after the age of 60 years for tier-I of the pension system. At exit the people would be mandatorily compulsory to invest 40 percent of pension wealth to purchase an annuity. In case of government workers, the annuity should provide for pension for the lifetime of the employee and his dependent parents and his partner at the time of retirement. The individual would receive a lump sum amount of the remaining pension wealth which he would be free to utilize in any manner. Individual would have the elasticity to leave the pension system prior to age 60, in that case the mandatory annuitization would be 80 percent of the pension wealth. The regulator-the government constituted an interim regulator, the pension fund regulatory and development authority through a government resolution dated the 10<sup>th</sup> October, 2003 as a precursor to a statutory regulator with a constitution of one chairman, the whole-time members, part time members. Investment- the pattern of investment to be followed as on April 2009 by Non-government provident funds, superannuation funds and gratuity funds.

The investments are completed in certain categories-securities (government securities, mutual funds) is up to 55%, debt securities, term deposit receipts, rupee bonds up to 40%, money market instruments up to 5 percent, shares of businesses on which derivatives are available in Bombay stock exchange or national stock exchange or equity linked schemes of mutual funds regulated be SEBI up to 15 percent. The design features of the new pension scheme are self-sustainability, scalability, individual choice, maximizing outreach, low-cost yet efficient pension system based on sound regulation. Withdrawal under new pension scheme is under the government notifies rule which states that payment in lump sum for new pension scheme accounts of rupees two lack or less in cases of premature exit from new pension scheme would not be allowed by relaxing the mandatory 80% annuitization rule as the retirement accounts of new pension scheme is portable amongst jobs and new pension scheme in its present form would promote old age income security. In new pension scheme portability of pension accounts ensures continuity of service for pension purposes as when a person moves across jobs, his pension account also moves simultaneously. In case of technical resignation of new pension scheme subscribers, no withdrawal would be permitted and the balance outstanding in their personal account along with PRAN would be carried forward.

NPS in states has been adopted resoundingly by the state government. Twenty-seven state governments or union territories have also notified adoption of new pension scheme for their new recruits. The states of Kerala and Tripura and Union Territory of Lakshadweep have still not adopted NPS for their employees. The central autonomous bodies are mandatorily covered under the NPS.

## **Issues in Reforms**

With this background, study can evaluate some of the issues in pension system design in India.

### **1. Universal mandatory system**

Should India adopt some kind of universal mandatory pension system? Whether or not some such system is desirable, there are acute constraints in the face of such a strategy:

- a. Such a system is likely to involve a central role for the state in policy formulation, on issues such as defining rules about contributions, benefits, asset management etc. there are significant political risks that flow from placing such demands upon the state in India.
- b. The administrative capacity to collect contributions from the 350 million workers, spread all over 3.3 million square kilometres, does not exist. For instance, at present, there is no concept of a unique citizen's identity number. The EPFO is fairly successful in enforcing the rule which required that each establishment with more than 20 workers should be connected up with the EPFO, yet it only covers 5 percent of the labour force.
- c. The administrative capacity to correctly pay out benefits does not exist. There is a significant risk of fraud in pay outs: paying out benefits to dead people, paying benefits multiple times to some individuals etc.

If rule out a universal mandatory system the alternative that remain are a combination of a mandatory pension system for employees of large establishments and a voluntary individual account system.

### **2. Individual accounts**

Now evaluate an individual account system without defined benefits, which places significant choices in the hands of participants on questions such as risk exposure or choice of fund manager.

### **a. political Risk**

One of the important appeals of individual accounts is the sense in which individuals interpret their account balances as personal wealth. This reduces the rider problem and encourages individuals to take interest in questions of governance and policy formulation in the context of the pension system. As long as individuals do face choices on the questions of risk exposure and the choice of the fund manager, individual accounts appear to require reduced inputs in terms of sound governance.

India's experience with the EPF program suggests that simply having defined contributions with an individual account does not suffice in obtaining sound governance. India's experience is a positive one in the sense that the long-term real return on EPF has not been negative, as compared with some other countries where extreme failure of governance of pension assets have generated sharply negative returns. However, the structure chosen India's EPS is clearly inadequate, individuals are powerless, fund management practices are clearly not in the interests of participants and the long-run historical real rate of return has proved to be below 3 percent.

### **b. Knowledge**

The most important concern with individual accounts and the idea of placing critical asset management choices in the hands of individual is the question of financial literacy. Individuals may face 2 kinds of choices: between asset classes and between fund managers.

- **Choosing asset classes:** There is a real risk that individuals may choose to expose themselves too little to risk factors and thus obtain poor consumption in old age. This issue has a peculiar twist in an environment with mass poverty given sufficiently small contribution, high investments in equity offer the highest probabilities of avoiding poverty in old age.
- **Choosing between fund managers:** The same question of knowledge in the hands of individuals is also important when it comes to making choices between fund managers. Researchers equipped with econometric models have found it difficult to choose a fund manager who fares well out of sample. Investors are often seen as not being sensitive to expenses and fees on the part of fund managers. In countries such as Chile and Argentina, there have been concerns about excessively high sales expenses by pension fund managers.



In this situation, there may be a case for the pension system to be designed in a way which helps curtail fees and expenses. Proposals in this direction include an auction to choose fund managers who offer the lowest consolidated feed and expenses and mandatory indexation.

**c. Administrative Costs**

The third major issue in an individual account system, particularly when contributions or account balances are small, is the question of administrative overhead and transactions costs. These questions are particularly important in the Indian setting, where the average contribution and the average account balance would be amongst the smallest in the world. James, Smalhout and Vittas (1999) suggest that the most important vehicles for keeping costs low are constrained portfolio choice, using passive management as stipulated by the regulator.

**3.13 Pension Fund Investment Pattern of NPS**

The subscribers are required to decide his/her investment choice whether active choice or auto choice. Before dwelling further, let us understand the available fund options in which NPS subscribers can channelize their savings. There are four asset classes across which contribution can be saved. These are equity, corporate debt, government bonds and alternative investments fund. This choice can be exercised across the seven pension fund managers allowed to manage the NPS funds. Further, each asset class has further defined investment as stipulated by the regulator

**Table No: 3.7**

<b>Asset classes offered by Pension Fund Managers (PFMs) for investment</b>	
Equity (E)	Scheme invests predominantly in Equity market instruments.
Corporate Debt (C)	Scheme invests in Bonds issued by Public Sector Undertakings (PSUs), Public Financial Institutions (PFIs), Infrastructure Companies and Money Market Instruments
Government Securities (G)	Scheme invests in Securities issued by Central Government, State Governments and Money Market Instruments
Alternative Investment Funds (A)	In this asset class, investments are being made in instruments like CMBS, REITS, AIFs, etc.

## 1. Active Choice in NPS

### Active Choice: Individual Funds

In this type of investment choice, subscribers have the right to actively decided as to how his/her contribution is to be invested, based on personal preference. The subscriber has to provide the pension fund manager. Asset class as well as percentage allocation to be done in each scheme of the Pension fund manager. There are four asset classes from which the allocation is to be specified under single PFM.

- Asset class E- Equity and related instruments
- Asset class C- Corporate debt and related instruments
- Asset class G- government bonds and related instruments
- Asset class A- Alternative investment funds including instruments like CMBS< MBS, REITS, AIFs, etc. also subscribers can select multiple asset class under a single pension fund manager as mentioned below.
- Up to 50 years of age, the maximum permitted equity investment is 75 percentage of the total asset allocation.
- From 51 years and above, maximum permitted equity investment will be as per the equity allocation matrix provided below. The tapering off of equity allocation will be carried out as per the matrix date of birth of subscriber.
- Percentage contribution value cannot exceed 5 percentage alternative investment funds.
- The total allocation across E, C, G and A asset classes must be equal to 100 percentage.

This choice is for NPS subscribers who wish to decide the asset class allocation on their own. In the NPS active choice, subscribers have the option to choose the ration in which their contributions will be invested among various asset classes or the NPS funds that offer a defined contribution. However, there are limitations even within this choice as the maximum permitted allocation to equities is restricted to 75 percentage. This limit was 50 percentage a few years ago and was raised after feedback from subscribers. Each pension fund manager has a bouquet of fund schemes that a subscriber can select from as per their picking.

**Table No: 3.8**  
**Asset allocation under Active Choice**

<b>ACTIVE CHOICE</b>			
<b>Active Investment Class</b>	<b>Equity (E)</b>	<b>Corporate (C)</b>	<b>Government (G)</b>
Permissible allocation	Up to 75%	Up to 100%	Up to 100%
Investment Risk	High	Medium	Low
Investment Return (potential)	High	Medium	Low

*Source: Compiled from EPFO Annual Reports*

Up to 5 percent can be invested in alternative investment funds. However, the capital on equity investment varies once the subscriber reaches age 50.

## **2. Auto Choice: Lifecycle Fund**

NPS offers an easy option for those subscribers who do not have the requires knowledge to manage their NPS investments. In this option, the investment will be made in a life-cycle fund. Here, the amount of funds invested across any three asset classes will be resolute by pre-defined portfolio. A subscriber who wants to automatically reduce exposure to more risky investment options as he/she gets older, auto choice is the best option. As age increases, the individual's exposure to equity and corporate debt tends to decrease. Depending upon the risk appetite of subscriber.

The NPS Auto Choice option works well for passive investors and those who seek to let an automatic allocation decide the proportion of money spread across the available asset classes. This allocation adopts a life-cycle based approach and starts with an equity-heavy portfolio during the subscriber's younger age and systematically reduces the equity exposure as the subscriber approaches retirement. A life-cycle based approach not only optimizes returns but also cushions you from market volatility as you approach maturity.

Under the auto choice, the investments are made in a life-cycle fund with three life cycle funds (LC) to choose from

**1) Moderate Life Cycle Fund:** It is the default option which caps the equity exposure to maximum of 50%.

**2) Conservative Life Cycle Fund:** As the name suggests, it takes a conservative approach to investing with maximum equity allocation capped at 25%

**3) Aggressive Life cycle Fund:** In this option, maximum equity allocation can go up to 75%.

**Table No: 3.9**

**Asset allocation under Auto Choice**

AUTO CHOICE									
	Moderate Life Cycle Fund			Aggressive Life Cycle Fund			Conservative Life Cycle Fund		
	Asset class in (%)			Asset class in (%)			Asset class in (%)		
Age	E	C	G	E	C	G	E	C	G
Up to 35 years	50	30	20	75	10	15	25	45	30
40 years	40	25	35	55	15	30	20	35	45
45 years	30	20	50	35	20	45	15	25	60
50 years	20	15	65	20	20	60	10	15	75
55 years	10	10	80	15	10	75	5	5	90

*Source: Compiled from EPFO Annual Reports*

In the Auto Choice model, the investment in E – Class shall be 50%, C – Class shall be 30% and G – Class shall be 20%. This ratio shall be fixed from the entry level till the age of 35. From the age of 36 onwards, there shall be a decrease in the E – Class and C – Class annually and weight in the G – Class shall increase annually. By the time, the investor attains the age of 55, the proportion of his investment in E – Class shall be only 10%, C – Class shall be 10% and G – Class shall be 80%.

In Active Choice model, the investor has the privilege of deciding the investment pattern. He can invest up to a maximum of 50% in E – Class and the remaining 50% can be invested in C – Class and G – Class at his discretion.

### 3.14 Factors Impact on Growth of Pension in India

**Problems in voluntary coverage:** Under the EPF regime, voluntary coverage of organizations employing less than 20 employees is possible. However, strict regulation of voluntary contributions under the EPF regime may hinder increased participation in pension plans. For example, the consent of majority of employees is required for voluntary coverage. Once the coverage has been granted, all employees may be required to contribute irrespective of their consent. The contribution rates for voluntary coverage are also inflexible. It may be worthwhile to provide greater flexibility in enrolments and contribution rates.

**Lack of portability of accumulated corpus:** The accumulated corpus of EPF, NPS are not inter-plan portable. This results in lack of consolidation of retirement corpus that may lead to inadequate pensions.

**Difference in Tax Treatment:** The tax treatment for EPF, NPS are quite different. Withdrawals may be taxable under the NPS, while they are tax exempt if the service period is more than five years under EPF. Contributions beyond INR 100,000 per annum are taxable under SAF (Superannuation Fund). A consistent tax treatment may increase pension coverage in India. In December 2018 NPS has declared as Free Tax Pension Scheme.

**Lack of mandatory participation in pension plans:** Generally, establishments with less than 20 employees are not required to set-up any pension plan for their employees. Consequently, a large number of employees in the micro and small enterprises are deprived of any pension coverage. Employees earning a monthly salary of more than INR 15,000 and without the existing membership of PF may also be excluded from participation in the otherwise mandatory EPF regime. A flexible option to incentivize greater pension participation may be considered by the government.

**Career interruptions absence of catch-up pension contributions:** In case of gaps in pension contribution on account of unemployment, childcare or foreign employment, there is currently no policy of catch-up pension contributions for employees. Suitable tax incentives and design flexibility in pension schemes for enabling catch-up contributions may be provided.

**Disparity for self-employed:** The self-employed do not get tax incentives at par with the employed individuals, as the employer contribution is not there. EPF- Flexibility in

contributions for low wage earners: No flexibility in contributions is provided for low wage earners who find it difficult to save for pensions. The contribution rate of 12 percent may be very high for them, which in some cases may incentivize evasion.

**Different investment options for voluntary contributions:** Contributions above the monthly salary of INR 15,000 are voluntary under the EPF regime (except for International Workers and newspaper employees). However, both the mandatory and voluntary contributions are invested alike. A choice could be given to individuals to allocate their voluntary contributions differently within a set of prudent investment guidelines.

**Pre-retirement Withdrawals:** Under the EPF regime, pre-retirement withdrawals are allowed. Further, those not able to make contributions for three years stop earning interest on their accumulations, thus encouraging them to withdraw.

**Contributions beyond retirement age:** Under the NPS, contributions are compulsorily stopped even if the employee is still working and wants to make a contribution after the age of 60. Contributions may be enabled as long as the employee is working. Low pension Contributions: Regular revision of salary cap would facilitate higher pension savings.

**Investment choice in corporate model- NPS:** If a corporate entity selects a fund manager, it also needs to select investment option mandatorily. However, where the corporate entity selects a fund manager, the investment choice (active/auto) should remain with the employees to give them greater flexibility in asset allocation.

**NPS transactions-offline Process:** Changes in fund manager/asset allocation and other such activities may be done through Central Recordkeeping Agency system without asking for any documents. Currently it is done through Points of Presence (PoPs) by submitting necessary documents and paying charges.

**NPS-Limited switching:** Currently, only one switch of fund manager/asset allocation is allowed in a financial year. More flexibility can be provided in changing fund managers or asset allocation.

**NPS-life insurance companies as PoPs:** Life insurance companies have large geographical spread with diverse distribution channels which can be used to increase NPS coverage. They are already selling Pension products and NPS can get added to the offering.

**NPS-investment choice for government subscribers:** Government subscribers in NPS should have the opportunity to choose fund managers as well as the investment schemes. This will help government subscribers choose an asset allocation best suited to their financial objectives and risk appetite, with an opportunity to improve returns significantly.

## CHAPTER – IV

### PENSION REFORMS IMPACT ON SAVINGS INVESTMENTS AND GROWTH OF INDIAN ECONOMY – AN ANALYSIS

#### 4.1 Introduction

A robust pension system cannot be fortified unless the subscribers have financial literacy and satisfaction on the particular pension scheme. In this chapter, the socio-economic profile of the respondents, respondents' perception towards defined benefit and defined contribution scheme, savings, investment and growth factors have been analyzed. Hypothesis framed have been tested and results have been given.

#### 4.2 Pension Reforms Impact on Savings Investments and Growth- An Analysis

Awareness toward pension reforms, Source of awareness about pension reforms, Factors influencing for enrolment to pension schemes, Perception of employees towards pension schemes, Attitude of employees towards pension schemes, Satisfaction level towards pension schemes, analysis of pension reforms impact on savings, investment and growth of Indian economy is calculated and presented in the form of graph. For calculation purpose growth rates, specific trend percentage, frequency and CAGR is used. The whole analysis has been divided in to two parts like Section A relating to primary data and Section B relating to secondary data analysis of the study.

**Table No: 4.1**  
**Gender Status**

Particulars		Frequency	Percentage
Gender	Male	246	64.1
	Female	138	35.9
	Transgender	-	-
	Total	384	100

*Source: Primary Data*

The above table depicts the gender status of the respondents, out of total respondents 246 respondents were male and 138 respondents were female and totally 384 respondents were responded, in percentage 64.1% respondents were male, 35.9% respondents were



female and no one fall in transgender. The gender data shows that out of total 384 respondents' majority (64.1%) of the respondents were male.

**Table No: 4.2**

**Age Status**

Particulars		Frequency	Percentage
Age	21-30	87	22.7
	31-40	99	25.8
	41-50	86	22.4
	51-60	111	28.9
	Above 60	1	0.3
	Total	384	100

*Source: Primary Data*

The above table indicates the age status of the respondents, the number of respondents between age 21-30 were 87 which is 22.7%, the number of respondents between age 31-40 were 99 which is 25.8%, and between age 41-50 were 86 which is 22.4%, the number of respondents between age 51-60 were 111 which is 28.9% and the number of respondents between age above 60 was 1 which is 0.3%. this indicates that majority of the respondents are between age 51-60.

**Table No: 4.3**

**Education Qualification Status**

Particulars		Frequency	Percentage
Education Qualification	SSLC	7	1.8
	PUC	10	2.6
	Graduation	81	21.1
	Post-Graduation	186	48.4
	PhD	67	17.4
	Others	33	8.6
	Total	384	100

*Source: Primary Data*

The above table depicts the educational qualification of the respondents. Out of total respondents, 7 had SSLC education qualification which is 1.8%, 10 have PUC qualification which is 2.6%, 81 were Graduates which is 21.1%, 186 have post-Graduation qualification which is 48.4%, 67 have PhD qualification which is 17.4% and 33 belongs to other qualification which is 8.6%. It indicates that majority (48.4%) of the respondents did their post-graduation.

**Table No: 4.4**  
**Region Status**

Particulars		Frequency	Percentage
<b>Region</b>	Urban	243	63.3
	Semi-Urban	66	17.2
	Rural	75	19.5
	Total	384	100

*Source: Primary Data*

The above table shows the region status of the respondents, out of total respondents 243 belongs to urban region which is 63.3%. 66 are from semi urban region which is 17.2% and 75 belongs to rural region which is 19.5%. It is observed that majority (63.3%) of respondents belongs to urban locality.

**Table No: 4.5**  
**Districts Status**

Particulars		Frequency	Percentage
<b>Districts</b>	Bangalore	96	25
	Mysore	96	25
	Belgaum	96	25
	Kalburgi	96	25
	Total	384	100

*Source: Primary Data*

The above table represents data related to the distribution of respondents' district wise. The primary data required for the research work collected from the employees in organized sector. A total of 384 respondents selected as sample for the study. The study area

being only Bangalore, Mysore, Belgaum and Kalburgi state of Karnataka, from each regions a total of 384 respondents selected and divided equally among the districts.

**Table No: 4.6**  
**Religion Status**

Particulars		Frequency	Percentage
<b>Religion</b>	Hindu	315	82
	Muslim	47	12.2
	Christian	18	4.7
	Jain	0	-
	Others	4	1
	Total	384	100

*Source: Primary Data*

The above table represents the religion status of the respondents, out of total respondents 315 belongs to Hindu religion which is 82%, 47 were Muslim which is 12.2%. 18 were Christian which is 4.7%, there was no respondent in Jain Religion and 4 respondents belongs to other religion which is 1% fall to other religion. It indicates that the majority (82%) of the respondents belongs to Hindu religion.

**Table No: 4.7**  
**Category Status**

Particulars		Frequency	Percentage
<b>Category</b>	Forward Caste	93	24.2
	Backward Caste	119	31
	Minorities	65	16.9
	Scheduled Caste	63	16.4
	Scheduled Tribe	44	11.5
	Total	384	100

*Source: Primary Data*

The above table depicts the category status of the respondents. Out of total 384 respondents 93 belongs to forward caste which is 24.2%, 119 respondents belong to

backward caste which is 31%, 65 respondents belong to minorities which is 16.9%, 63 respondents belong to Scheduled caste which is 16.4% and 44 respondents belongs to Scheduled tribe which is 11.5%. With regard to category of respondent's majority (31%) of respondents belongs to backward caste.

**Table No: 4.8**  
**Marital Status**

Particulars		Frequency	Percentage
<b>Marital Status</b>	Married	304	79.2
	Unmarried	78	20.3
	Widowed	1	0.3
	Widower	1	0.3
	Divorced	-	-
	Total	384	100

*Source: Primary Data*

The above table represent the marital status of the respondents. Out of total respondents 304 were married which is 79.2%, 78 were unmarried which is 20.3%, 1 respondent were widowed and widower which is 0.3% respectively and no one fall under divorced category. This indicates that majority (79.2%) of the respondent's marital status is married.

**Table No: 4.9**  
**Family Type**

Particulars		Frequency	Percentage
<b>Family Type</b>	Single	50	13
	Nuclear Family	186	48.4
	Joint Family	125	32.6
	Nuclear Family with Dependents	23	6
	Others (Specify)	-	-
	Total	384	100

*Source: Primary Data*

The above table shows the family type of the respondents. Out of total 384 respondents, 50 were living single which is 13%, 186 have nuclear family which is 48.4%. 125 have joint family which is 32.6%, 23 have nuclear family with dependents which is 6% and no one fall under the others family type. Overall, it is observed that majority (48.4%) of respondents belongs to nuclear family.

