CHAPTER 3
EVOLUTION OF RETIREMENT BENEFIT PROGRAMMES AND CONTEMPORARY RETIREMENT PLANS ACROSS THE GLOBE
3.1 Introduction

Old age is a period of life which requires special care and attention. The support structure for the elderly mainly consists of the family, society and the government. Traditionally, in almost every society the families have been taking care of their elderly members. But, it is also duty of society and government to provide support to the elderly citizens and as a result various institutionalised retirement benefit programmes have evolved in the last few centuries. In this chapter, an attempt has been made to discuss the evolution of retirement benefit programmes as well as to discuss various operational retirement benefit plans across the globe with special emphasis on Indian retirement benefit structure.

3.2 Evolution of Retirement Programmes

The modern concept of social security came into being when Chancellor Otto von Bismarck of Germany introduced some social legislation in 1880s. These were started by Bismarck to give greater security to the working class people and also to gain workers’ support for his party. In 1883, legislation was passed for compulsory Sickness Insurance. Two thirds of its cost was borne by the employee himself and the rest one third by the employer. Government did not share the cost of insurance. In 1884, Accident Insurance Law was passed. Bismarck made an attempt to include government’s share in this law, but failed