**Table No: 4.10**  
**Family Dependents Status**

Particulars		Frequency	Percentage
<b>Number of Dependents</b>	Single	60	15.6
	2-4	266	69.3
	5-8	55	14.3
	More than 9	3	0.8
	Total	384	100

*Source: Primary Data*

The above table depicts the status of dependents in family. Out of total 384 respondents, 60 respondents opines that they are single and do not have any dependent which works out to 15.6%. 266 respondents opines that they have 2-4 dependents which is 69.3%, 55 respondents opine they have 5-8 which is 14.3% and 3 respondents opined they have more than 9 dependents in their family which is 0.8%. It observed that majority (69.3%) of the respondents have 2-4 dependents in their family.

**Table No: 4.11**  
**Occupation Status**

Particulars		Frequency	Percentage
<b>Occupation</b>	Professor	114	29.7
	Teacher	73	19
	Bank Employee	81	21.1
	Railway Employee	81	21.1
	Professional	28	7.3
	Others	7	1.8
	Total	384	100

*Source: Primary Data*

The above table represents the occupation status of the respondents, out of total 384 respondents, 114 respondents were professor which is 29.7%, 73 were teacher which is 19%, 81 were bank employees which is 21.1%, 81 were railway employee which is 21.1%. 28 were professional employees which is 7.3% and 7 were others which is 1.8%. It shows that majority (29.7%) of the respondents are professors.

**Table No: 4.12**  
**Monthly Income Status**

Particulars		Frequency	Percentage
<b>Monthly Income</b>	Below ₹ 10000	3	0.8
	₹ 10000-25000	71	18.0
	₹ 26000-50000	117	30.5
	Above ₹ 50000	193	50.3
	Total	384	100

*Source: Primary Data*

The above table represents the monthly income status of the respondents. Monthly income data reveals that out of total 384 respondents 3(0.8%) respondents have monthly income of less than ₹ 10000. Respondents with monthly income between ₹ 10000- ₹ 25000 were 71 which is 18.0%. Respondents with monthly income between ₹ 26000-₹ 50000 were 117 which is 30.5% and the number of respondents with monthly income above ₹ 50000 were 193 which is 50.3%. It implies that majority of the respondents (50.3%) have above ₹ 50000 monthly income.

**Table No: 4.13**  
**Retirement Benefit Pension Scheme Opted**

Particulars		Frequency	Percentage
<b>Retirement Benefit Pension Scheme</b>	Defined Benefit (Old Pension Scheme)	174	45.3
	Defined Contribution (New Pension Scheme)	210	54.7
	Total	384	100

*Source: Primary Data*

The above table depicts the retirement benefit pension scheme opted by the respondents. Out of total 384 respondents, 174 respondents come under defined benefit

pension scheme which is 45.3% and 210 respondents comes under defined contribution pension scheme which is 54.7%. It is shows that majority (54.7%) of respondents comes under the new pension scheme.

**Table No: 4.14**  
**Duration of Pension Enrollment**

Particulars		Frequency	Percentage
<b>Duration of Enrollment to Pension</b>	0-10 Years	187	48.7
	11-20 Years	112	29.2
	21-30 Years	85	22.1
	Above 30 Years	0	0
	Total	384	100

*Source: Primary Data*

The above table shows the period of having enrolled to pension scheme. Out of total 384 respondents, 187(48.7%) enrolled to pension for a period of 0-10 years. 112 (29.2%) respondents enrolled to pension for a period of 11-20 years. 85 (22.1%) respondents enrolled to pension for a period of 21-30 years. No one enrolled for above 30 years.

It is observed that majority (48.7%) of the respondents have enrolled to pension scheme between 0-10 years group.

**Table No: 4.15**  
**Status of Savings Proportion**

Particulars		Frequency	Percentage
<b>Proportion of Savings</b>	Not Fixed	22	5.7
	1-10%	85	22.1
	11-20%	131	34.1
	21-30%	63	16.5
	Above 31%	83	21.6
	Total	384	100

*Source: Primary Data*

The above table exhibits the savings proportion status of the respondents, out of the total respondents 5.7% of respondents do not have any fixed proportion of savings out of their monthly income, 22.1% of respondents save up to 1-10% of monthly income, 34.1% of respondents save 11-20% from their monthly income, 16.5% of respondents save 21-30% and 21.6% of respondents save more than 31% from their monthly income. It was observed that majority (34.1%) of the employees save 11-20% from their monthly income.

**Table No: 4.16**  
**Proportion of Investment**

Particulars		Frequency	Percentage
<b>Proportion of Investment</b>	Not Fixed	48	12.5
	1-10%	145	37.8
	11-20%	81	21.1
	21-30%	57	14.8
	Above 31%	53	13.8
	Total	384	100

*Source: Primary Data*

The above table highlights respondents' investment proportion status, out of the total respondents 12.5% of respondents have no specific fixed rate for investing out of their monthly income, they do investment according to their comfort. 37.8% of respondents invest 1-10% of their monthly income. 21.1% of respondents invest 11-20% of their monthly income. 14.8% of respondents invest 21-30% of their monthly income. 13.8% of respondents invest above 31% of their monthly income. Hence it shows that majority (37.8%) of the respondents invest 1-10% out of their total monthly income.

**Table No: 4.17**  
**Awareness towards Pension Reforms**

Statements	Yes		No		Total	
	F	%	F	%	F	%
Pension reforms (DB to DC)	384	100	00	00	384	100

*Source: Primary Data*



The above table depicts that awareness towards pension reforms, out of total respondents, 384 respondents are aware about pension reforms which is 100%. As the respondents are the organized sector workers who have enrolled to pension schemes hence 100% of respondents have complete awareness regarding pension reforms took place during 2004 that is conversion of defined benefit to defined contribution.

**Table No: 4.18**  
**Source of Awareness about Pension Reforms**

Particulars		Yes		No		Total	
		Frequency	%	Frequency	%	Frequency	%
Source of Awareness	Television	343	89.3	41	10.7	384	100
	Radio	14	3.6	370	96.4	384	100
	Pension Staff	159	41.4	225	8.6	384	100
	Friends	302	78.6	82	21.4	384	100
	Colleagues	95	24.7	289	75.3	384	100
	Newspapers	285	74.2	99	25.8	384	100
	Others	-	-	-	-	-	-

*Source: Primary Data*

The above table exhibits the of sources of awareness towards pension reforms, out of the total respondents 89.3% aware about pension reforms from television, 3.6% from radio, 41.4% of respondents from pension staff, 78.6% of respondents from friends' group, 24.7% of respondents aware about pension reforms from colleagues, 74.2% of respondents aware about pension reforms through newspaper. It is observed that majority (89.3%) of the respondents aware about pension reforms from the television media.

**Table No: 4.19**  
**Influencing Factors for enrolling to Pension Schemes**

Particulars	Level of Influence										
	Very low		Low		Moderate		High		Very High		Total
	F	%	F	%	F	%	F	%	F	%	F (%)
Future Uncertainties	7	1.8	7	1.8	36	9.4	85	22.1	249	64.8	384(100)
Health care	5	1.3	24	6.3	104	27.1	113	29.4	138	35.9	384(100)
Financial Emergencies	9	2.3	24	6.3	120	31.3	155	40.4	76	19.8	384(100)
Buying Fixed/ Financial Assets	16	4.2	36	9.4	182	47.4	108	28.1	42	10.9	384(100)
Wealth Maximization	124	32.3	95	24.7	104	27.1	47	12.2	14	3.6	384(100)
Financial Security	16	4.2	27	7	124	32.3	118	30.7	99	25.8	384(100)
Regular Income	19	4.9	26	6.8	107	27.9	166	43.2	66	17.2	384(100)
Tax Benefit	21	5.5	38	9.9	156	40.6	118	30.7	51	13.3	384(100)
Family Members	14	3.6	18	4.7	76	19.8	209	54.4	67	17.4	384(100)
Prestige Value in Society	107	27.9	70	18.2	122	31.8	57	14.8	28	7.3	384(100)

*Source: Primary Data*

The above table exhibits the data related to factors influencing for enrolling pension scheme decision of respondents. Out of 384 respondent's majority (64.8%) opined very high influence of future uncertainties on pension scheme decision, 22.1% said highly influenced, 9.4% said moderate and 1.8% said low and very low influenced on future uncertainties.

Regarding health care factor influence on pension scheme decision majority (35.9%) opined as very highly influenced, 29.4% opined as highly influenced, 27.1% said moderate influenced, 6.3% opined low and 1.3% opined very low influenced on pension scheme regard to health care factor.

Concerning financial emergencies influence on pension scheme decision majority (40.4%) opined highly influence, 31.3% opined moderate influenced, 19.8% said very highly influenced, 6.3% said low influenced and 2.3% opined very low influenced with respect to the financial emergency factor.

Regarding buying fixed and financial assets influence the majority (47.4%) opined moderate influenced, 28.1% opined highly influenced, 10.9% said very highly influenced, 9.4% opined low and 4.2% opined as very low influenced.

Concerning wealth maximization factor influence majority (32.3%) opined very low influence, 27.1% said moderate influence, 24.7% opined low influenced, 12.2% said high and 3.6% opined very high influenced respect to the wealth factor.

Regarding financial security factor influence majority (32.3%) opined moderate influenced, 30.7% said high influenced, 25.8% opined very high influenced, 7% opined low and 4.2% opined very low influenced.

Concerning regular income influence majority (43.2%) opined highly influenced, 27.9% opined moderate influenced, 17.2% said very highly influenced, 6.8% opined low influenced and 4.9% opined very low influenced regard to regular income.

Regarding tax benefit factor influence on pension scheme decision majority (40.6%) opined moderate influenced, 30.7% said highly influenced, 13.3% opined very highly influenced, 9.9% said low influenced and 5.5% opined very low influenced.

With respect to family members influence majority (54.4%) opined highly influenced, 19.8% moderate influenced, 17.4% said very highly influenced, 4.7% opined low and 3.6% opined very low influenced.

Concerning to prestige value in society factor influence majority (31.8%) opined moderate influenced, 27.9% opined very low influenced, 18.2% said low influenced, 14.8% opined high influenced and 7.3% opined very high influence,

In nutshell respondents opined that future uncertainties, health care, financial emergencies, regular income, family members have very high and highly influenced to having pension scheme.

**Table No: 4.20**

**Perception of Pension Beneficiaries towards Defined Benefit Pension Scheme (DB)**

	Statements	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
		F	%	F	%	F	%	F	%	F	%
Perception towards Previous Scheme (DB)	Conversion from defined benefit to defined contribution affected me	135	35.2	12	3.1	22	5.7	97	25.3	118	30.5
	I had an adequate understanding of the defined benefit scheme and its benefits	3	0.8	9	2.3	70	18.2	238	62.0	64	16.7
	In general, the defined benefit scheme met my expectation	10	2.6	18	4.7	89	23.2	179	46.6	88	22.9
	I felt it was good way to save money for retirement	2	0.5	7	1.8	65	16.9	194	50.5	116	30.2
	When I retire the defined benefit scheme will provide me with adequate income	3	0.8	17	4.4	92	24.0	159	41.4	113	29.4
	My level of job satisfaction increased with defined benefit scheme	3	0.8	23	6.0	151	39.3	160	41.7	47	12.2
	The defined benefit scheme offers me an opportunity to select my desired investment portfolio	8	2.1	35	9.1	132	34.4	167	43.5	42	10.9
	The defined benefit scheme is convenient for me in the event I want to change jobs	5	1.3	26	6.8	154	40.1	134	34.9	65	16.9
	DB tend to afford employees a greater retirement benefit than other retirement plans	7	1.8	30	7.8	151	39.3	152	39.6	44	11.5
	The defined benefit scheme will provide me with more retirement benefits than the new defined contribution scheme	10	2.6	14	3.6	152	39.6	155	40.4	53	13.8
	My contribution to the pension scheme increased in the defined benefit scheme	7	1.8	19	4.9	141	36.7	155	40.4	62	16.1

*Source: Primary Data*

The above table shows that perception of employees towards defined benefit pension scheme with regard to conversion from defined benefit to defined contribution affected them. Out of 384 total respondents regarding the perception toward defined benefit pension scheme 135 respondents rated strongly disagree which is 35.2%, 12 respondents rated disagree which is 3.1%, 22 respondents rated neutral which is 5.7%, 97 respondents rated agree which is 25.3% and 118 respondents rated strongly agree which is 30.5%. Most of the respondents rated strongly disagree with a total number of 135 respondents which is 35.2%. This implies that the perception regarding conversion from defined benefit to defined contribution affected them majority (35.2%) opined as strongly disagree.

Out of total 384 respondents regarding they had an adequate understanding of defined benefit scheme and its benefit 3 respondents rated strongly disagree which is 0.8%, 9 respondents rated disagree which is 2.3%, 70 respondents' rate as neutral which is 18.2%, 238 respondents rated agree which is 62.0% and 64 respondents rated as strongly agree which is 16.7%. This shows that majority (62.0%) of the respondents agreed they had adequate understanding of defined benefit scheme and its benefit.

Regarding Defined benefit pension scheme generally met their expectation 10 respondents rated strongly disagree which is 2.6%, 18 respondents rated disagree which is 4.7%, 89 respondents rated as neutral opinion which is 23.2%, 179 respondents rated agree which is 46.6% and 88 respondents rated strongly agree which is 22.9%. This implies that majority (46.6%) of the respondents agrees to it.

Out of total 384 respondents regarding they felt defined benefit scheme was good to save money for retirement, 2 respondents rated strongly disagree which is 0.5%, 7 respondents rated disagree which is 1.8%, 65 respondents rated neutral which is 16.9%, 194 respondents rate as agree which is 50.5% and 116 respondents rate strongly agree which is 30.2%. It is observed that majority (50.5%) of the respondents are agreed to it.

Respect to the when they retired defined benefit scheme provide adequate income in retirement 3 respondents rate strongly disagree which is 0.8%, 17 respondents rated disagree which is 4.4%, 92 respondents rated neutral which is 24.0%, 159 respondents rate as agree which is 41.4% and 113 respondents rate strongly agree which is 29.4%. It is observed that majority (41.4%) of the respondents are agreed with when they retired defined benefit scheme provide adequate income in retirement.

Out of total respondents regarding defined benefit scheme increased job satisfaction level 3 respondents' rate strongly disagree which is 0.8%, 23 respondents rated disagree which is 6.0%, 151 respondents rated neutral which is 39.3%, 160 respondents' rate as agree which is 41.7% and 47 respondents' rate strongly agree which is 12.2%. It is observed that majority (41.7%) of the respondents are agreed to it.

Concerning defined benefit scheme offers them to select best desired investment portfolio, 8 respondents' rate strongly disagree which is 2.1%, 35 respondents rated disagree which is 9.1%, 132 respondents rated neutral which is 34.4%, 167 respondents' rate as agree which is 43.5% and 42 respondents' rate strongly agree which is 10.9%. It is observed that majority (43.5%) of the respondents are agreed that defined benefit scheme offers them best desired investment portfolio to select.

regarding defined benefit scheme is convenient to them when they want to change the jobs, 5 respondents' rate strongly disagree which is 1.3%, 26 respondents rated disagree which is 6.8%, 154 respondents rated neutral which is 40.1%, 134 respondents' rate as agree which is 34.9% and 65 respondents' rate strongly agree which is 16.9%. It is observed that majority (40.1%) of the respondents are neutral opined to defined benefit scheme is convenient to them in the event of they want to change the jobs.

Out of total respondents regarding defined benefit scheme tend to afford employees to a greater retirement plan than other retirement plans, 7 respondents' rate strongly disagree which is 1.8%, 30 respondents rated disagree which is 7.8%, 151 respondents rated neutral which is 39.3%, 152 respondents' rate as agree which is 39.6% and 44 respondents' rate strongly agree which is 11.5%. It is observed that majority (39.6%) of the respondents are agreed to it.

Defined benefit scheme will provide them more retirement benefit than new defined contribution scheme. Out of total respondents, 10 respondents' rate strongly disagree which is 2.6%, 14 respondents rated disagree which is 3.6%, 152 respondents rated neutral which is 39.6%, 155 respondents' rate as agree which is 40.4% and 53 respondents' rate strongly agree which is 13.8%. It shows that majority (40.4%) of the respondents agreed to defined benefit scheme will provide them more retirement benefit than new defined contribution scheme.

Concerning with their contribution increased in defined benefit to the pension scheme out of total respondents, 7 respondents' rate strongly disagree which is 1.8%, 19 respondents rated disagree which is 4.9%, 141 respondents rated neutral which is 36.7%, 155 respondents' rate as agree which is 40.4% and 62 respondents' rate strongly agree which is 16.1%. It shows that majority (40.4%) of the respondents are agreed to it.

**Table No: 4.21**

**Perception of Pension Beneficiaries towards Defined Contribution Pension Scheme (DC)**

	Statements	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
		F	%	F	%	F	%	F	%	F	%
Perception towards Defined Contribution (DC)	When the retirement scheme was being changed to defined contribution, I received adequate communication	11	2.9	25	6.5	102	26.6	158	41.1	88	22.9
	I have an adequate understanding of the defined contribution scheme and its benefits	6	1.6	23	6.0	140	36.5	175	45.6	40	10.4
	Generally, the defined contribution scheme meets my expectation	15	3.9	49	12.8	229	59.6	73	19.0	18	4.7
	When I retire the defined contribution scheme will provide me with adequate income	15	3.9	99	25.8	200	52.1	42	10.9	28	7.3
	Generally, the change from defined benefit to defined contribution was good for me	20	5.2	105	27.3	192	50.0	58	15.1	9	2.3
	My level of job satisfaction increased with the new defined contribution scheme	6	1.6	94	24.5	230	59.9	35	9.1	19	4.9
	The new defined contribution scheme offers me an opportunity to select my desired investment portfolio	9	2.3	120	31.3	183	47.7	60	15.6	12	3.1
	Ensure family benefits under DC	8	2.1	10	2.6	21	5.5	164	42.7	181	47.1
	The new defined contribution scheme is convenient for me in the event I want to change jobs	9	2.3	102	26.6	199	51.8	55	14.3	19	4.9
	With the new defined contribution scheme, I would consider the pension scheme type provided by an employer when seeking employment	6	1.6	87	22.7	202	52.6	74	19.3	15	3.9



The new defined contribution scheme will provide me with less retirement benefits than the previous defined benefit scheme	8	2.1	10	2.6	21	5.5	164	42.7	181	47.1
The new defined contribution scheme will provide me same retirement benefits	239	62.2	91	23.7	32	8.3	15	3.9	7	1.8
In new defined contribution scheme, my benefits at retirement will be affected in the event my employer becomes insolvent	10	2.6	82	21.4	246	64.1	36	9.4	10	2.6
My employers' contribution to the pension scheme increased with the new defined contribution scheme	12	3.1	141	36.7	160	41.7	46	12.0	25	6.5
Enable withdrawal facility in tier I account under DC	8	2.1	10	2.6	21	5.5	164	42.7	181	47.1

*Source: Primary Data*

The above table shows the perception of employees towards defined contribution pension scheme, out of 384 total respondents regarding to when the retirement scheme was being changed to defined contribution, they received adequate communication information 11 respondents strongly disagree which is 2.9%, 25 respondents rated disagree which is 6.5%, 102 respondents rated neutral which is 26.6%, 158 respondents' rate as agree which is 41.1% and 88 respondents' rate strongly agree which is 22.9%. It is implying that majority (41.1%) of the respondents are agreed to it.

Out of total respondents regarding they have an adequate understanding of defined contribution scheme and its benefits, 6 respondents strongly disagree which is 1.6%, 23 respondents rated disagree which is 6.0%, 140 respondents rated neutral which is 36.5%, 175 respondents' rate as agree which is 45.6% and 44 respondents' rate strongly agree which is 10.4%. This implies that majority (45.6%) of the respondents are agreed to it.

Regarding defined contribution scheme meets their expectation, 15 respondents strongly disagree which is 3.9%, 49 respondents rated disagree which is 12.8%, 229 respondents rated neutral which is 59.6%, 73 respondents' rate as agree which is 19.0% and 18 respondents' rate strongly agree which is 4.7%. This shows that majority (59.6%) of the respondents have neutral opinion on it.

With regard to when they retired defined contribution can provides them an adequate income at retirement time. Out of total respondents, 15 respondents strongly disagree which is 3.9%, 99 respondents rated disagree which is 25.8%, 200 respondents rated neutral which is 52.1%, 42 respondents' rate as agree which is 10.9% and 28 respondents' rate strongly agree which is 7.3%. This shows that majority (52.1%) of the respondents have neutral opinion on it.

Out of total 384 respondents regarding the change from defined benefit to defined contribution scheme was good for them, 20 respondents strongly disagree which is 5.2%, 105 respondents rated disagree which is 27.3%, 192 respondents rated neutral which is 50.0%, 58 respondents' rate as agree which is 15.1% and 9 respondents' rate strongly agree which is 2.3%. This shows that majority (50.0%) of the respondents have neutral opinion on it.

Regarding their level of job satisfaction increased with the new defined contribution scheme, 6 respondents strongly disagree which is 1.6%, 94 respondents rated disagree which

is 24.5%, 230 respondents rated neutral which is 59.9%, 35 respondents' rate as agree which is 9.1% and 19 respondents' rate strongly agree which is 4.9%. This implies that majority (59.9%) of the respondents have neutral opinion on it.

Regarding the new defined contribution scheme offers them an opportunity to select their desired investment portfolio. Out of total respondents, 9 respondents strongly disagree which is 2.3%, 120 respondents rated disagree which is 31.3%, 183 respondents rated neutral which is 47.7%, 60 respondents' rate as agree which is 15.6% and 12 respondents' rate strongly agree which is 3.1%. It is observed that majority (47.7%) of the respondents have neutral opinion to it.

Out of total 384 respondents regarding the new defined contribution scheme ensure family benefits, 8 respondents strongly disagree which is 2.1%, 10 respondents rated disagree which is 2.6%, 21 respondents rated neutral which is 5.5%, 164 respondents' rate as agree which is 42.7% and 181 respondents' rate strongly agree which is 47.1%. This implies that majority (47.1%) of the respondents strongly agreed to it.

With regard to new defined contribution pension scheme is convenient for them in the event of job changed, out of total respondents 9 respondents strongly disagree which is 2.3%, 102 respondents rated disagree which is 26.6%, 199 respondents rated neutral which is 51.8%, 55 respondents' rate as agree which is 14.3% and 19 respondents' rate strongly agree which is 4.9%. This implies that majority (51.8%) of the respondents have neutral opinion to it.

Regarding selection of pension scheme while seeking employment with the new defined contribution scheme. Out of total respondents, 6 respondents strongly disagree which is 1.6%, 87 respondents rated disagree which is 22.7%, 202 respondents rated as neutral which is 52.6%, 74 respondents' rate as agree which is 19.3% and 15 respondents' rate strongly agree which is 3.9%. This implies that majority (52.6%) of the respondents have neutral opinion that they would consider the pension scheme type provided by the employer when seeking employment.

Out of total 384 respondents regarding the new defined contribution scheme will provide them less retirement benefit than previous defined benefit pension scheme, 8 respondents strongly disagree which is 2.1%, 10 respondents rated disagree which is 2.6%, 21 respondents rated neutral which is 5.5%, 164 respondents' rate as agree which is 42.7%

and 181 respondents' rate strongly agree which is 47.1%. This implies that majority (47.1%) of the respondents strongly agreed to it.

Regarding the new defined contribution pension scheme will provide them same retirement benefits as like old scheme 239 respondents strongly disagree which is 62.2%, 91 respondents rated disagree which is 23.7%, 32 respondents rated neutral which is 8.3%, 15 respondents' rate as agree which is 3.9% and 7 respondents' rate strongly agree which is 1.8%. This indicates that majority (62.2%) of the respondents have strongly disagreed to it.

Regarding the new defined contribution pension scheme helpful to them to get benefits at retirement and it will affect in the event of their employer become insolvent, out of total respondents 10 respondents strongly disagree which is 2.6%, 82 respondents rated disagree which is 21.4%, 246 respondents rated neutral which is 64.1%, 36 respondents' rate as agree which is 9.4% and 10 respondents' rate strongly agree which is 2.6%. This indicates that majority (64.1%) of the respondents have neutral opinion to it.

Out of total respondents regarding that their employer contribution to the pension scheme increased with the new defined contribution pension scheme 12 respondents strongly disagree which is 3.1%, 141 respondents rated disagree which is 36.7%, 160 respondents rated neutral which is 41.7%, 46 respondents' rate as agree which is 12.0% and 25 respondents' rate strongly agree which is 6.5%. This indicates that majority (41.7%) of the respondents have neutral opinion to it.

Regarding the new defined contribution scheme Enable withdrawal facility in tier I account, 8 respondents strongly disagree which is 2.1%, 10 respondents rated disagree which is 2.6%, 21 respondents rated neutral which is 5.5%, 164 respondents' rate as agree which is 42.7% and 181 respondents' rate strongly agree which is 47.1%. This implies that majority (47.1%) of the respondents strongly agreed to it.

**Table No 4.22**  
**Attitude of Employees towards Pension Schemes**

Statements	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	F	%	F	%	F	%	F	%	F	%
Pension enhances financial independence during old age	-	-	6	1.6	14	3.6	113	29.4	251	65.4
Pension funds in pension system are safer custody for formal sector pension saving	4	1.0	4	1.0	23	6.0	188	49.0	165	43.0
There is adequate pension information at the market	6	1.6	5	1.3	54	14.1	215	56	104	27.1
Low income in formal sector is a barrier to participation in pension	6	1.6	8	2.1	79	20.6	171	44.6	120	31.3
There are effective recruitment efforts of pension participants from the formal sector by pension funds scheme	3	0.8	6	1.6	65	16.9	193	50.3	117	30.5
Putting money into a pension is the most secure way of saving for their retirement	6	1.6	4	1.0	69	18.0	177	46.1	128	33.3
Best time to start making pension contributions was as soon as one started earning any money	3	0.8	8	2.1	53	13.8	214	55.7	106	27.6
Pensions can sometimes seem too complicated to know the best thing to do	5	1.3	13	3.4	65	16.9	208	54.2	93	24.2

*Source: Primary Data*

The above table exhibits the attitude of employees towards pension scheme. Out of total respondents regarding pension scheme enhances financial independence during old age no one rated as strongly disagree, 6 respondents' rate as disagreed which is 1.6%, 14 respondents rate neutral which is 3.6%, 113 respondents' rate as agree which is 29.4% and 251 respondents' rate as strongly agree which is 65.4%. It is observed that majority (65.4%) of the respondents are strongly agreed to it.

Regarding pension funds in pension system are safer custody for formal sector pension savings, out of total respondents 4 respondents' rate as strongly disagreed which is 1.0%, 4 respondents rate disagree which is 1.0%, 23 respondents' rate as neutral which is 6.0%, 188 respondents' rate as agree which is 49.0% and 165 respondents have strongly agreed which is 43.0%. It is observed that majority (49.0%) of the respondents are agreed to it.

Out of total respondents regarding that there is adequate pension information available at the market 6 respondents' rate as strongly disagreed which is 1.6%, 5 respondents rate disagree which is 1.3%, 54 respondents' rate as neutral which is 14.1%, 215 respondents' rate as agree which is 56.0% and 104 respondents have strongly agreed which is 27.1%. This implies that majority (56.0%) of the respondents are agreed to it

Concerning low income in formal sector is a barrier for participation in pension, out of total respondents 6 respondents' rate as strongly disagreed which is 1.6%, 8 respondents rate disagree which is 2.1%, 79 respondents' rate as neutral which is 20.6%, 171 respondents' rate as agree which is 44.6% and 120 respondents have strongly agreed which is 31.3% regarding to low-income in formal sector is a barrier to participation in pension. This shows that majority (44.6%) of the respondents agreed to it.

Concerning to there are effective recruitment efforts of pension participation form the formal sector by pension funds scheme, out of total respondents 3 respondents' rate as strongly disagreed which is 0.8%, 6 respondents rate disagree which is 1.6 %, 65 respondents rated as neutral which is 16.9%, 193 respondents rated as agree which is 50.3% and 117 respondents have strongly agreed which is 30.5%. This shows that majority (50.3%) of the respondents agreed to it.

Regarding putting money into a pension is most secure way of saving for their retirement period, out of total respondents 6 respondents' rate as strongly disagreed which is

1.6%, 4 respondents rate disagree which is 1.0%, 69 respondents' rate as neutral which is 18.0%, 177 respondents' rate as agree which is 46.1% and 128 respondents have strongly agreed which is 33.3%. This implies that majority (46.1%) of the respondents agreed to it.

Out of total respondents 3 respondents' rate as strongly disagreed which is 0.8% that the best time to start making pension contributions was as soon as one started earning any money, 8 respondents rate disagree which is 2.1%, 53 respondents' rate as neutral which is 13.8%, 214 respondents' rate as agree which is 55.7% and 106 respondents have strongly agreed which is 27.6% to that best time to start making pension contribution was as soon as one started earnings any money. This implies that majority (55.7%) of the respondents agreed to it.

Out of total respondents 5 respondents' rate as strongly disagreed which is 1.3% that pensions can sometimes seem too complicated to know the best thing to do, 13 respondents rate disagree which is 3.4%, 65 respondents' rate as neutral which is 16.9%, 208 respondents' rate as agree which is 54.2% and 93 respondents have strongly agreed which is 24.2% regarding to that pension can sometime seem too complicated to know the best thing to do. It is observed that majority (54.2%) of the respondents agreed to it.

**Table No: 4.23**  
**Problems faced by the Pension Beneficiaries while Enrolling to Pension Schemes**

	Strongly Agree		Agree		Neither agree		Disagree		Strongly Disagree	
	F	%	F	%	F	%	F	%	F	%
Involved Lengthy Enrolment process	46	12	104	27.1	165	43.0	29	7.5	40	10.4
Poor staff management	77	20.3	161	41.9	116	30.2	11	2.9	18	4.7
More Political influence	42	10.8	126	32.9	120	31.3	52	13.5	44	11.5
Lack of profitable investment opportunities	81	21.1	139	36.2	124	32.3	29	7.5	11	2.9
Lack of information need to enrolled	136	35.4	169	44.2	67	17.4	8	2.0	4	1.0
Lack of participation by the public	54	14.1	168	43.7	92	24.0	35	9.1	35	9.1
Involve Corruption	43	11.1	134	34.9	127	33.1	42	10.9	37	10.0
Lack of financial education among the public	86	22.4	209	54.4	57	14.8	21	5.5	11	2.9
Government policy	128	33.3	167	43.5	61	15.9	16	4.2	12	3.1
Different Individual perception on pension schemes	33	8.6	170	44.2	91	23.7	69	18.0	21	5.5
Pension reform initiatives	51	13.3	112	29.2	108	28.1	85	22.1	28	7.3
A lack of awareness regarding the benefit of the pension scheme	16	4.2	105	27.3	110	28.7	75	19.5	78	20.3
Lack of documentation needed	60	15.6	114	29.7	73	19	99	25.8	38	9.9

*Source: Primary Data*

The above table exhibits the result of Problems faced by the Pension Beneficiaries while Enrolling to Pension Scheme. Out of 384 respondents, 43% opined neither agree for Lengthy Enrolment process, 27.1% agreed, 7.5% opined disagree, 10.4% strongly disagreed and 12% opined strongly agree to it.

Out of 384 respondents 41.9% opines agree regarding poor staff management, 30.2% have neither agree, 20.3% have strongly agree, 2.9% have disagree agreed and 4.7% strongly disagree to it.

Regarding more political influence, out of 384 respondents 10.8% opined strongly agree, 32.9% opined agree, 31.3% opined neither agree, 13.5% disagreed and 11.5% and strongly disagreed respectively to it. Out of total 384 respondents 17.4% opined neither agree, 36.2% opined agree, 21.1% opined strongly agree, 7.5% opined disagree and 2.9% strongly disagreed regarding Lack of profitable investment opportunities.

Regarding Lack of information need to enrolled out of 384 respondents 17.4% opined neither agree. 44.2% opined agree, 35.4% opined disagree, 2.0% opined strongly agree and 1% opined strongly disagree.

Concerning Lack of participation by the public, 43.7% opined agreed, 9.1% opined disagree, 14.1% opined strongly agree and 9.1% strongly disagree respectively. Out of 384 respondents' majority (34.9%) of the respondents opined agree that involve corruption, 33.1% are opined neither agreed, 11.1% are strongly agreed, 10.9% are opined disagreed and 10% are opined strongly disagreed to it.

Concerning to the lack of financial education among the public, out of total 384 respondents 22.4% respondents strongly agreed, 54.4% opined agree, 14.8% opined neither agree, 5.5% opined disagree and 2.9% opined strongly agree to it. Regarding Government policy 33.3% opined strongly agree, 43.5% opined agree, 15.9% opined neither agree, 4.2% disagreed and 3.1% opined strongly agree to it.

Out of 384 respondents 8.6% opined strongly agree for different individual perception on pension schemes, 44.2% opined agree, 23.7% opined neither agree, 18% opined disagree and 5.5% opined strongly disagree to it. Majority (29.1%) of the respondents opined agree with Pension reform initiatives, 28.1% opined neither agree, 22.1% opined disagree, 13.3% opined strongly agree and 7.3% opined strongly disagree to it.

Out of total 384 respondents 4.2% opined strongly agree, 27.3% opined agree, 28.7% opined neither agree, 19.5% opined disagree and 20.3% opined strongly disagree to lack of



awareness regarding the benefit of the pension scheme. Regarding Lack of documentation needed to enrolment, 29.7% respondents opined agree. 19.0% opined neither agree, 15.6% opined strongly agree, 25.8% and 9.9% opined disagree and strongly disagree with the documentation problems to enrol.

**Table No: 4.24**  
**Satisfaction Level towards Pension Schemes**

Statements	Highly Dis Satisfied		Dis Satisfied		Neutral		Satisfied		Highly Satisfied	
	F	%	F	%	F	%	F	%	F	%
Defined Benefit	4	1.1	20	5.1	50	13.0	150	39.1	160	41.7
Defined Contribution	100	26.0	180	46.9	50	13.0	42	10.9	12	3.2

*Source: Primary Data*

The above table represents the satisfaction level towards pension schemes, out of 384 respondents 4 respondents were highly dissatisfied which is 1.1% towards defined benefit pension scheme, 20 respondents were dissatisfied which is 5.1%, 50 respondents were neutral satisfied which is 13.0%, 150 respondents were satisfied which is 39.1% and 160 respondents were highly satisfied which is 41.7% towards defined benefit scheme. It shows that majority (41.7%) of the respondents are satisfied to it.

With regard to defined contribution pension scheme, out of 384 respondents 100 respondents were highly dissatisfied which is 26.0% towards defined benefit pension scheme, 180 respondents were dissatisfied which is 46.9%, 50 respondents were neutral satisfied which is 13.0%, 42 respondents were satisfied which is 10.93% and 12 respondents were highly satisfied which is 3.2% to it. It implies that majority (46.9%) of the respondents are dissatisfied towards defined contribution pension scheme.

## SECTION-B

**Table No: 4.25**  
**Pension and Other Retirement Benefit (Expenditure in Crores)**

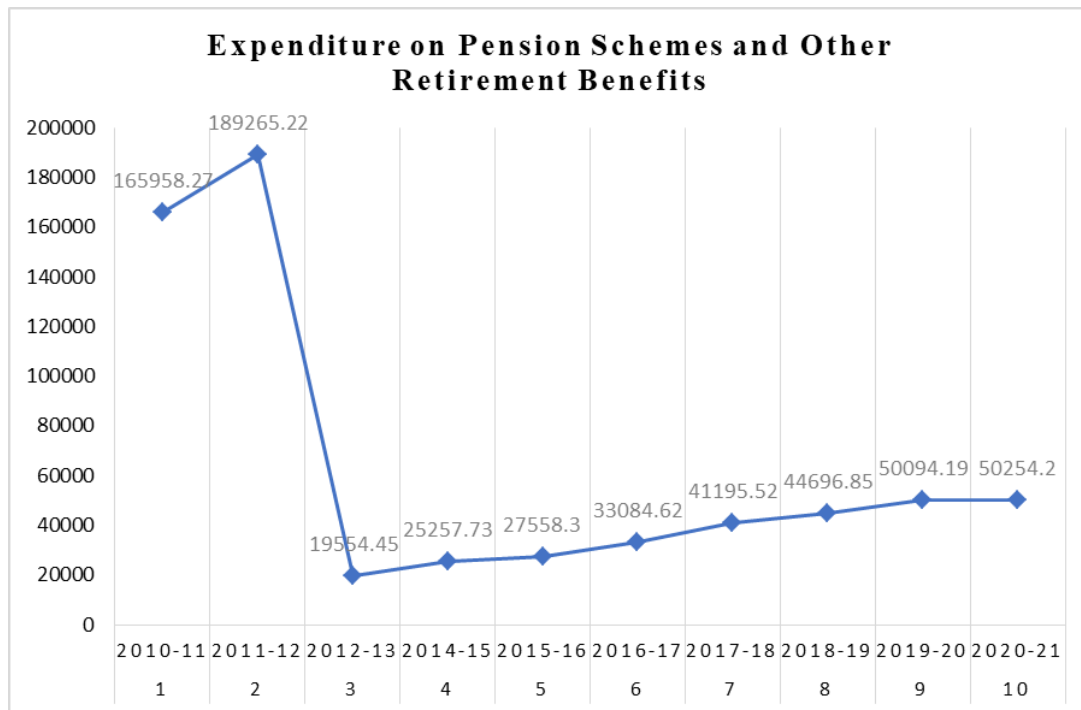
Sl. No	Year	Expenditure (Crores)	GR in %
1	2010-11	165958.27	-
2	2011-12	189265.22	14.04
3	2012-13	19554.45	-89.67
4	2014-15	25257.73	29.17
5	2015-16	27558.30	9.1
6	2016-17	33084.62	20.05
7	2017-18	41195.52	24.52
8	2018-19	44696.85	8.50
9	2019-20	50094.19	12.08
10	2020-21	50254.20	0.32

*Source: Indian Public Statistic of various years, Ministry of Finance Department of Economic Affairs Economic Division*

The above table depicts the amount of expenditure incurred by government on pension and other retirement benefit from the year 2010-11 to 2020-21. The trend in the growth rate of expenditure incurred on pension and other retirement benefit shows that, for the year 2011-12 there is a growth trend (14.04%) in the amount of expenditure incurred, but for the year 2012-13 it was witnessed that there is a reduction in the growth rate (-89.67%) compared to 2011-12 expenditure incurred. But for the year 2014-15 the expenditure incurred and the growth rate is positive compare to 2012-13. From the year 2015-16 to 2020-21 there is a positive growth rate in the current year against to their respective previous years.

In nutshell the growth rate in the amount of expenditure incurred by the government on pension and other retirement benefit was very high for the years 2010-11 and 2011-12 but there is drastic fall in the growth rate to the extent of 89.67 % in the year 2012-13, however from there onwards till 2020-21 growth rate is positive even though the growth rate trend was not stable in all the years.

**Graph: 4.1**



The trend in the growth rate of expenditure incurred by the government on various pension and other retirement benefit is offered in the above graph. It can be understood from the graph that the outflow on pension schemes and other retirement benefits was not stable it was increased from 2010-11 to 2011-12, there after high fall is seen in the year 2012-13 and from there after increased slowly over the period till 2020-21.

**Table No: 4.26**  
**Growth in Expenditure by Govt. towards Pension and other Retirement Benefits**

Sl. No.	Variable	CAGR in %	t-value	P-value
1	Expenditure towards Pension and Other Retirement Benefits	-12.43	3.372	0.008

*Source: SPSS and Excel Output*

The above table presents the data regarding growth in the expenditure by government towards pension and other retirement benefits. It is found from CAGR that the growth rate in the expenditure is -12.43% and it is significant.

**Table No: 4.27**  
**Contribution toward Defined Benefit**

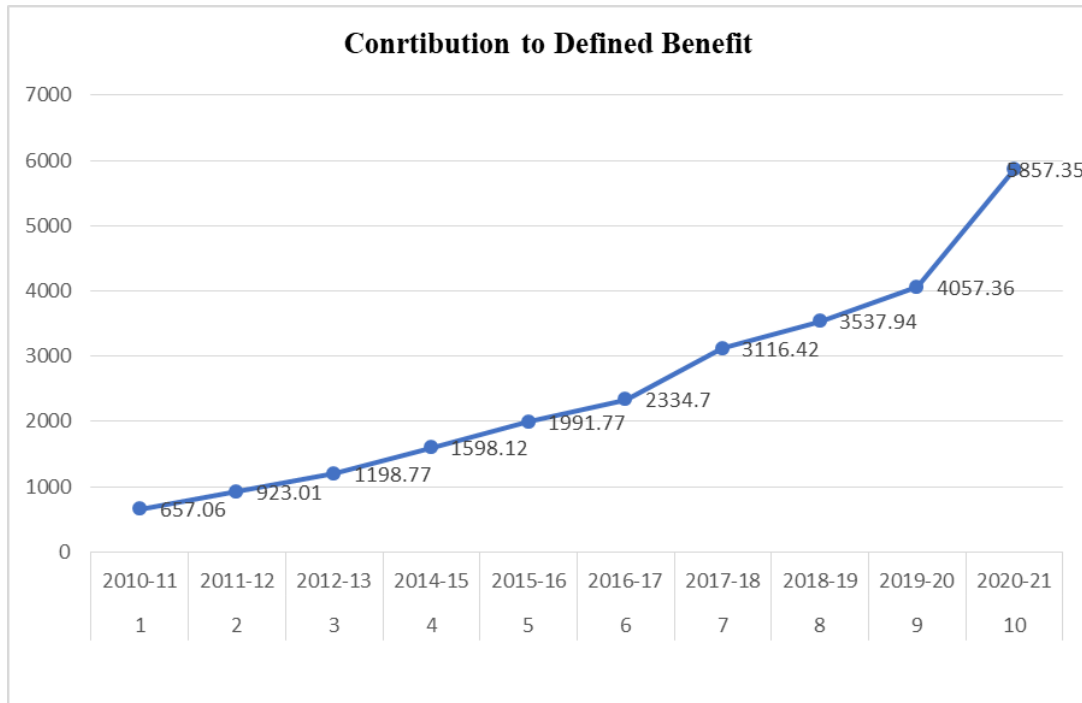
Sl. No	Year	Expenditures (Crores)	GR in %
1	2010-11	657.06	-
2	2011-12	923.01	40.48
3	2012-13	1198.77	29.88
4	2014-15	1598.12	33.31
5	2015-16	1991.77	24.63
6	2016-17	2334.7	17.22
7	2017-18	3116.42	33.48
8	2018-19	3537.94	13.53
9	2019-20	4057.36	14.68
10	2020-21	5857.35	44.36

*Source: accounts at a glance 2008-09 to 2019-20, central pension accounting office, ministry of finance, department of expenditure, new Delhi. [www.cpaonline.gov.in](http://www.cpaonline.gov.in)*

The above table depicts the amount of expenditure incurred by government on contribution to defined benefit pension scheme from the year 2010-11 to 2020-21. The trend in the growth rate of contribution to defined benefit pension scheme shows that, for the year 2011-12 there is a growth trend (40.48%), but for the year 2012-13 it was witnessed that there is a reduction in the growth rate (29.88%) compared to 2011-12 contribution made. But for the year 2014-15 it was increased and next year the growth rate is positive but the rate is downward. However, for the year 2017-18 there is 33.48% growth rate in the amount of contribution, but for the year 2018-19 and 2019-20 it fell down to 13.53% and 14.68% respectively.

In nutshell the growth rate in the amount of contribution by the government on defined benefit pension increased form year to year but the rate of growth was not stable it was in the way of increasing and also decreasing.

**Graph: 4.2**



The trend in the growth rate of contribution by the government on defined benefit pension scheme is described in the above graph. It can be seen from the graph that the involvement on defined pension scheme was not stable it was increasing from one year to another, over the period till 2020-21.

**Table No: 4.28**  
**Growth in Contribution by Govt. towards Defined Benefit**

Sl. No.	Variable	CAGR in %	t-value	P-value
1	Expenditure towards Defined Benefits	27.52	4.912	0.001

*Source: SPSS and Excel Output*

The above table presents the data regarding growth in the contribution by government towards defined benefit pension scheme. It is found from CAGR that the growth rate in the amount of contribution is 27.52% and it is significant.

**Table No: 4.29**  
**Contribution towards Defined Benefit Pension Schemes**

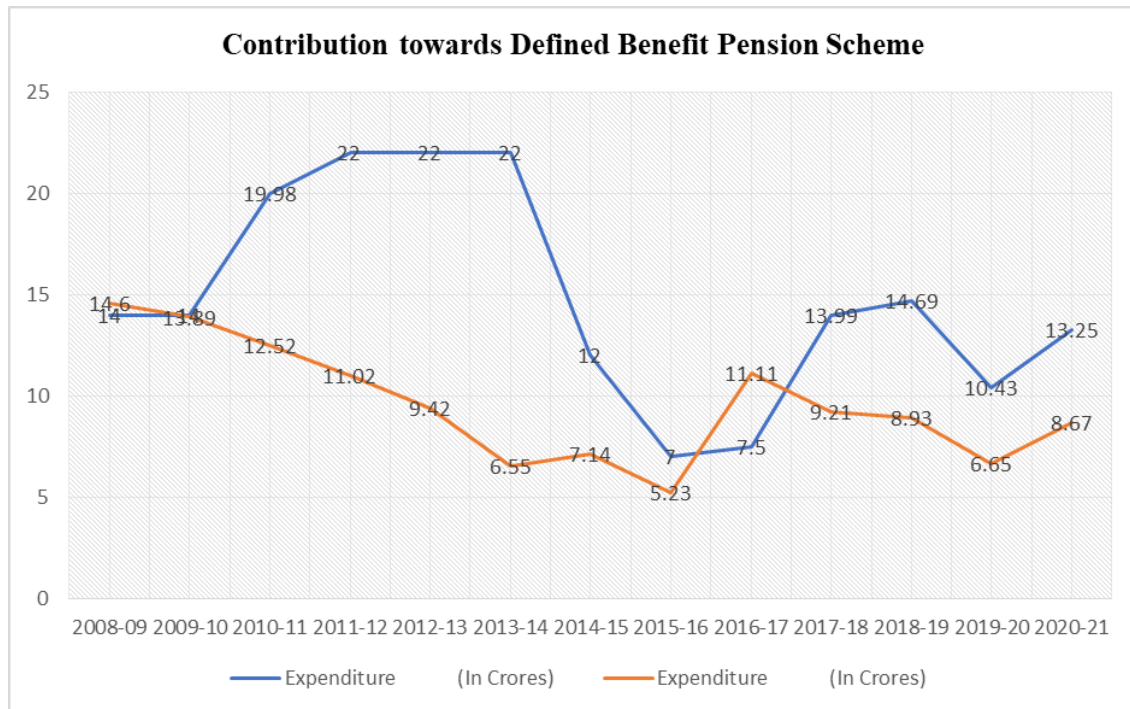
Sl. No	Years	Expenditure (In Crores)		GR in % for Actual	SR in %
		Budget	Actual		
1	2008-09	14	14.6	-	104.2
2	2009-10	14	13.89	-4.86	99.2
3	2010-11	19.98	12.52	-9.86	62.66
4	2011-12	22	11.02	-11.98	50.09
5	2012-13	22	9.42	-14.52	42.81
6	2013-14	22	6.55	-30.47	29.77
7	2014-15	12	7.14	9.01	59.5
8	2015-16	7	5.23	-26.75	74.71
9	2016-17	7.5	11.11	112.43	148.13
10	2017-18	13.99	9.21	-17.10	65.78
11	2018-19	14.69	8.93	-3.04	60.74
12	2019-20	10.43	6.65	-25.53	63.94
13	2020-21	13.25	8.67	30.38	65.43

*Source: accounts at a glance 2008-09 to 2020, central pension accounting office, ministry of finance, department of expenditure, New Delhi. www.cpao.nic.in*

The above table depicts the amount of expenditure incurred by government budgeted and actual on contribution to defined benefit pension scheme from the year 2008-09 to 2020-21. It also shows the growth rate for actual contribution and success rate in comparison of budgeted with actual. The trend in the growth rate of actual contribution to defined benefit pension scheme shows that, for the year 2008-09 to 2013-14 the growth trend is negative but for the year 2014-15 it was witnessed positive growth (9.01%) in the contribution made. But again, from the year 2017-18 the growth rate is negative and the rate is downward. However, for the year 2020-21 there is 30.38% growth rate in the amount of contribution. The success rate reveals that for the year 2008-09 (budget Rs 14 crore and actual Rs 14.6 crore), for 2016-17 (budget Rs 7.5 crore and actual Rs 11.11 crore) this shows the actual government contribution to defined benefit pension scheme is more than the budgeted with the success rate of 104.2% and 148.13%. However, for the rest of the year success rate is below 100%.

In nutshell the growth rate in the amount of contribution by the government on defined benefit pension reduced form year to year, and the success rate from budgeted contribution to actual was not stable it was in the way of increasing and also decreasing.

**Graph: 4.3**



The trend in the growth rate of actual contribution and budgeted contribution by the government on defined benefit pension scheme is presented in the above graph. It can be seen from the graph that shows the budgeted and actual contribution on defined pension scheme was not stable. For 2008-09 and 2016-17 actual is more than budgeted but for the rest of the years it was less, over the period till 2020-21.

**Table No: 4.30**  
**Growth in Expenditure by Govt. towards Defined Benefit Pension Scheme**

Sl. No.	Variable	CAGR in %	t-value	P-value
1	Expenditure towards Defined Benefits Pension Scheme Actual	4.44	11.952	0.000

Source: SPSS and Excel Output

The above table presents the data regarding growth in the actual contribution by government towards defined benefit pension scheme. It is found from CAGR that the growth rate in the amount of contribution is 4.44% and it is significant.

**Table No: 4.31**  
**Expenditure by Govt. towards Defined Contribution Pension Scheme**

Sl. No	Years	Expenditure (In Crores)		GR in % for Actual	SR in %
		Budget	Actual		
1	2008-09	379.56	360.31	-	94.93
2	2009-10	577.5	576.63	60.04	99.85
3	2010-11	656.6	657.06	13.95	100.07
4	2011-12	962	923.01	40.48	95.94
5	2012-13	1132	1198.77	29.88	105.84
6	2013-14	1652.8	1598.12	33.31	96.69
7	2014-15	2001.5	1991.77	24.63	99.51
8	2015-16	2407	2334.7	17.22	96.99
9	2016-17	3050.82	3116.42	33.48	102.15
10	2017-18	3184.61	3537.94	13.53	111.09
11	2018-19	3950.16	4057.36	14.68	112.7
12	2019-20	5860	5857.35	44.36	99.95
13	2020-21	6253	6325.25	7.99	101.16

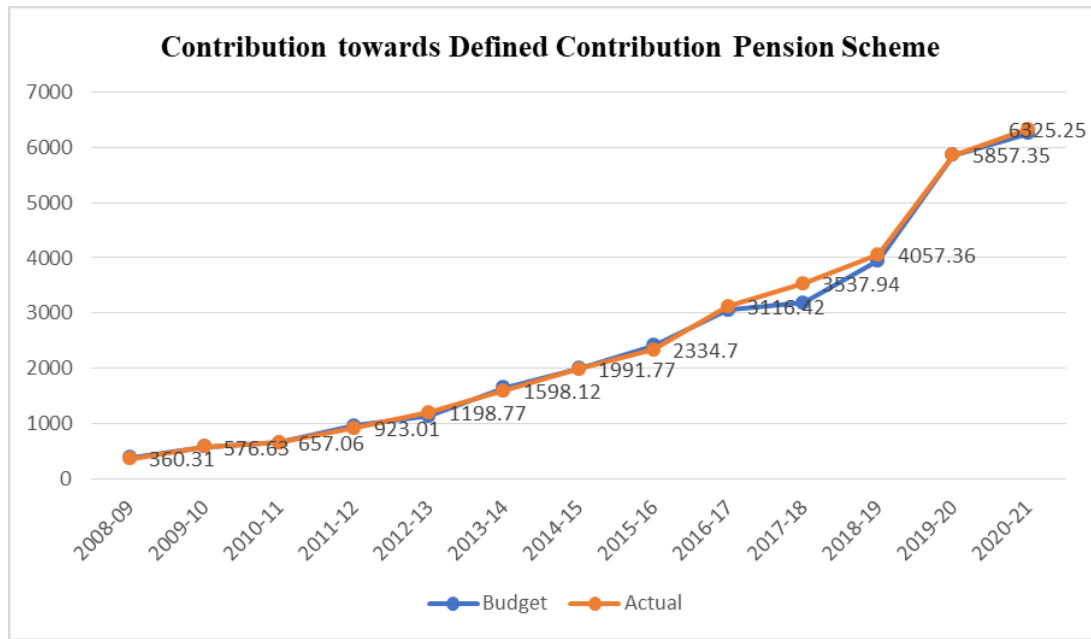
*Source: accounts at a glance 2008-09 to 2020, central pension accounting office, ministry of finance, department of expenditure, New Delhi. [www.cpao.nic.in](http://www.cpao.nic.in)*

The above table depicts the amount of expenditure incurred by the government budgeted and actual towards defined contribution pension scheme from the year 2008-09 to 2020-21. It also shows the growth rate for actual contribution and success rate in comparison of budgeted with actual. The trend in the growth rate of actual contribution to defined contribution pension scheme shows that, for the year 2008-09 to 2020-21 the growth trend is positive but not stable. It was witnessed that for the year 2009-10 (60%), 2019-20 (44.36%) growth rate is high compared to any of the year in the amount of contribution made. The success rate reveals that for the year 2010-11 (budget Rs 656.6 crore and actual Rs 657.06 crore, success rate is 100.07%), for 2012-13 (budget Rs 1132 crore and actual Rs 1198.77 crore, success rate is 105.84%) for the year 2016-17, 2017-18, 2018-19 and 2020-21 the success rate is 102.15%, 111.09%, 112.7% and 101.16% this shows the actual government contribution to defined benefit pension scheme is more than the budgeted. However, for the rest of the year success rate is below 100%.



In nutshell the growth rate in the amount of contribution by the government on defined benefit pension is positive but not stable form year to year, and the success rate from budgeted contribution to actual was not stable it was in the way of increasing and also decreasing.

**Graph: 4.4**



The trend in the growth rate of actual contribution and budgeted contribution by the government on defined contribution pension scheme is shown in the above graph. It can be seen from the graph that the budgeted value and actual contribution on defined contribution scheme was not stable. For 2010-11, 2012-13, 2016-17, 2017-18, 2018-19 and 2020-21 actual is more than budgeted but for the rest of the years it was less, over the period till 2020-21.

**Table No: 4.32**  
**Growth in Expenditure by Govt. towards Defined Contribution Pension Scheme**

Sl. No.	Variable	CAGR in %	t-value	P-value
1	Expenditure towards Contribution Pension Scheme Actual	26.97	4.572	0.001

Source: SPSS and Excel Output

The above table presents the data regarding growth in the actual contribution by government towards defined contribution pension scheme. It is found from CAGR that the growth rate in the amount of contribution is 26.97% and it is significant.

**Table No: 4.33**  
**Financing Pattern of SPF and PPF under Defined Benefit Pension Scheme**

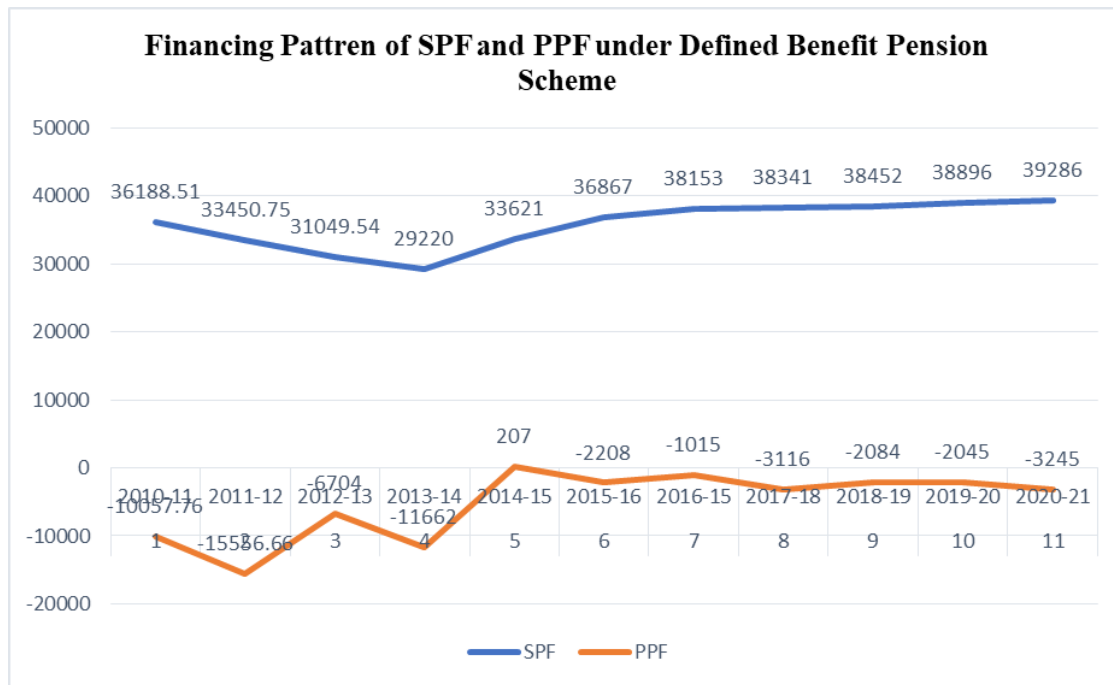
Sl. No	Years	SPF (In Crores)	GR in %	PPF (In Crores)	GR in %
1	2010-11	36188.5	-	-10057.8	-
2	2011-12	33450.8	-7.57	-15556.7	54.67
3	2012-13	31049.5	-7.18	-6704	-56.91
4	2013-14	29220	-5.89	-11662	73.96
5	2014-15	33621	15.06	207	-101.77
6	2015-16	36867	9.65	-2208	-1166.67
7	2016-15	38153	3.49	-1015	-54.03
8	2017-18	38341	0.49	-3116	207.00
9	2018-19	38452	0.29	-2084	-33.12
10	2019-20	38896	1.15	-2045	-1.87
11	2020-21	39286	1.00	-3245	58.68

*Source: Indian Public Statistic of various years, Ministry of Finance Department of Economic Affairs Economic Division*

The above table depicts the financing pattern of SPF and PPF under defined benefit pension scheme from the year 2010-11 to 2020-21. The trend in the growth rate of financing pattern of SPF under defined benefit pension scheme shows that, for the year 2011-12 (-7.57%), 2012-13(-7.18%) and 2013-14 (-5.89%) there is a negative and downward trend in the growth rate, but for the years 2014-15 till 2020-21 it was witnessed that there is a positive growth rate but at reducing rate. In case of financing pattern of PPF under defined benefit pension scheme the trend in the growth rate is mixture of negative and positive rate with downward and upward movement.

In nutshell the growth rate in the financing pattern of SPF and PPF under defined benefit pension scheme increased form year to year but the rate of growth was not stable it was in the way of increasing and also decreasing.

**Graph: 4.5**



The trend in the growth rate of financing pattern of SPF and PPF under defined benefit pension scheme is presented in the above graph. It can be seen from the graph that the financing patten of SPF and PPF was not stable, however SPF growth rate is positive with increase in the amount, but concerning PPF the growth rate is mixture of positive and negative with downward and upward movement over the period till 2020-21.

**Table No: 4.34**  
**Growth in Financing Pattern of SPF and PPF under Defined Benefit Pension Scheme**

Sl. No.	Variables	CAGR in %	t value	P-value
1	Financing Pattern of SPF	0.82	34.515	0.000
2	Financing Pattern of PPF	-10.70	-3.410	0.007

Source: SPSS and Excel Output

The above table presents the data regarding growth in the financing pattern of SPF and PPF under Defined benefit pension scheme. It is found from CAGR that the growth rate of SPF financing pattern is positive with 0.82% with significant value of 0.000 and in case of PPF financing pattern the CAGR is -10.70% and it is significant.

**Table No: 4.35**  
**Number of Subscribers and Asset under Management – NPS (Central Government Employees)**

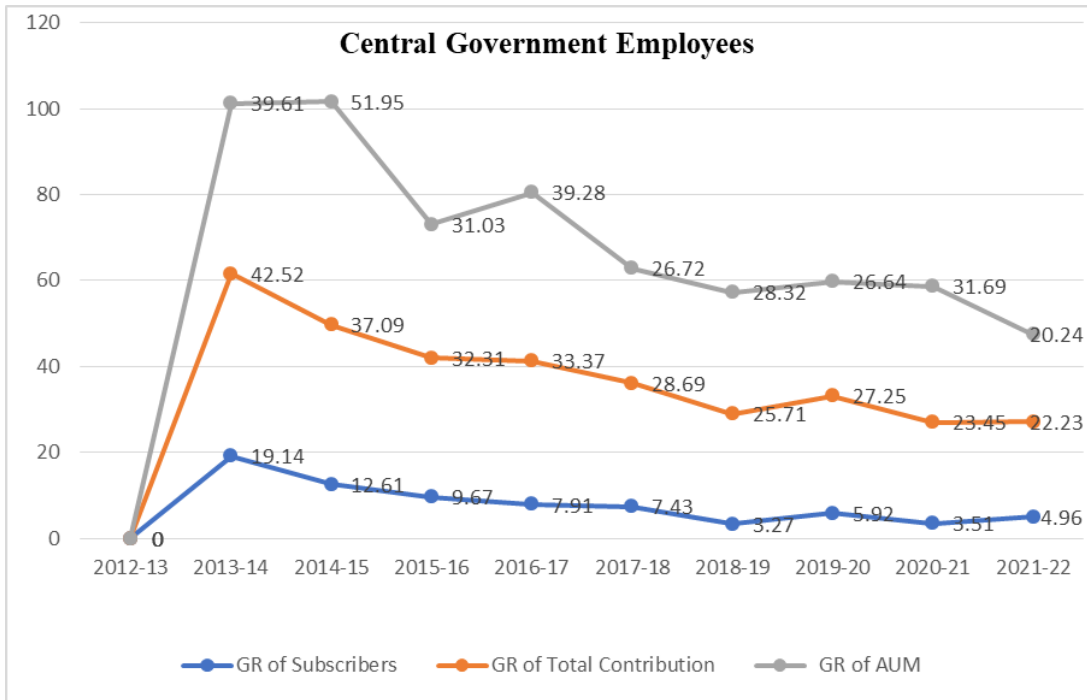
Year	Central Government Employees					
	No. of Subscribers	GR in %	Total Contribution (Rs in Crs)	GR in %	AUM (Rs in Crs)	GR in %
2012-13	11,26,588	-	14,053.80	-	17,317.01	-
2013-14	13,42,267	19.14	20,029.45	42.52	24,177.05	39.61
2014-15	15,11,528	12.61	27,458.07	37.09	36,736.80	51.95
2015-16	16,57,623	9.67	36,329.43	32.31	48,135.03	31.03
2016-17	17,88,699	7.91	48,451.73	33.37	67,040.20	39.28
2017-18	19,21,673	7.43	62,350.74	28.69	84,954.39	26.72
2018-19	19,84,564	3.27	78,379.20	25.71	1,09,009.55	28.32
2019-20	21,01,972	5.92	99,739.87	27.25	1,38,046.28	26.64
2020-21	21,75,846	3.51	1,23,123.93	23.45	1,81,788.30	31.69
2021-22	22,83,671	4.96	1,50,491	22.23	2,18,577	20.24

Source: NPS Portal and NPS Trust

The above table shows the data regarding number of subscribers, total contribution by central government employees toward NPS and asset under management. Concerning the number of subscribers to NPS in the year 2012-13, a total of 11, 26,588 of central government employees subscribed to NPS. There is a positive trend in the growth rate of subscribers. For the year 2013-14, the growth rate (19.14%) is highest as compared to 2012-13. In case of total contribution to NPS it can be seen that for each of the year the trend in the growth rate of total contribution to NPS is positive however it is not stable, for the year 2013-14(42.52%) the growth rate is highest among other remaining years as compared to their respective previous year. Concerning asset under management the data reveals that growth rate is positive with upward and downward movement. The highest growth rate is 51.95% for the year 2014-15.

In nutshell there is a growth in the number of subscribers to NPS, the amount of total contribution to NPS is also increased and the asset under management is also increasing, the growth rate of all these aspects is also alarming but the growth is not stable.

**Graph: 4.6**



The trend in the growth rate of central government employees towards new pension scheme is presented in the above graph. It can be seen from the graph that the growth in the number of subscribers to NPS, total amount of contribution towards NPS and asset under management was not stable, over the period till 2021-22.

**Table No: 4.36**  
**Growth in subscribers, contribution and AUM in NPS of Central Government Employees**

Sl. No.	Variables	CAGR in %	t value	P-value
1	Number of Subscribers	8.17	15.001	0.000
2	Total Contribution	30.14	4.522	0.001
3	AUM	32.54	4.269	0.002

Source: SPSS and Excel Output

The above table presents the data regarding growth in the number of subscribers, total contribution and AUM in NPS of central government employees. It is found from CAGR that the growth rate of number of subscribers is positive with 8.17% with significant value of

0.000. In case of total contribution, the CAGR is 30.14% and it is significant. Concerning asset under management, the CAGR is 32.54% and it is significant.

**Table No: 4.37**  
**Number of Subscribers and Asset under Management – NPS (State Government Employees)**

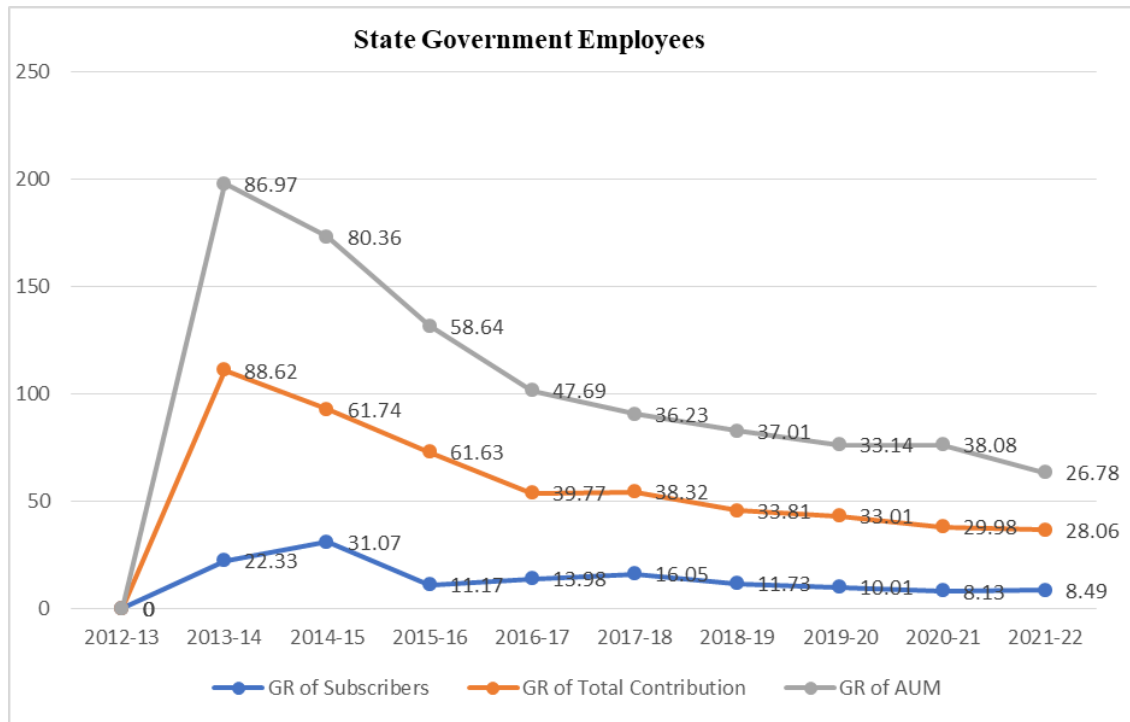
Year	State Government Employees					
	No. of Subscribers	GR in %	Total Contribution (Rs in Crs)	GR in %	AUM (Rs in Crs)	GR in %
2012-13	16,40,519	-	9,735.65	-	10,748.11	-
2013-14	20,06,777	22.33	18,363.70	88.62	20,095.27	86.97
2014-15	26,30,194	31.07	29,702.31	61.74	36,243.85	80.36
2015-16	29,23,882	11.17	48,006.60	61.63	57,498.27	58.64
2016-17	33,32,526	13.98	67,099.32	39.77	84,917.29	47.69
2017-18	38,67,544	16.05	92,808.52	38.32	1,15,679.08	36.23
2018-19	43,21,325	11.73	1,24,190.66	33.81	1,58,491.37	37.01
2019-20	47,53,870	10.01	1,65,189.88	33.01	2,11,022.52	33.14
2020-21	51,40,504	8.13	2,14,710.48	29.98	2,91,381.41	38.08
2021-22	55,76,986	8.49	2,74,950	28.06	3,69,427	26.78

*Source: NPS Portal and NPS Trust*

The above table shows the data regarding number of subscribers, total contribution by state government employees toward NPS and asset under management. Concerning the number of subscribers to NPS in the year 2012-13, a total of 16,40,519 of state government employees subscribed to NPS. There is a positive trend in the growth rate of subscribers. For the year 2014-15, the growth rate (31.07%) is highest as compared to 2013-14. In case of total contribution to NPS it can be seen that for each of the year the trend in the growth rate of total contribution to NPS is positive however it is not stable, for the year 2013-14(88.62%) the growth rate is highest among other remaining years as compared to their respective previous year. Concerning asset under management the data reveals that growth rate is positive with upward and downward movement. The highest growth rate is 86.97% for the year 2013-14.

In nutshell there is a growth in the number of subscribers to NPS, the amount of total contribution to NPS is also increased and the asset under management is also increasing, the growth rate of all these aspects is also alarming but the growth is not stable.

**Graph: 4.7**



The trend in the growth rate of state government employees towards new pension scheme is presented in the above graph. It can be seen from the graph that the growth in the number of subscribers to NPS, total amount of contribution towards NPS and asset under management was not stable, over the period till 2021-22.

**Table No: 4.38**

**Growth in subscribers, contribution and AUM in NPS of State Government Employees**

Sl. No.	Variables	CAGR in %	t value	P-value
1	Number of Subscribers	14.56	8.571	0.000
2	Total Contribution	44.95	3.694	0.005
3	AUM	48.15	3.526	0.006

Source: SPSS and Excel Output

The above table presents the data regarding growth in the number of subscribers, total contribution and AUM in NPS of state government employees. It is found from CAGR that

the growth rate of number of subscribers is positive with 14.56% with significant value of 0.000. In case of total contribution, the CAGR is 44.95% and it is significant. Concerning asset under management, the CAGR is 48.15% and it is significant.

**Table No: 4.39**  
**Number of Subscribers and Asset under Management – NPS (Corporate Sector Employees)**

Year	Corporate Sector Employees					
	No. of Subscribers	GR in %	Total Contribution (Rs in Crs)	GR in %	AUM (Rs in Crs)	GR in %
2012-13	1,43,248	-	1046.08	-	1,119.73	-
2013-14	2,62,335	83.13	2,495.84	138.59	2,627.60	134.66
2014-15	3,73,273	42.29	4,800.78	92.35	5,674.76	115.97
2015-16	4,73,515	26.85	8,348.75	73.90	9,290.05	63.71
2016-17	5,85,595	23.67	12,472.71	49.40	14,953.22	60.96
2017-18	6,95,831	18.82	17,704.07	41.94	21,378.09	42.97
2018-19	8,03,015	15.40	24,436.77	38.03	30,874.79	44.42
2019-20	9,73,560	21.24	32,828.57	34.34	41,231.12	33.54
2020-21	11,25,163	15.57	44,710.52	36.19	62,608.74	51.85
2021-22	14,04,923	24.86	66,078	47.79	90,634	44.76

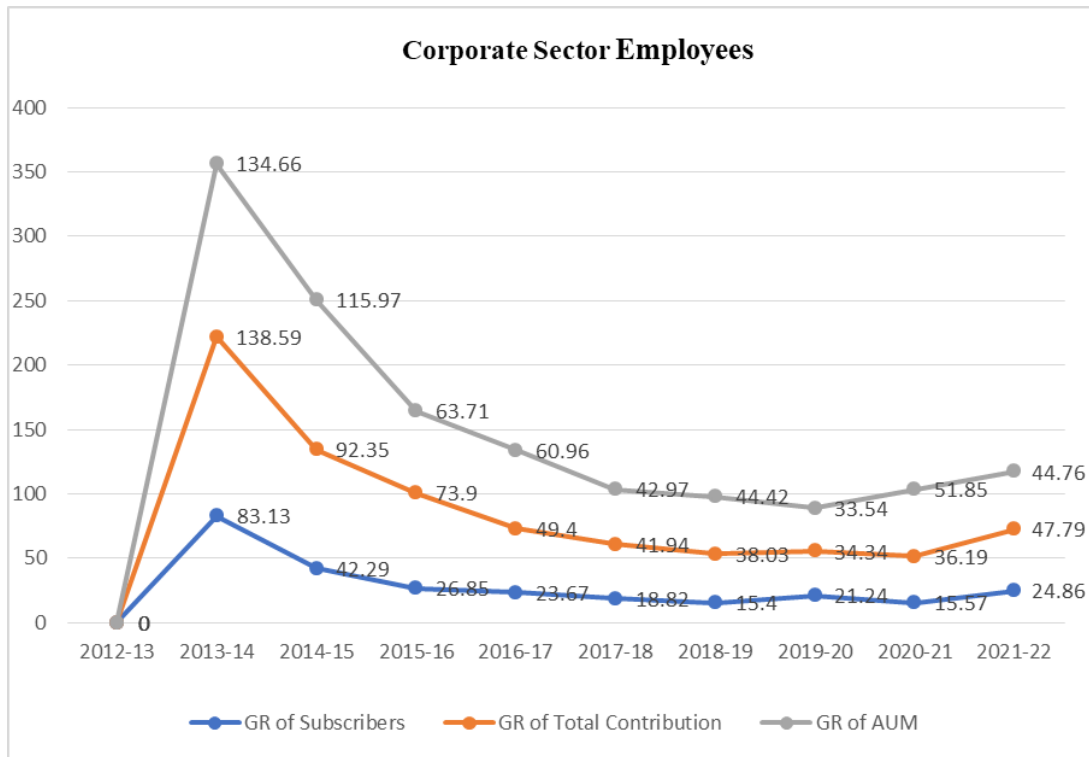
*Source: NPS Portal and NPS Trust*

The above table shows the data regarding number of subscribers, total contribution by corporate sector employees toward NPS and asset under management. Concerning the number of subscribers to NPS in the year 2012-13, a total of 1,43,248 of corporate sector employees subscribed to NPS. There is a positive trend in the growth rate of subscribers. For the year 2013-14, the growth rate (83.13%) is highest as compared to 2012-13. In case of total contribution to NPS it can be seen that for each of the year the trend in the growth rate of total contribution to NPS is positive however it is not stable, for the year 2013-14(138.59%) the growth rate is highest among other remaining years as compared to their respective previous year. Concerning asset under management the data reveals that growth rate is positive with upward and downward movement. The highest growth rate is 134.66% for the year 2013-14.



In nutshell there is a growth in the number of subscribers to NPS, the amount of total contribution to NPS is also increased and the asset under management is also increasing, the growth rate of all these aspects is also alarming but the growth is not stable.

**Graph: 4.8**



The trend in the growth rate of corporate sector employees towards NPS is presented in the above graph. It can be seen from the graph that the growth in the number of subscribers to NPS, total amount of contribution towards NPS and asset under management was not stable, over the period till 2021-22.

**Table No: 4.40**  
**Growth in subscribers, contribution and AUM in NPS of Corporate Sector Employees**

Sl. No.	Variables	CAGR in %	t value	P-value
1	Number of Subscribers	28.88	5.421	0.000
2	Total Contribution	58.51	3.228	0.010
3	AUM	62.94	3.025	0.014

Source: SPSS and Excel Output

The above table presents the data regarding growth in the number of subscribers, total contribution and AUM in NPS of corporate sector employees. It is found from CAGR that the growth rate of number of subscribers is positive with 28.88% with significant value of 0.000. In case of total contribution, the CAGR is 58.51% and it is significant. Concerning asset under management, the CAGR is 62.94% and it is significant.

**Table No: 4.41**  
**Number of Subscribers and Asset under Management – NPS (All Citizen)**

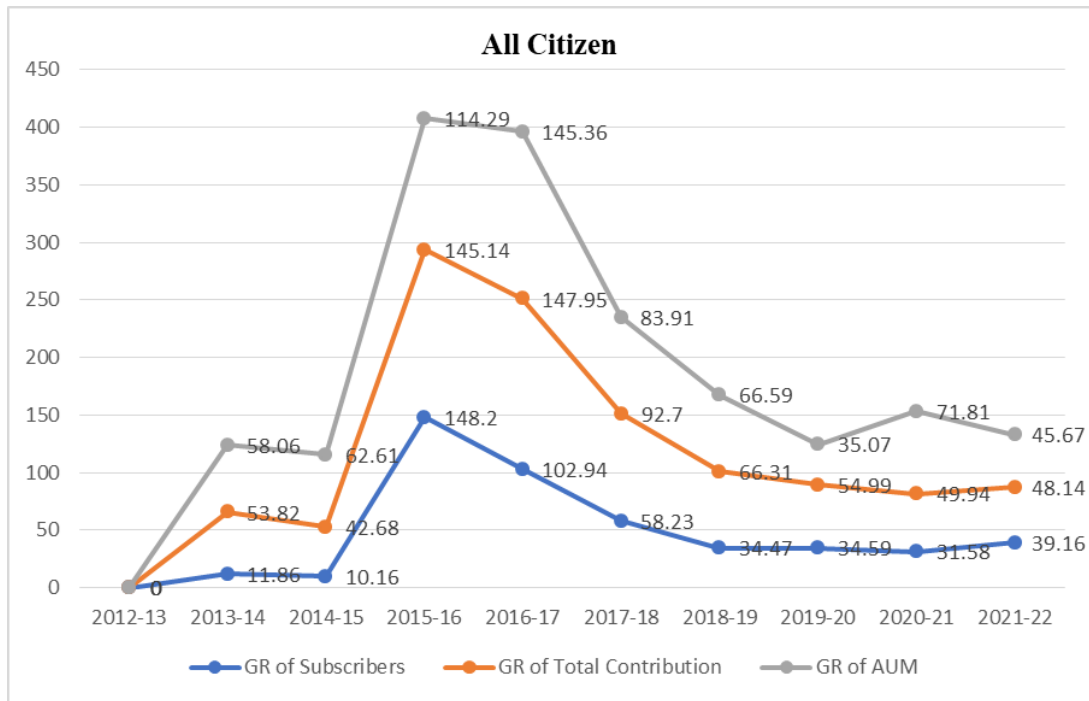
Year	All Citizen					
	No. of Subscribers	GR in %	Total Contribution (Rs in Crs)	GR in %	AUM (Rs in Crs)	GR in %
2012-13	70419	-	226.55	-	231.1	-
2013-14	78,774	11.86	348.48	53.82	365.28	58.06
2014-15	86,774	10.16	497.2	42.68	593.99	62.61
2015-16	2,15,372	148.20	1,218.85	145.14	1,272.88	114.29
2016-17	4,37,076	102.94	3,022.09	147.95	3,123.13	145.36
2017-18	6,91,570	58.23	5,823.66	92.70	5,743.64	83.91
2018-19	9,29,931	34.47	9,685.54	66.31	9,568.50	66.59
2019-20	12,51,574	34.59	15,011.86	54.99	12,924.30	35.07
2020-21	16,46,773	31.58	22,510.19	49.94	22,205.50	71.81
2021-22	22,91,660	39.16	33,347	48.14	32,346	45.67

*Source: NPS Portal and NPS Trust*

The above table shows the data regarding number of subscribers, total contribution by all citizens which refers to all organized employees toward NPS and asset under management. Concerning the number of subscribers to NPS in the year 2012-13, a total of 70,419 subscribed to NPS. There is a positive trend in the growth rate of subscribers. For the year 2015-16, the growth rate (148.20%) is highest as compared to 2014-15. In case of total contribution to NPS it can be seen that for each of the year the trend in the growth rate of total contribution to NPS is positive however it is not stable, for the year 2016-17(147.95%) the growth rate is highest among other remaining years as compared to their respective previous year. Concerning asset under management the data reveals that growth rate is positive with upward and downward movement. The highest growth rate is 145.36% for the year 2016-17.

In nutshell there is a growth in the number of subscribers to NPS, the amount of total contribution to NPS is also increased and the asset under management is also increasing, the growth rate of all these aspects is also alarming but the growth is not stable.

**Graph: 4.9**



The trend in the growth rate of all citizen which refers to all organized workers towards NPS is presented in the above graph. It can be seen from the graph that the growth in the number of subscribers to NPS, total amount of contribution towards NPS and asset under management was not stable, over the period till 2021-22.

**Table No: 4.42**  
**Growth in subscribers, contribution and AUM in NPS of all citizen**

Sl. No.	Variables	CAGR in %	t value	P-value
1	Number of Subscribers	47.25	3.203	0.011
2	Total Contribution	74.13	2.574	0.030
3	AUM	73.16	2.573	0.030

*Source: SPSS and Excel Output*

The above table presents the data regarding growth in the number of subscribers, total contribution and AUM in NPS of all citizen which refers to all organized workers. It is found

from CAGR that the growth rate of number of subscribers is positive with 47.25% with significant value of 0.011. In case of total contribution, the CAGR is 74.13% and it is significant. Concerning asset under management, the CAGR is 73.16% and it is significant.

**Table No: 4.43**  
**Number of Subscribers and Asset under Management – NPS (Swavalamban)**

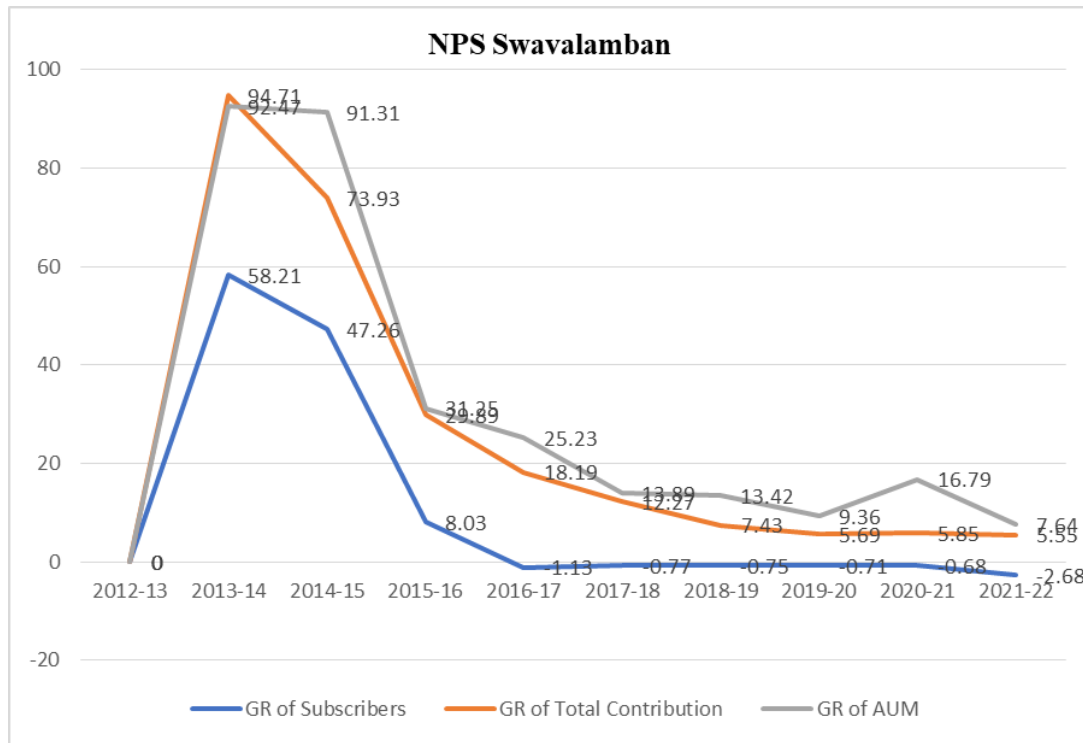
Year	NPS Swavalamban					
	No. of Subscribers	GR in %	Total Contribution (Rs in Crs)	GR in %	AUM (Rs in Crs)	GR in %
2012-13	17,79,944	-	407.49	-	436.08	-
2013-14	28,16,027	58.21	793.44	94.71	839.33	92.47
2014-15	41,46,880	47.26	1,380.00	73.93	1,605.72	91.31
2015-16	44,80,014	8.03	1,792.48	29.89	2,107.55	31.25
2016-17	44,29,342	-1.13	2,118.54	18.19	2,639.21	25.23
2017-18	43,95,323	-0.77	2,378.48	12.27	3,005.82	13.89
2018-19	43,62,538	-0.75	2,555.18	7.43	3,409.23	13.42
2019-20	43,31,664	-0.71	2,700.51	5.69	3,728.40	9.36
2020-21	43,02,258	-0.68	2,858.41	5.85	4,354.38	16.79
2021-22	41,86,943	-2.68	3,017	5.55	4,687	7.64

*Source: NPS Portal and NPS Trust*

The above table shows the data regarding number of subscribers, total contribution by Swavalamban scheme toward NPS and asset under management. Concerning the number of subscribers to NPS in the year 2012-13, a total of 17,79,944 subscribed to NPS Swavalamban. There is a positive trend in the growth rate of subscribers. For the year 2013-14, the growth rate (58.21%) is highest as compared to 2012-13. In case of total contribution to NPS it can be seen that for each of the year the trend in the growth rate of total contribution to NPS is positive however it is not stable, for the year 2013-14(94.71%) the growth rate is highest among other remaining years as compared to their respective previous year. Concerning asset under management, the data reveals that growth rate is positive with upward and downward movement. The highest growth rate is 92.47% for the year 2013-14.

In nutshell there is a growth in the number of subscribers to NPS, the amount of total contribution to NPS is also increased and the asset under management is also increasing, the growth rate of all these aspects is also alarming but the growth is not stable.

**Graph: 4.10**



The trend in the growth rate of Swavalamban Scheme towards NPS is presented in the above graph. It can be seen from the graph that the growth in the number of subscribers to NPS, total amount of contribution towards NPS and asset under management was not stable, over the period till 2021-22.

**Table No: 4.44**  
**Growth in subscribers, contribution and AUM in NPS of Swavalamban Scheme**

Sl. No.	Variables	CAGR in %	t value	P-value
1	Number of Subscribers	9.97	13.840	0.000
2	Total Contribution	24.91	7.098	0.000
3	AUM	30.19	5.918	0.000

Source: SPSS and Excel Output

The above table presents the data regarding growth in the number of subscribers, total contribution and AUM in NPS of Swavalamban scheme. It is found from CAGR that the growth rate of number of subscribers is positive with 9.97% with significant value of 0.000. In case of total contribution, the CAGR is 24.91% and it is significant. Concerning asset under management, the CAGR is 30.19% and it is significant.

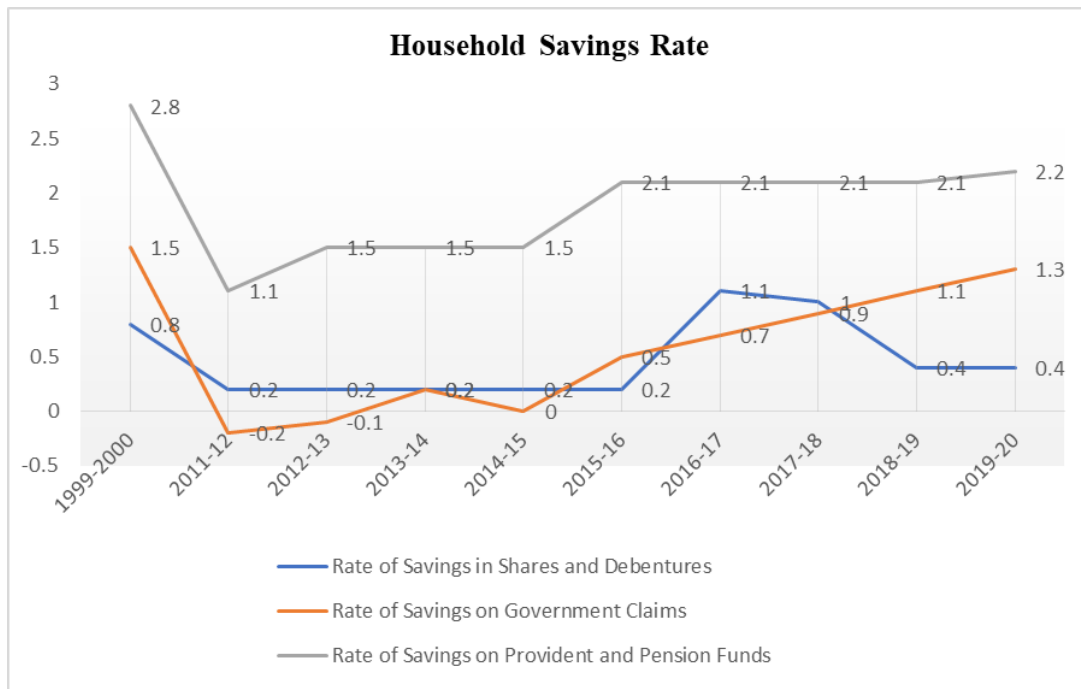
**Table No: 4.45**  
**Household Financial Savings Rates (Gross) (As percentage of GDP at current market prices)**

Year	Share and Debentures		Claims on Govt.		Provident and Pension Fund	
	Rate in %	GR in %	Rate in %	GR in %	Rate in %	GR in %
1999-2000	0.8	-	1.5	-	2.8	-
2011-12	0.2	-75.00	-0.2	-113.33	1.1	-60.71
2012-13	0.2	0.00	-0.1	-50.00	1.5	36.36
2013-14	0.2	0.00	0.2	-300.00	1.5	0.00
2014-15	0.2	0.00	0	-100.00	1.5	0.00
2015-16	0.2	0.00	0.5	-	2.1	40.00
2016-17	1.1	450.00	0.7	40.00	2.1	0.00
2017-18	1	-9.09	0.9	28.57	2.1	0.00
2018-19	0.4	-60.00	1.1	22.22	2.1	0.00
2019-20	0.4	0.00	1.3	18.18	2.2	4.76

*Source: Central statistical organization, RBI Annual Reports*

The above table shows the data regarding house hold financial savings rates as a percentage of GDP. Concerning shares and debentures during 1999-2000, the rate is 0.8%, however from 2011-16 it was stable with 0.2%, for 2016-17 and 2017-18 it was declined to 1.1% and 1% respectively, for 2018-2020 it increased to 0.4%. Concerning rates on government claims, during 1999-2000, the rate is 1.5%, however from 2011-13 it was negative with -0.2 and -0.1%, from 2015-20 it was in the direction on increase. Concerning rates on provident and pension funds, during 1999-2000, the rate is 2.8%, however from 2011-20 it stated to fall with positive rate.

**Graph: 4.11**



The trend in the growth rate of household savings as a percentage of GDP is presented in the above graph. It can be seen from the graph that the growth in household savings in shares and debentures was high during 1999-2000 and it was reduced and remain constant over the years till 2015-16 and later increased but during 2019-20 it was reduced again. In case of saving rate of provident and pension funds the trend is quite fluctuating with increase, decrease and stable over the years. However, regarding household savings rate on claims on government during 1999-2000 it was high but since 2011-12 it reduced after 2014-15 it witnessed gradual increase.

**Table No: 4.46**  
**Growth in Household Financial Savings Rates (Gross) (As percentage of GDP at current market prices)**

Sl. No.	Variables	CAGR in %	t value	P-value
1	Shares and Debentures	-7.41	4.138	0.003
2	Claims on Government	-1.58	3.077	0.013
3	Provident and Pension Fund	-2.64	12.208	0.000

Source: SPSS and Excel Output

The above table presents the data regarding growth rate of household savings as a percentage of GDP. It is found from CAGR the growth in household savings in shares and debentures are negative with -7.41% with significant value of 0.003. For claims on government, the CAGR is -1.58%. Concerning household savings rate of provident and pension fund, the CAGR is -2.64% and it is significant.

**Table No: 4.47**  
**Performance: Scheme Central Government**

<b>Financial Year Return (%)</b>			
<b>PFM (FY)</b>	<b>LIC</b>	<b>SBI</b>	<b>UTI</b>
FY 10	12.27	8.88	9.27
FY 11	8.30	8.05	8.45
FY 12	5.80	5.81	5.52
FY 13	12.06	12.75	12.26
FY 14	5.93	3.93	5.04
FY 15	18.96	19.38	18.58
FY 16	5.99	6.47	6.24
FY 17	13.22	13.13	13.64
FY 18	5.85	6.08	6.25
FY 19	8.72	8.94	8.82
FY 20	6.47	8.32	7.02
FY 21	15.57	13.57	15.9

(Source: [www.npst.org.on](http://www.npst.org.on) )

The above table shows the performance of new pension scheme of central government employees in different pension fund managers. The financial year return in LIC, SBI and UTI pension fund manager over the year 2010 to 2021 in the way of increasing and decreasing the returns although it was not stable. Concerning financial returns in LIC, SBI and UTI fund managers NPS performance the highest return rate was witnessed in the year 2015 with 18.96%, 19.38%, and 18.58% respectively. Therefore, the overall performance of the pension fund managers with respect to the central government employees new pension scheme returns shows steady and positive growth.



**Table No: 4.48****Performance: Scheme State Government**

<b>Financial Year Return (%)</b>			
<b>PFM /FY</b>	<b>LIC</b>	<b>SBI</b>	<b>UTI</b>
FY 11	10.77	9.88	11.34
FY 12	6.68	6.8	6.04
FY 13	12.80	13.00	13.20
FY 14	5.87	3.83	4.70
FY 15	19.4	19.8	18.80
FY 16	5.97	6.62	6.30
FY 17	13.28	13.24	13.56
FY 18	5.80	5.94	6.05
FY 19	8.55	8.83	8.79
FY 20	6.62	8.62	7.13
FY 21	15.22	13.30	14.93

(Source: [www.npst.org.on](http://www.npst.org.on) )

The above table shows the performance of new pension scheme of state government employees in different pension fund managers. The financial year return in LIC, SBI and UTI pension fund manager over the year 2010 to 2021 in the way of increasing and decreasing the returns although it was not stable. Concerning financial returns in LIC, SBI and UTI fund managers NPS performance the highest return rate was witnessed in the year 2015 with 19.4%, 19.38%, and 18.58% respectively. Therefore, the overall performance of the pension fund managers with respect to the State government employees new pension scheme returns shows steady and positive rate.

**Table No: 4.49****Performance of Scheme E-Tier-I**

<b>Financial Year Return (%)</b>						
<b>PFM/FY</b>	<b>LIC</b>	<b>SBI</b>	<b>UTI</b>	<b>ICICI</b>	<b>KOTAK</b>	<b>HDFC</b>
FY 11	-	8.05	8.35	11.8	11.9	-
FY 12	-	-7.18	-10.6	-7.75	-10.2	-
FY 13	-	8.24	7.42	9.05	11.52	-
FY 14	20.13	20.68	21.29	21.18	19.48	-32.09
FY 15	27.51	28.37	29.74	28.65	28.41	28.63
FY 16	-7.91	-7.2	-6.72	-7.37	-6.88	-7.47
FY 17	21.23	21.83	22.93	21.42	22.23	22.96
FY 18	9.05	10.33	11.18	9.95	11.20	11.48
FY 19	10.25	13.10	12.93	12.59	10.29	13.32
FY 20	-28.4	-25.0	-27.8	-26.3	-25.0	-23.45
FY 21	74.35	66.28	72.2	72.49	70.98	69.78

(Source: [www.npst.org.on](http://www.npst.org.on) )

The above table shows the performance of new pension scheme of corporate sector in Equity Tier-I in different pension fund managers. The financial year return in SBI, UTI, ICICI, and Kotak pension fund manager in the year 2012 returns rate was negative although then it was in the way of positive. And in the year 2015 and 2020 returns rate was negative in all the fund managers. Concerning financial returns of LIC, SBI, UTI, ICICI, Kotak and HDFC fund managers NPS performance the highest return rate was witnessed in the year 2021 with 74.35%, 66.28%, 72.2%, 72.49%, 70.98% and 69.78% respectively. Therefore, the overall performance of the pension fund managers with respects to the corporate sector in Equity Tier-I, new pension scheme returns shows steady and positive rate.

**Table No: 4.50**

**Performance of Scheme E-Tier-II**

<b>Financial Year Return (%)</b>						
<b>PFM</b>	<b>LIC</b>	<b>SBI</b>	<b>UTI</b>	<b>ICICI</b>	<b>KOTAK</b>	<b>HDFC</b>
<b>FY</b>						
FY 11	-	7.86	10.16	10.12	11.66	-
FY 12	-	-7.56	-10.7	-10.4	-9.8	-
FY 13	-	8.26	7.63	9.79	11.33	-
FY 14	-1.85	20.37	20.51	21.14	19.5	-12.36
FY 15	21.46	28.64	31.04	28.14	28.12	22.77
FY 160	-7.29	-7.13	-6.54	-7.39	-6.67	-7.17
FY 17	21.13	21.59	22.04	21.40	21.94	23.31
FY 18	8.51	10.46	11.15	9.95	11.08	11.77
FY 19	10.37	13.08	13.52	12.78	10.53	13.19
FY 20	-28.7	-25.2	-27.6	-26.16	-25.03	-23.47
FY 21	75.33	67.40	72.63	72.63	69.62	69.59

(Source: [www.npst.org.on](http://www.npst.org.on) )

The above table shows that performance of new pension scheme of corporate sector in Equity Tier-II in different pension fund managers. The financial year return in SBI, UTI, ICICI, and Kotak pension fund manager in the year 2012 returns rate was negative although then it was in the way of positive. And in the year 2015 and 2020 returns rate was negative in all the fund managers. Concerning financial returns of LIC, SBI, UTI, ICICI, Kotak and HDFC fund managers NPS performance the highest return rate was witnessed in the year 2021 with 74.35%, 66.28%, 72.2%, 72.49%, 70.98% and 69.78% respectively. Therefore, the overall performance of the pension fund managers with respects to the corporate sector in Equity Tier-I, new pension scheme returns shows steady and positive rate.

All the NPS E schemes (tier II) offered by HDFC, ICICI, Kotak, LIC, SBI and UTI gave a negative return for the 2012, however the variation in returns between these companies are very close. The highest return was given by in the year 2021 LIC Pension fund with 75.33% and the lowest return was given by SBI pension fund with 67.40%.

**Table No: 4.51**

**Performance of Scheme C-Tier-I**

Financial Year Return (%)						
PFM	LIC	SBI	UTI	ICICI	KOTAK	HDFC
FY						
FY 11	-	12.66	9.2	9.41	10.86	-
FY 12	-	11.07	10.19	11.43	10.19	-
FY 13	-	14.27	13.41	14.22	15.01	-
FY 14	11.44	5.24	6.14	6.22	5.77	10.89
FY 15	21.46	15.7	15.09	15.72	15.22	15.2
FY 16	-7.29	8.72	8.83	9.77	9.46	15.2
FY 17	21.13	21.59	22.04	21.40	21.94	23.31
FY 18	8.51	10.46	11.15	9.95	11.08	11.77
FY 19	10.37	13.08	13.52	12.76	10.53	13.19
FY 20	-28.7	-25.2	-27.6	-26.16	-25.03	-23.47
FY 21	11.07	10.17	9.79	10.74	8.40	10.47

(Source: [www.npst.org.on](http://www.npst.org.on) )

The above table shows that performance of new pension scheme of corporate sector in Tier-I in different pension fund managers. The financial year return in SBI, UTI, ICICI, and Kotak pension fund manager all the years returns rate was positive although it was in the way of positive. Return rate in the year 2016 to LIC pension fund was negative and in the year 2020 all the cases return rate was negative. Concerning financial returns of LIC, SBI, UTI, ICICI, Kotak and HDFC fund managers NPS performance the highest return rate was witnessed in the year 2017 with 21.13%, 21.59%, 22.04%, 21.40%, 21.94% and 23.31% respectively. Therefore, the overall performance of the pension fund managers with respects to the corporate sector in Tier-I, new pension scheme returns shows steady and positive rate.

**Table No: 4.52****Performance of Scheme C-Tier-II**

<b>Financial Year Return (%)</b>						
<b>PFM (FY)</b>	<b>LIC</b>	<b>SBI</b>	<b>UTI</b>	<b>ICICI</b>	<b>KOTAK</b>	<b>HDFC</b>
FY 11	-	14.46	7.62	10.74	7.2	-
FY 12	-	10.7	11.4	12.3	9.7	-
FY 13	-	12.69	12.95	13.6	13.15	-
FY 14	6.51	4.15	5.75	6.1	5.76	9.49
FY 15	12.37	15.62	15.3	15.91	15.19	9.51
FY 16	8.26	8.2	8.57	9.46	8.61	8.94
FY 17	12.31	11.73	11.65	12.36	12.42	12.33
FY 18	5.49	6.23	6.11	6.31	6.22	6.65
FY 19	6.89	8.08	7.0	7.99	6.95	7.92
FY 20	10.88	10.51	10.96	9.66	11.56	11.91
FY 21	13.10	9.59	9.35	10.98	8.96	9.99

(Source: [www.npst.org.on](http://www.npst.org.on) )

The above table shows the performance of new pension scheme of corporate sector in Tier-II in different pension fund managers. The financial year return in SBI, UTI, ICICI, and Kotak pension fund manager all the years returns rate was positive although it was in the way of positive. Concerning financial returns of SBI, UTI, ICICI and Kotak fund managers NPS performance the highest return rate was witnessed in the year 2015 with 15.52%, 15.30%, 15.91%, 15.19% respectively. Therefore, the overall performance of the pension fund managers with respects to the corporate sector in Tier-I, new pension scheme returns shows steady and positive rate.

**Table No: 4.53****Performance of Scheme G-Tier-I**

<b>Financial Year Return (%)</b>						
<b>PFM (FY)</b>	<b>LIC</b>	<b>SBI</b>	<b>UTI</b>	<b>ICICI</b>	<b>KOTAK</b>	<b>HDFC</b>
FY 11	-	11.82	16.44	6.43	6.4	-
FY 12	-	5.31	3.81	3.36	5.37	-
FY 13	-	13.47	13.52	14.36	12.86	-
FY 14	10.94	0.39	0.51	1.12	1.18	9.18
FY 15	20.93	20.57	20.27	20.7	19.9	19.45
FY 16	6.50	7.28	7.28	7.05	7.66	6.83
FY 17	14.31	12.44	11.66	12.18	12.63	12.23
FY 18	5.52	5.19	4.21	5.10	4.70	4.59
FY 19	10.92	9.02	8.57	8.80	9.08	9.35
FY 20	16.47	14.80	14.40	15.05	15.18	15.47
FY 21	7.40	7.72	7.84	7.23	7.34	8.10

(Source: [www.npst.org.on](http://www.npst.org.on) )

The above table shows the performance of new pension scheme of corporate sector in Government security Tier-I in different pension fund managers All G schemes offered by all sic companies gave positive return rate in all the years. The LIC pension fund is the best option for those investors who want to invest in government bond plans because of its rich experience in handling debt investments. In corporate debt plan all schemes have positive returns in all the years like government bond plan.

**Table No: 4.54**

**Performance of Scheme G-Tier-II**

<b>Financial Year Return (%)</b>						
<b>PFM</b>	<b>LIC</b>	<b>SBI</b>	<b>UTI</b>	<b>ICICI</b>	<b>KOTAK</b>	<b>HDFC</b>
<b>FY</b>						
FY 11	-	11.82	16.44	6.43	6.4	-
FY 12	-	5.31	3.81	6.36	5.37	-
FY 13	-	13.47	13.52	14.36	12.86	-
FY 14	10.94	0.39	0.51	1.12	1.18	-
FY 15	19.94	20.57	20.27	20.70	19.90	19.45
FY 16	6.75	7.28	7.28	7.05	7.66	6.83
FY 17	13.68	12.55	11.96	12.14	12.41	12.11
FY 18	4.94	4.76	4.38	5.06	4.66	4.70
FY 19	12.68	8.95	8.83	8.80	8.61	9.42
FY 20	17.15	14.38	14.66	15.00	14.28	14.90
FY 21	6.76	7.70	7.51	7.18	7.28	7.45

(Source: [www.npst.org.on](http://www.npst.org.on) )

The above table shows the performance of new pension scheme of corporate sector in Government security Tier-II in different pension fund managers All G schemes offered by all sic companies gave positive return rate in all the years. The LIC pension fund is the best option for those investors who want to invest in government bond plans because of its rich experience in handling debt investments and high return rate as compared to other. In corporate debt plan all schemes have positive return in all years like government bond plan.

**Table No: 4.56****Growth in AUM of Equity Investment**

Year	Equity Tier 1		Equity Tier 2		Equity Tier Total	
	Rs in Crores	GR in %	Rs in Crores	GR in %	Rs in Crores	GR in %
2011	27.71	-	3.58	-	31.29	-
2012	63.91	130.64	7.07	97.49	70.98	126.85
2013	167.78	162.53	14.04	98.59	181.82	156.16
2014	355.56	111.92	43.54	210.11	698.04	283.92
2015	654.50	84.08	43.54	0.00	698.04	0.00
2016	1181.46	80.51	60.44	38.81	1241.89	77.91
2017	2538.98	114.90	12.90	-78.66	2664.88	114.58
2018	4308.22	69.68	217.78	1588.22	4526.00	69.84
2019	7234.21	67.92	325.44	49.44	7559.65	67.03
2020	7932.05	9.65	352.55	8.33	8284.40	9.59
2021	18979.51	139.28	850.98	141.38	19830.49	139.37
<b>CAGR</b>	52.45		72.82		90.36	

Source: SPSS and Excel Output

The above table shows the growth in asset under management of equity investment. The investment in equity tier 1 over the years since from 2011 to 2021 have positive growth rate although it was not stable. High growth rate could be witnessed during 2013(162%) against 2012. The CAGR is 52.45% over the period till 2021 shows there is growth in the equity investment of tier 1. Concerning investment in equity tier 2 the highest growth rate was witnessed during 2018 with 1588.22% against 2017 (-78.66%), moreover the investment in equity tier 2 has positive, negative and no growth movement. The CAGR is 72.82% over the period till 2021 shows there is growth in the equity investment of tier 2. Therefore, the overall asset under management with respect to investment in equity shows steady and positive growth even after pension reforms with CAGR 90.36%.

**Table No: 4.57****Growth in AUM of Bond Investment**

Year	Bond Tier 1		Bond Tier 2		Bond Tier Total	
	Rs in Crores	GR in %	Rs in Crores	GR in %	Rs in Crores	GR in %
2011	19.86	-	2.97	-	22.83	-
2012	48.21	142.75	7.89	165.66	56.10	145.73
2013	128.81	167.19	15.94	102.03	144.75	158.02
2014	246.46	91.34	24.27	52.26	270.73	87.03
2015	468.76	90.20	37.48	54.43	506.24	86.99
2016	887.78	89.39	55.10	47.01	942.88	86.25
2017	1684.95	89.79	101.33	83.90	1786.28	89.45
2018	2846.55	68.94	162.16	60.03	3008.70	68.43
2019	4422.07	55.35	209.08	28.93	4631.15	53.93
2020	6495.76	46.89	297.26	42.18	6793.02	46.68
2021	9686.52	49.12	482.73	62.39	10169.25	49.70
<b>CAGR</b>	85.70		66.38		84.03	

*Source: SPSS and Excel Output*

The above table shows the growth in asset under management of bond investment. The investment in bond tier 1 over the years since from 2011 to 2021 have positive growth rate although it was not stable. High growth rate could be witnessed during 2013(167.19%) against 2012. The CAGR is 85.70% over the period till 2021 shows there is growth in the bond investment of tier 1. Concerning investment in bond tier 2 the highest growth rate was witnessed during 2012 with 165.66% growth rate against 2011, moreover the investment in bond tier 2 has positive growth movement. The CAGR is 63.38% over the period till 2021 shows there is growth in the bond investment of tier 2. Therefore, the overall asset under management with respect to investment in bond shows steady and positive growth even after pension reforms with CAGR 84.03%.

**Table No: 4.58****Growth in AUM of G-Sec Investment**

Year	G Sec Tier 1		G Sec Tier 2		G Sec Tier Total	
	Rs in Crores	GR in %	Rs in Crores	GR in %	Rs in Crores	GR in %
2011	28.92	-	3.67	-	32.59	-
2012	77.51	168.02	7.08	92.92	84.52	159.34
2013	244.67	215.66	12.90	82.20	257.57	204.74
2014	408.97	67.15	20.44	58.45	429.41	66.72
2015	771.29	88.59	35.68	74.56	806.97	87.93
2016	1324.79	71.76	54.35	52.33	1379.13	70.90
2017	2506.93	89.23	112.43	106.86	2619.37	89.93
2018	4242.06	69.21	181.47	61.41	4424.50	68.91
2019	6896.75	62.58	262.69	44.76	7159.44	61.81
2020	10992.80	59.39	457.16	74.03	11449.95	59.93
2021	16766.29	52.52	835.49	82.76	17601.78	53.73
<b>CAGR</b>	88.94		72.08		87.61	

*Source: SPSS and Excel Output*

The above table shows the growth in asset under management of G-Sec tier 1. The investment in G-Sec tier 1 over the years since from 2011 to 2021 have positive growth rate although it was not stable. High growth rate could be witnessed during 2013(215.66%) against 2012. The CAGR is 88.94% over the period till 2021 shows there is growth in the G-Sec investment of tier 1. Concerning investment in G-Sec tier 2 the highest growth rate was witnessed during 2017 with 106.86% growth rate against 2016, moreover the investment in G-Sec tier 2 have positive growth movement. The CAGR is 72.08% over the period till 2021 shows there is growth in the G-Sec investment of tier 2. Therefore, the overall asset under management with respect to investment in G-Sec shows steady and positive growth even after pension reforms with CAGR 87.61%.



**Table No: 4.59****Growth in AUM of Private Sector Investment**

Year	NPS Lite		APY		Corporate CG	
	Rs in Crores	GR in %	Rs in Crores	GR in %	Rs in Crores	GR in %
2011	3.13	-	0	-	32.59	-
2012	140.46	4387.54	0	-	84.52	159.34
2013	436.08	210.47	0	-	257.57	204.74
2014	843.33	93.39	0	-	429.41	66.72
2015	1605.72	90.40	0	-	806.97	87.93
2016	2107.55	31.25	506.34	-	1379.13	70.90
2017	2639.21	25.23	1885.00	272.28	2619.37	89.93
2018	3005.82	13.89	387.86	-79.42	4424.50	68.91
2019	3409.23	13.42	6860.30	1668.76	7159.44	61.81
2020	3728.40	9.36	10526.26	53.44	11449.95	59.93
2021	4354.38	16.79	15687.11	49.03	17601.78	53.73
<b>CAGR</b>	106.22		40.96		87.61	

*Source: SPSS and Excel Output*

The above table shows the growth in asset under management of private sector investment. The investment in NPS lite over the years since from 2011 to 2021 have positive growth rate although it was not stable. High growth rate could be witnessed during 2012(4387.54%) against 2011. The CAGR is 106.22% over the period till 2021 shows there is huge growth in the NPS lite. Concerning investment in APY the highest growth rate was witnessed during 2019 with 1668.76% growth rate against 2018, moreover the investment in APY have positive, negative and no growth movement. Since from 2011-2015 there was no investment in APY. The CAGR is 40.96% over the period till 2021 shows there is growth in the NPS lite investment. Concerning investment in corporate CG the highest growth rate was witnessed during 2013 with 204.74% growth rate against 2012, moreover the investment in Corporate CG has positive growth movement. The CAGR is 87.61% over the period till 2021 shows there is growth in the Corporate CG investment.

**Table No: 4.60****Growth in AUM of Public Sector Investment**

Year	CG		SG	
	Rs in Crore	GR in %	Rs in Crore	GR in %
2011	28.92	-	3.67	-
2012	77.51	168.02	7.08	92.92
2013	244.67	215.66	12.90	82.20
2014	408.97	67.15	20.44	58.45
2015	771.29	88.59	35.68	74.56
2016	1324.79	71.76	54.35	52.33
2017	2506.93	89.23	112.43	106.86
2018	4242.06	69.21	181.47	61.41
2019	6896.75	62.58	262.69	44.76
2020	10992.80	59.39	457.16	74.03
2021	16766.29	52.52	835.49	82.76
<b>CAGR</b>	88.94		72.08	

*Source: SPSS and Excel Output*

The above table shows the growth in asset under management of public sector investment. The investment in Central Government avenues over the years since from 2011 to 2021 have positive growth rate, although it was not stable. High growth rate could be witnessed during 2013(215.66%) against 2012. The CAGR is 88.94% over the period till 2021 shows there is a huge growth in the CG investment. Concerning investment in SG the highest growth rate was witnessed during 2017 with 106.86% growth rate against 2016, moreover the investment in SG has positive growth movement. The CAGR is 72.08% over the period till 2021 shows there is growth in the SG investment.

### 4.3 Testing of Hypotheses

#### Hypotheses Testing

Hypothesis framed for the study have been tested in this section and its result presented below:

#### Hypothesis-1

**H<sub>0</sub>**: There is no significant difference in the Attitude of beneficiaries of DB and DC towards pension schemes;

**H<sub>1</sub>**: There is a significant difference in the Attitude of beneficiaries of DB and DC towards pension schemes;

**Table No: 4.61**

**Attitude towards Pension Schemes of DB and DC beneficiaries  
[Independent sample t test (n=384, df = 382)]**

Statements on Pension Schemes	Beneficiaries				t value	P value Sig.(2-tailed)	Decision Made (Null)
	DB		DC				
	Mean	SD	Mean	SD			
Pension Increases Financial Independence during the Old age	4.64	.638	4.55	.642	1.396	.163	Accepted
Pension Funds in Pension System are safer for formal sector pension savings	4.26	.826	4.37	.629	1.488	.138	Accepted
There is adequate pension information at the market	4.06	.906	4.05	.654	.198	.843	Accepted
Low income in formal sector is a barrier for participation in pension	4.02	.901	4.02	.836	.018	.986	Accepted
There are effective recruitment efforts of pension participants from the formal sector by pension funds scheme	3.99	.869	4.14	.684	1.872	.062	Accepted
Putting money into a pension is the most secure way of saving for the retirement	4.05	.910	4.12	.758	.850	.396	Accepted
Best time to start making pension contributions was as soon as one started earning any money	4.06	.810	4.16	.679	1.285	.200	Accepted
Pensions can sometimes seem too complicated to know the best thing to do	3.86	.969	4.05	.658	2.213	.028*	Rejected

Source: Field Survey SPSS Output Note: 1. \* denotes significant @ 5% level

The above table outcome highlights the attitude of DB and DC beneficiaries towards pension schemes. Independent sample t test is applied to analyze the differences in attitude.

With regard to the statement that pensions can sometimes seem too complicated to know the best thing to do, since P value is less than 0.05, null hypothesis “There is no significant difference in the attitude of beneficiaries of DB and DC towards pension schemes” is rejected at 5% significance level thus, it can be concluded the result is significant, and there exist significant difference in the attitude of beneficiaries of DB and DC towards pension schemes.

However for the statements such as pension increases financial independence during old age, pension funds in pension system are safer for formal sector pension savings, adequate pensions information is available at market, low income is a barrier for participation in pension, there are effective recruitment efforts of pension participants from the formal sector, putting money into pension is the most secure way of savings for retirement and the best time to start making pension contribution was as soon as one started earning any money for all these statements as P value is more than 0.05, null hypothesis “There is no significant difference in the attitude of beneficiaries of DB and DC towards pension schemes” accepted at 5% significance level thus it can be concluded that the result is insignificant.

## Hypothesis-2

**H<sub>0</sub>:** There is no significant difference in the perception of beneficiaries about pension schemes

**H<sub>1</sub>:** There is a significant difference in the perception of beneficiaries about pension schemes

**Table No: 4.62**

**Perception of DB and DC beneficiaries about Pension Schemes**  
**[One sample t test (n=384, df = 382)]**

<b>Variable</b>	<b>N</b>	<b>Df</b>	<b>Mean</b>	<b>Standard deviation</b>	<b>t value</b>	<b>P value Sig.(2-tailed)</b>	<b>Decision Made (Null)</b>
<b>DB</b>	384	383	19.0496	3.1722	99.015	.000**	Rejected
<b>DC</b>	384	383	18.8851	2.6233	118.503	.000**	Rejected

*Source: Field Survey SPSS Output Note: 1. \*\* denotes significant @ 1% level*

The above table highlights the perception of beneficiaries about pension schemes. One sample t test applied to test the perception among the beneficiaries of DB and DC pension schemes. The result shows that, since P value is less than 0.01, null hypothesis “There is no significant difference in the perception of beneficiaries about pension schemes” is rejected at 1% significance level for both DB pension scheme and DC pension scheme thus, it can be concluded the there is a positive perception among the beneficiaries about pension schemes.

### Hypothesis-3

**H<sub>0</sub>:** There is no significant difference in the contribution of Pension scheme after the Pension Reforms to GDP;

**H<sub>1</sub>:** There is a significant difference in the contribution of Pension scheme after the Pension Reforms to GDP;

**Table No: 4.63**

**Contribution to the GDP by pension Schemes Before and After the Pension Reforms  
[Paired Sample t-test]**

<b>Pair-1</b>	<b>N</b>	<b>Df</b>	<b>Mean</b>	<b>Standard deviation</b>	<b>t value</b>	<b>P value Sig.(2-tailed)</b>	<b>Decision Made (Null)</b>
<b>DB-DC</b>	7	6	1375.26	467.054	-7.791	.000**	Rejected

*Source: SPSS Output*

*Note: 1. \*\* denotes significant @1% level*

Above table is an attempt to prove the difference between the contribution of the pension schemes before and after the reforms to the GDP of nation. The table denotes that the  $p < 0.05$  at 1% significance level, hence it is proved that the null hypothesis “There is no significant difference in the contribution of Pension scheme after the Pension Reforms to GDP” is rejected and alternative hypothesis is accepted. Hence it is concluded that there is a significant difference in the contribution of pension scheme after pension reforms to the GDP.

#### Hypothesis-4

**H<sub>0</sub>:** There is no relationship between equity investment and pension reforms;

**H<sub>1</sub>:** There is a relationship between equity investment and pension reforms;

**Table No: 4.64**

**Investment in Equity after Pension Reforms (Defined Contribution)  
[One Sample t test]**

<b>Variable</b>	<b>N</b>	<b>Df</b>	<b>Mean</b>	<b>Standard deviation</b>	<b>t value</b>	<b>P value Sig.(2-tailed)</b>	<b>Decision Made (Null)</b>
Equity Tier 1	11	10	3949.44	5752.25	2.277	.046*	Rejected
Equity Tier 2	11	10	175.62	258.91	2.250	.048*	Rejected
Equity Total	11	10	4162.49	5988.15	2.305	.044*	Rejected

Source: SPSS Output

Note: 1. \* denotes significant @ 5% level

The above table highlights the investment in Equity after pension reforms. One sample t test applied to test the growth in equity investment of pension schemes after pension reforms. The result shows that, since P value is less than 0.05, for equity tier 1, equity tier 2 and total equity investment, hence null hypothesis “There is no growth in equity investment of pension schemes after pension reforms” is rejected at 5% significance level, and concluded that there is a growth in equity investment namely, equity tier 1, equity tier 2 and total equity investment of pension schemes after pension reforms.

### Hypothesis-5

**H<sub>0</sub>**: There is no relationship between bonds investment and pension reforms;

**H<sub>1</sub>**: There is a relationship between bonds investment and pension reforms;

**Table No: 4.65**

**Investment in Bonds after Pension Reforms (Defined Contribution)  
[One Sample t test]**

<b>Variable</b>	<b>N</b>	<b>Df</b>	<b>Mean</b>	<b>Standard deviation</b>	<b>t value</b>	<b>P value Sig.(2-tailed)</b>	<b>Decision Made (Null)</b>
Bond Tier 1	11	10	2448.70	3188.26	2.547	.029*	Rejected
Bond Tier 2	11	10	126.92	151.59	2.777	.020*	Rejected
Bond Total	11	10	2575.63	3339.46	2.558	.028*	Rejected

*Source: SPSS Output*

*Note: 1. \* denotes significant @ 5% level*

The above table highlights the investment in bond after pension reforms. One sample t test applied to test the growth in bonds investment of pension schemes after pension reforms. The result shows that, since P value is less than 0.05, for bond tier 1, bond tier 2 and total bond investment, hence null hypothesis “There is no relationship between bonds investment and pension reforms” is rejected at 5% significance level, and concluded that there is a growth in bond investment namely, bond tier 1, bond tier 2 and total bond investment by pension schemes after pension reforms.



### Hypothesis-6

**H<sub>0</sub>:** There is no relationship between Government-Securities investment and pension reforms;

**H<sub>1</sub>:** There is a relationship between Government-Securities investment and pension reforms;

**Table No: 4.66**

**Investment in G-Sec after Pension Reforms (Defined Contribution)  
[One Sample t test]**

Variable	N	Df	Mean	Standard deviation	t value	P value Sig.(2-tailed)	Decision Made (Null)
G Sec Tier 1	11	10	4023.72	5461.54	2.443	.035*	Rejected
G Sec Tier 2	11	10	180.30	258.62	2.312	.043*	Rejected
G Sec Total	11	10	4204.11	5718.48	2.438	.035*	Rejected

Source: SPSS Output

Note: 1. \* denotes significant @ 5% level

The above table highlights the investment in G-Sec after pension reforms. One sample t test applied to test the growth in G-Sec investment by pension schemes after pension reforms. The result shows that, since P value is less than 0.05, for G-Sec tier 1, G-Sec tier 2 and total G-Sec investment, hence null hypothesis “There is no relationship between Government-Securities investment and pension reforms” is rejected at 5% significance level, and concluded that there is a growth in G-Sec investment namely, G-Sec tier 1, G-Sec tier 2 and total G-Sec investment by pension schemes after pension reforms.

### Hypothesis-7

**H<sub>0</sub>:** There is no growth in the Private Sector investment by the Pension schemes pension reforms;

**H<sub>1</sub>:** There is a growth in the Private Sector investment by the Pension schemes after pension reforms;

**Table No: 4.67**

**Investment in Private Sector after Pension Reforms (Defined Contribution)  
[One Sample t test]**

<b>Variable</b>	<b>N</b>	<b>Df</b>	<b>Mean</b>	<b>Standard deviation</b>	<b>t value</b>	<b>P value Sig.(2-tailed)</b>	<b>Decision Made (Null)</b>
NPS lite	11	10	2024.84	1527.28	4.397	.001**	Rejected
APY	11	10	3259.35	5394.94	2.004	.073	Accepted
Corporate CG	11	10	22594.44	34233.72	2.189	.053	Accepted

*Source: SPSS Output*

*Note: 1. \* denotes significant @ 1% level*

The above table highlights the investment in private sector after pension reforms. One sample t test applied to test the growth in the private sector investment by pension schemes after pension reforms. The result shows that, since P value is less than 0.01, for NPS lite, the null hypothesis “There is no growth in the Private Sector investment by the Pension schemes after pension reforms” is rejected at 1% significance level, and concluded that there is a growth in the Private Sector investment namely NPS lite by the Pension schemes after pension reforms. However, for APY and Corporate CG private sector investment the null hypothesis accepted and concluded that with regard to APY and Corporate CG private sector investment there is no growth by pension schemes after pension reforms.

## Hypothesis-8

**H<sub>0</sub>:** There is no growth in the Public Sector investment by the Pension schemes after pension reforms;

**H<sub>1</sub>:** There is a growth in the Public Sector investment by the Pension schemes after pension reforms;

**Table No: 4.68**

**Investment in Public Sector after Pension Reforms (Defined Contribution)  
[One Sample t test]**

Variable	N	Df	Mean	Standard deviation	t value	P value Sig.(2-tailed)	Decision Made (Null)
CG	11	10	65937.74	56973.05	3.838	.003**	Rejected
SG	11	10	90308.58	95605.30	3.133	.011*	Rejected

Source: SPSS Output

Note: 1. \* denotes significant @ 5% level \*\* denotes significant @ 1% level

The above table highlights the investment in public sector after pension reforms. One sample t test applied to test the growth in the public sector investment by pension schemes after pension reforms. The result shows that, since P value is less than 0.01, for CG, the null hypothesis “There is no growth in the Public Sector investment by the Pension schemes after pension reforms” is rejected at 1% significance level, and for SG since P value is less than 0.05 null hypothesis rejected at 5% significance level and concluded that there is a growth in the Public Sector investment namely CG and SG by the Pension schemes after pension reforms.

## 4.4 Conclusion

The chapter discusses the outcomes of pension reforms and its impact on savings investment and growth of Indian economy. Awareness toward pension reforms, Source of awareness about pension reforms, Factors influencing for enrolment to pension schemes, Perception of employees towards pension schemes, Attitude of employees towards pension schemes, Satisfaction level towards pension schemes, analysis of pension reforms impact discussed by considering various factors. Framed study hypothesis tested by using statistical test such as, one sample t test, independent sample t test, paired t test and found the results regarding knowledge and awareness level, perception, satisfaction towards various pension scheme.

## CHAPTER-V

### SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION

#### 5.1 Introduction

The present chapter focuses on describing the summary of major findings of the study. The findings of the study are categorized into general findings providing information on socio-demographic and economic status of the respondents, findings based on objectives and based on hypothesis of the study. Further suggestions have been given based on the findings of the study,

#### 5.2 Findings of the Study

##### A. Findings based on respondents' profile

###### • Demographic Profile

1. Gender status shows that out of total 384 respondents, majority (64.1%) are male and (35.9%) are female respondents.
2. It was found that majority (28.9%) of the respondents fall into the age category of 51-60 years and least (0.3%) are belongs to above 60 age group.
3. With regard to educational qualification, it was found that majority (48.4%) of respondents did their post-graduation degree and least (1.8%) have SSLC education.
4. It was found that majority (63.3%) of employees belongs to urban locality and least 17.2% belongs to semi urban locality.
5. The majority (82%) of the respondents belongs to Hindu religion followed by 31% from backward caste and 24.2% are minorities.
6. Marital status shows that majority 79.2% are married and 20.3% are unmarried.
7. The result shows that majority (29.7%) of the respondents are professors followed by (19%) are teachers, 21.1% bank employees, 7.3% railway employees and 1.8% professional and other employees.

###### • Socio-Economic Status

1. It was found that majority (48.4%) of employees have nuclear family and 32.6% lives in joint family system.
2. It was found that majority (69.3%) of the respondents have family with 2-4 dependents members and least (0.8%) more than 9 members dependent in family.

3. With regard to monthly income majority of respondents (50.3%) have above ₹ 50000, followed by (30.5%) ₹ 26000-50000 and least (0.8%) have below ₹ 10000.
4. With regard to pension scheme majority (54.7%) of respondents fall under the new pension scheme i.e., Defined Contribution (DC).
5. It was found that majority (34.1%) of the employees save 11-20% from their total savings followed by (37.8%) of the respondents invest 1-10% out of their total income.
6. The data shows that majority of the respondents opined that (64.8%) future uncertainties, (54.4%) family members influence, financial assets (47.4%), financial emergency (40.4%), regular income (43.2%) have high influence in their pension decision.

## **B. Findings based on Objectives**

### **1. Findings based on Awareness**

Out of total respondents, 384 respondents are aware about pension reforms which is 100%. As the respondents are the organized sector workers who have enrolled to pension schemes hence 100% of respondents have complete awareness regarding pension reforms took place during 2004 that is conversion of defined benefit to defined contribution.

### **2. Findings on Defined Benefit Pension Scheme**

- Majority of the respondents (35.2%) strongly disagreed that conversion of pension scheme from defined benefit to defined contribution affected them.
- Majority of the respondents (62.0%) agreed that they had an adequate understanding of defined benefit scheme and its benefit.
- Majority (46.6%) of the respondents agreed that defined benefit scheme generally met employee's expectation and least (2.6%) strongly disagreed.
- Half of the respondents (50.5%) agreed that they felt defined benefit scheme was good to save money for retirement.
- Majority (51.4%) of the respondents agreed that defined benefit provide adequate income during retirement.
- Majority (41.7%) of the respondents agreed that defined benefit scheme increased job satisfaction level and least 0.8 are strongly disagreed to it.
- With regard to defined benefit scheme offers them to select best desired investment portfolio majority (43.5%) of the respondents agreed.

- Majority (40.1%) of the respondents have neutral opinion regarding defined benefit scheme is convenient to them during changing the jobs.
- With regard to the defined benefit scheme tend to afford employees to a greater retirement plan than other retirement plans. Out of total respondents' majority (39.6%) of the respondent agreed to it.
- Regarding defined benefit scheme will provide them more retirement benefit than new defined contribution scheme out of total respondents' majority (40.4%) of the respondents agreed and (2.6%) are strongly disagreed to it.
- Majority 40.4% of the respondents agreed that their contribution to the pension scheme increased in defined benefit scheme increased contribution level and least 1.8% are strongly disagree to it.

### **3. Findings on Defined Contribution Pension Scheme.**

- Majority (41.1%) of the respondents agreed that during retirement scheme was being changed to defined contribution, they received adequate communication information.
- Nearly half (45.6%) of the respondents agreed regarding that they have an adequate understanding of defined contribution scheme and its benefits.
- Majority (59.6%) of the respondents opined neutral regard that generally the defined contribution scheme meets their expectation.
- More than half percentage (52.1%) of the respondents have neutral opinion that when they get retire defined contribution will provides them an adequate income.
- Majority (50.0%) of the respondents have neutral opinion that generally, the change from defined benefit to defined contribution scheme it was good for them.
- Majority (59.9%) of the respondents neutrally opined that their level of job satisfaction increased with the new defined contribution scheme and only 1.6% have strongly disagreed to it.
- Regarding the new defined contribution scheme offers them an opportunity to select their desired investment portfolio majority 47.7% of the respondents have neutral opinion to it.
- Majority (47.1%) of the respondents strongly agreed that new defined contribution scheme ensures family benefits as like defined benefit pension scheme.

- Majority (52.6%) of the respondents have neutral opinion that with the new defined contribution scheme they would consider the pension scheme type provided by the employer when seeking employment.
- Majority (47.1%) of the respondents strongly agreed with the new defined contribution scheme will provide them less retirement benefit than previous defined benefit pension scheme.
- Majority (62.2%) of the respondents strongly disagreed regarding that the new defined contribution pension scheme will provide them same retirement benefits as like old scheme.
- Majority (41.7%) of the respondents have neutral opinion that their employer contribution to the pension scheme increased with the new defined contribution pension scheme.
- Majority (47.1%) of the respondents strongly agreed regarding the new defined contribution scheme offer withdrawal facility in tier I account.

#### **4. Findings on attitude of beneficiaries towards pension schemes**

- Majority (65.4%) of the respondents strongly agreed that pension scheme enhances financial independence during old age.
- Majority (49.0%) of the respondents agreed that the pension fund in pension system ensures safer custody for formal sector pension savings.
- Majority 56% of the respondents agreed that there is adequate pension information available in the market.
- With regard to low-income barrier to participation in pension majority 44.6% are agreed and least 1.6% strongly disagreed to it.
- Concerning to there are effective recruitment efforts of pension participation form the formal sector by pension funds scheme, majority (50.3%) of the respondents agreed to it.
- Majority (46.1%) of the respondents agreed that regarding putting money into a pension is most secure way of saving for their retirement period.
- Majority (55.7%) of the respondents agreed that best time to start making pension contribution was as soon as one started earnings any money.
- Majority of the respondents (54.2%) agreed that pension can sometime seem too complicated to know the best thing to do.

## **5. Findings on impact of pension reforms on saving and investments**

- It is found that regarding house hold financial savings rates as a percentage of GDP. Concerning shares and debentures during 1999-2000, the rate is 0.8%, however from 2011-16 it was stable with 0.2%, for 2016-17 and 2017-18 it was declined to 1.1% and 1% respectively, for 2018-2020 it increased to 0.4%. Concerning rates on government claims, during 1999-2000, the rate is 1.5%, however from 2011-13 it was negative with -0.2 and -0.1%, from 2015-20 it was in the direction on increase. Concerning rates on provident and pension funds, during 1999-2000, the rate is 2.8%, however from 2011-20 it stated to fall with positive rate.
- It was found that the growth rate of subscribers for NPS Swavalamban was declining over the years from 2016-17 to 2021-22.
- There is a growth in the number of subscribers to NPS, the amount of total contribution to NPS in central and state govt employees, corporate sector employees, all citizen, all these cases are also increased and the asset under management is also increasing, the growth rate of all these aspects is alarming but the growth is not stable.
- The investment in equity tier 1 over the years since from 2011 to 2021 have positive growth rate although it was not stable. High growth rate could be witnessed during 2013(162%) against 2012. The CAGR is 52.45% over the period till 2021 shows there is growth in the equity investment of tier 1. Concerning investment in equity tier 2 the highest growth rate was witnessed during 2018 with 1588.22% against 2017 (-78.66%), moreover the investment in equity tier 2 has positive, negative and no growth movement. The CAGR is 72.82% over the period till 2021 shows there is growth in the equity investment of tier 2. Therefore, the overall asset under management with respect to investment in equity shows steady and positive growth even after pension reforms with CAGR 90.36%.
- The investment in bond tier 1 over the years since from 2011 to 2021 have positive growth rate although it was not stable. High growth rate could be witnessed during 2013(167.19%) against 2012. The CAGR is 85.70% over the period till 2021 shows there is growth in the bond investment of tier 1. Concerning investment in bond tier 2 the highest growth rate was witnessed during 2012 with 165.66% growth rate against 2011, moreover the investment in bond tier 2 has positive growth movement. The CAGR is 63.38% over the period till 2021 shows there is growth in the bond



investment of tier 2. Therefore, the overall asset under management with respect to investment in bond shows steady and positive growth even after pension reforms with CAGR 84.03%.

- The investment in G-Sec tier 1 over the years since from 2011 to 2021 have positive growth rate although it was not stable. High growth rate could be witnessed during 2013(215.66%) against 2012. The CAGR is 88.94% over the period till 2021 shows there is growth in the G-Sec investment of tier 1. Concerning investment in G-Sec tier 2 the highest growth rate was witnessed during 2017 with 106.86% growth rate against 2016, moreover the investment in G-Sec tier 2 have positive growth movement. The CAGR is 72.08% over the period till 2021 shows there is growth in the G-Sec investment of tier 2. Therefore, the overall asset under management with respect to investment in G-Sec shows steady and positive growth even after pension reforms with CAGR 87.61%.
- The investment in NPS lite over the years since from 2011 to 2021 have positive growth rate although it was not stable. High growth rate could be witnessed during 2012(4387.54%) against 2011. The CAGR is 106.22% over the period till 2021 shows there is huge growth in the NPS lite. Concerning investment in APY the highest growth rate was witnessed during 2019 with 1668.76% growth rate against 2018, moreover the investment in APY have positive, negative and no growth movement. Since from 2011-2015 there was no investment in APY. The CAGR is 40.96% over the period till 2021 shows there is growth in the NPS lite investment. Concerning investment in corporate CG the highest growth rate was witnessed during 2013 with 204.74% growth rate against 2012, moreover the investment in Corporate CG has positive growth movement. The CAGR is 87.61% over the period till 2021 shows there is growth in the Corporate CG investment.
- The investment in Central Government avenues over the years since from 2011 to 2021 have positive growth rate, although it was not stable. High growth rate could be witnessed during 2013(215.66%) against 2012. The CAGR is 88.94% over the period till 2021 shows there is a huge growth in the CG investment. Concerning investment in SG the highest growth rate was witnessed during 2017 with 106.86% growth rate against 2016, moreover the investment in SG has positive growth movement. The CAGR is 72.08% over the period till 2021 shows there is growth in the SG investment.

## **6. Findings on impact of pension reforms on growth of Indian economy**

- Growth rate in the amount of expenditure incurred by the government on pension and other retirement benefit was very high for the years 2010-11 and 2011-12 but there is drastic fall in the growth rate to the extent of 89.67 % in the year 2012-13, however from there onwards till 2020-21 growth rate is positive even though the growth rate trend was not stable in all the years.
- Growth rate in the amount of contribution by the government on defined benefit pension, financing pattern of SPF and PPF increased form year to year but the rate of growth was not stable it was in the way of increasing and also decreasing.
- Growth rate in the amount of contribution by the government on defined benefit pension is positive but not stable form year to year, and the success rate from budgeted contribution to actual was not stable it was in the way of increasing and also decreasing.

## **C. Findings Based on Hypotheses**

- One sample t test applied to test the perception among beneficiaries of defined benefit and defined contribution pension scheme. Since P value is less than 0.01, explained in the table number 4.62 null hypothesis “There is no significant difference in the perception of beneficiaries about pension schemes” is rejected at 1% significance level for both DB pension scheme and DC pension scheme thus, it can be concluded the there is a positive perception among the beneficiaries about pension schemes.
- Independent sample t test is applied to test the differences in attitude

With regard to the statement that pension can sometimes seem too complicated to know the best thing to do, since P values is less than 0.05, explained in the table number 4.61 null hypothesis “There is no significant difference in the attitude of beneficiaries of DB and DC towards pension schemes” is rejected at 5% significance level thus, it can be concluded the result is significant, and there exist significant difference in the attitude of beneficiaries of DB and DC towards pension schemes.

However for the statements such as pension increases financial independence during old age, pension funds in pension system are safer for formal sector pension savings, adequate pensions information is available at market, low income is a barrier for participation in pension, there are effective recruitment efforts of pension participants from the formal sector, putting money into pension is the most secure way

of savings for retirement and the best time to start making pension contribution was as soon as one started earning any money for all these statements as P value is more than 0.05, explained in the table number 4.61 null hypothesis “There is no significant difference in the attitude of beneficiaries of DB and DC towards pension schemes” accepted at 5% significance level thus it can be concluded that the result is insignificant.

- Paired sample t test is applied to test the Difference in the contribution to the GDP Pension scheme after the Pension Reforms. Since  $p < 0.05$  at 1% significance level, hence it is proved that the null hypothesis “There is no significant difference in the contribution of Pension scheme after the Pension Reforms to GDP” is rejected and alternative hypothesis is accepted. Hence it is concluded that there is a significant difference in the contribution of pension scheme after pension reforms to the GDP.
- One sample t test applied to test the growth in equity investment of pension schemes after pension reforms. Since P value is less than 0.05, for equity tier 1, equity tier 2 and total equity investment, hence null hypothesis “There is no relationship between equity investment and pension reforms” is rejected at 5% significance level, and concluded that there is a growth in equity investment namely, equity tier 1, equity tier 2 and total equity investment of pension schemes after pension reforms.
- One sample t test applied to test the growth in bonds investment of pension schemes after pension reforms. Since P value is less than 0.05, for bond tier 1, bond tier 2 and total bond investment, hence null hypothesis “There is no relationship between bonds investment and pension reforms” is rejected at 5% significance level, and concluded that there is a growth in bond investment namely, bond tier 1, bond tier 2 and total bond investment by pension schemes after pension reforms.
- One sample t test applied to test the growth in G-Sec investment by pension schemes after pension reforms. Since P value is less than 0.05, for G-Sec tier 1, G-Sec tier 2 and total G-Sec investment, hence null hypothesis “There is no relationship between Government-Securities investment and pension reforms” is rejected at 5% significance level, and concluded that there is a growth in G-Sec investment namely, G-Sec tier 1, G-Sec tier 2 and total G-Sec investment by pension schemes after pension reforms.
- One sample t test applied to test the growth in the private sector investment by pension schemes after pension reforms. Since P value is less than 0.01, for NPS lite, the null hypothesis “There is no growth in the Private Sector investment by the

Pension schemes after pension reforms” is rejected at 1% significance level, and concluded that there is a growth in the Private Sector investment namely NPS lite by the Pension schemes after pension reforms. However, for APY and Corporate CG private sector investment the null hypothesis accepted and concluded that with regard to APY and Corporate CG private sector investment there is no growth by pension schemes after pension reforms.

- One sample t test applied to test the growth in the public sector investment by pension schemes after pension reforms. Since P value is less than 0.01, for CG, the null hypothesis “There is no growth in the Public Sector investment by the Pension schemes after pension reforms” is rejected at 1% significance level, and for SG since P value is less than 0.05 null hypothesis rejected at 5% significance level and concluded that there is a growth in the Public Sector investment namely CG and SG by the Pension schemes after pension reforms.

## **Suggestions**

- Beneficiaries prefers old pension scheme over new pension scheme due to the fact of getting 50% of monthly salary in terms of pension after retirement hence it is advised to the government to have such provision even under new pension scheme.
- Investment avenue selection decision is left to the government; hence it is suggested to allow investment selection choice to the pension beneficiaries.
- Growth rate in equity investment is found more hence, it is advised to pension regulatory development authority to ensure convenience in making investment in different class of assets so as to have balanced growth among various investment avenues.
- It is advised to the policy makers to enable family benefit in new pension scheme which is available under old pension scheme, as majority of beneficiaries opine this.
- Beneficiaries of new pension schemes with tier I account desires to have withdrawal facility, hence it is advised to ensure such facility to the beneficiaries.
- It was found that the growth rate of subscribers for NPS Swavalamban was declining over the years from 2016-17 to 2021-22. This clearly shows that NPS Swavalamban scheme is not well advertised to reach those who need to be benefitted from it. Hence, it is suggested to promote this scheme among all beneficiaries.

- Findings are seemingly consistent with the claim that financial market developments enhanced economic growth and that pension reform has contributed to this development. The links between financial market indicators and capital accumulation are surprisingly robust, and a link between pension funds and financial market developments is suggested.
- It is suggested to keep the defined benefit Plan and add a Supplemental Plan, where the employer would continue to operate its current defined benefit plan and a supplemental defined contribution plan for those employees who want to save additional amounts for their retirement.
- It is suggested to offer both a defined benefit plan and a new plan, the employer would offer both its current defined benefit plan and a new defined plan and employees would choose the plan in which they would participate.
- Pension holders have to improve their financial literacy regarding pension schemes particularly about the different assets class of investment for reducing their investment risk.
- Pension fund manager conduct periodical meetings, conferences and workshops with the pension holders to handle the difficulties and enhancing pension subscribers, investment corpus pension amount.
- The pension holder should carefully examine the performance of the pension fund managers by evaluating the net asset value and make better decision.
- Pension fund manager may recruit qualified and expertise candidates to deal with pension fund in stock or capital market.

## **Conclusion**

After a long period of services may be around thirty years the employees get retired. The employees have to live peacefully after their retirement which depends on several factors. The pension system in India has traditionally towards the organized sector been based on financing through employer and employee participation. Therefore, pension reform as implemented in Chile requires a comprehensive reform package covering essentially all areas of macroeconomic and microeconomic policy and institution building, supported by a tight fiscal policy. Moreover, pension reform must not be left only to social policy specialists; it should be entrusted also to economists of different backgrounds, including industrial economics, public finance, and financial markets.

One of the important factors is the social security system. Social security depends mainly on the economic status of the country. The employees need to have regular source of income even after their retirement for maintaining not only themselves but also their family members including children. The study concludes that gives some similar type of benefits to new pension scheme beneficiaries as like old pension scheme. That provide a guaranteed return with low risk at retirement. After pension reforms countries economy growth way to increase but not stable, so have to maintain balanced saving and investment by providing more savings and investment opportunities to the pension holder in different avenues that leads to economic growth of the country.

### **Scope for Further Research**

Further research study can be carried on the area such as, preferences for pension schemes, financial literacy. The present study is delimited to only four districts of Karnataka hence, the study can be taken up for entire Karnataka. The study can be taken up to examine the impact of pension reforms on capital market. A comparative study can be taken up between defined benefit and defined contribution on the growth of economy. Moreover, pension reforms impact from the unorganized beneficiaries' perspective can be focused.

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## QUESTIONNAIRE

Dear Respondent,

I am pursuing doctoral degree program in Kuvempu University on the topic entitled **“PENSION REFORMS AND ITS IMPACT ON SAVINGS INVESTMENTS AND GROWTH OF INDIAN ECONOMY”** under the guidance of Prof. S Venkatesh. Kindly spare your valuable time to give your response and kindly solicit your co-operation in this regard. I assure you that the information collected from you will be confidential and will be used for research and academic purpose only.

Thanking you,

Yours sincerely

**UMA S**

### SECTION-A

#### DEMOGRAPHIC PROFILE

1. Name and Address

2. Gender

- a. Male
- b. Female
- c. Transgender

3. Age

- a. 21 – 30
- b. 31 – 40
- c. 41 – 50
- d. 51 – 60
- d. Above 60

4. Education

- a. SSLC
- b. PUC
- c. Graduation
- d. Post-graduation
- e. Ph.D.
- f. Others.....

5. Region

- a. Urban
- b. Semi-Urban
- c. Rural

6. District
- a. Bangalore
  - b. Mysore
  - c. Belgaum
  - d. Kalburgi
7. Religion
- a. Hindu
  - b. Muslim
  - c. Christian
  - d. Jain
  - e. Others.....
8. Category
- a. Hindu
  - b. Muslim
  - c. Christian
  - d. Jain
  - e. Others.....
9. Marital status
- a. Married
  - b. Unmarried
  - c. Widowed
  - d. Widower
  - e. Divorced
10. Type of family
- a. Single
  - b. Nuclear family
  - c. Joint family
  - d. Nuclear family with dependents
  - e. Other (specify).....
11. No. of dependent
- a. Single
  - b. 2-4
  - c. 5-8
  - d. More than 9
12. Occupation
- a. Professor
  - b. Teacher
  - c. Bank employee
  - d. Railway employee
  - e. Professional
  - f. Others.....

13. Monthly Income

- a. Below ₹ 10000 ( )
- b. ₹ 10000-25000 ( )
- c. ₹ 26000-50000 ( )
- d. Above ₹ 50000 ( )

14. Are you a Beneficiary of Pension Schemes? 1. Yes ( ) 2. No ( )

15. Mention your retirement benefit Pension Scheme?

- a. Defined Benefit (Old Pension Scheme) ( )
- b. Defined Contribution (NPS-New Pension Scheme) ( )

16. How long have you been in your Pension Scheme.....?

17. Do you Save and Invest some money out of your earnings? 1

- a. Yes ( )
- b. No ( )

18	If yes, mention how much percentage (%) of your earnings you have saved and invested				
	1. None	2. 1-10%	3. 11-20%	4. 21-30%	5. Above 31%
	Saved				
	Invested				

**SECTION B**

**Knowledge and Awareness level about Pension Schemes**

19. How you get Information and Awareness of Pension Schemes?					
1. Television ( )	2. Radio ( )	3. Pension staff ( )			
4. Friends ( )	5. Colleagues ( )	6. Newspapers ( )			
7. Other please specify .....					

20. Please indicate the influencing factors for enrolling to Pension Scheme. By ticking appropriate place (√). (5. Very High, 4. High, 3. Moderate, 2. Low, 1. Very low)

		5	4	3	2	1
1	Future Uncertainties					
2	Health care					
3	Financial Emergencies					
4	Buying Fixed/ Financial Assets					
5	Wealth Maximization					
6	Financial Security					
7	Regular Income					
8	Tax Benefit					
9	Family Members					

## SECTION C

### Perceptions and attitude of Employees on Pension Schemes

21. Using the scale below, please indicate your response by ticking each of the items that best describes your Perception of the Pension Schemes. **(5. Strongly Agree, 4. Agree, 3. Neutral, 2. Disagree, 1. Strongly Disagree).**

<b>A. Perception towards Previous Scheme (DB)</b>						
		<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
1	Conversion from defined benefit to defined contribution affected me.					
2	I had an adequate understanding of the defined benefit scheme and its benefits.					
3	In general, the defined benefit scheme met my expectation.					
4	I felt it was good way to save money for retirement					
5	When I retire the defined benefit scheme will provide me with adequate income.					
6	My level of job satisfaction increased with the Defined benefit scheme					
7	The defined benefit scheme offers me an opportunity to select my desired investment portfolio.					
8	Generally, the defined benefit scheme meets my expectation					
9	The defined benefit scheme is convenient for me in the event I want to change jobs.					
10	DB tend to afford employees a greater retirement benefit than other retirement plans					
11	The defined benefit scheme will provide me with more retirement benefits than the new defined contribution scheme					
12	My contribution to the pension scheme increased in the defined benefit scheme.					
<b>B. Perception towards the New scheme (DC)</b>						
1	When the retirement scheme was being changed to defined contribution, I received adequate communication.					
2	I have an adequate understanding of the defined contribution scheme and its benefits.					
3	Generally, the defined contribution scheme meets my expectation.					
4	When I retire the defined contribution scheme will provide me with adequate income.					
5	Generally, the change from defined benefit to defined contribution was good for me					
6	My level of job satisfaction increased with the new Defined Contribution scheme					
7	The new defined contribution scheme offers me an opportunity to select my desired investment portfolio.					

8	Ensure family benefits under DC					
9	The new defined contribution scheme is convenient for me in the event I want to change jobs.					
10	With the new defined contribution scheme, I would consider the pension scheme type provided by an employer when seeking employment.					
11	The new defined contribution scheme will provide me with less retirement benefits than the previous defined benefit scheme.					
12	The new defined contribution scheme will provide me with about the same benefits					
13	In the new defined contribution scheme, my benefits at retirement will be affected in the event my employer becomes insolvent.					
14	My employer's contribution to the pension scheme increased with the new defined contribution scheme.					
15	Enable withdrawal facility in tier I account under DC					
<b>C. Attitude towards Pension Scheme</b>						
1	Pension increases financial independence during old age					
2	Pension funds in pension system are safer custody for formal sector pension saving					
3	There is adequate pension information at the market					
4	Low income in formal sector is a barrier to participation in pension					
5	There are effective recruitment efforts of pension participants from the formal sector by pension funds scheme					
6	Putting money into a pension is the most secure way of saving for their retirement.					
7	Best time to start making pension contributions was as soon as one started earning any money.					
8	Pensions can sometimes seem too complicated to know the best thing to do					

22. Using the scale below, please indicate your response regarding Problems faced while Enrolling to Pension Schemes.

	Strongly Agree		Agree		Neither agree		Disagree		Strongly Disagree	
	F	%	F	%	F	%	F	%	F	%
Involved Lengthy Enrolment process	46	12	104	27.1	165	43.0	29	7.5	40	10.4
Poor staff management	77	20.3	161	41.9	116	30.2	11	2.9	18	4.7
More Political influence	42	10.8	126	32.9	120	31.3	52	13.5	44	11.5
Lack of profitable investment opportunities	81	21.1	139	36.2	124	32.3	29	7.5	11	2.9

Lack of information need to enrolled	136	35.4	169	44.2	67	17.4	8	2.0	4	1.0
Lack of participation by the public	54	14.1	168	43.7	92	24.0	35	9.1	35	9.1
Involve Corruption	43	11.1	134	34.9	127	33.1	42	10.9	37	10.0
Lack of financial education among the public	86	22.4	209	54.4	57	14.8	21	5.5	11	2.9
Government policy	128	33.3	167	43.5	61	15.9	16	4.2	12	3.1
Different Individual perception on pension schemes	33	8.6	170	44.2	91	23.7	69	18.0	21	5.5
Pension reform initiatives	51	13.3	112	29.2	108	28.1	85	22.1	28	7.3
A lack of awareness regarding the benefit of the pension scheme	16	4.2	105	27.3	110	28.7	75	19.5	78	20.3
Lack of documentation needed	60	15.6	114	29.7	73	19	99	25.8	38	9.9

**23. What is the Satisfaction level towards Pension Schemes**

<b>Statements</b>	<b>Highly Dis Satisfied</b>	<b>Dis Satisfied</b>	<b>Neutral</b>	<b>Satisfied</b>	<b>Highly Satisfied</b>
Defined Benefit					
Defined Contribution					

**24. Any Suggestion: .....**

**Date:**

**Signature of Respondent**

**Place:**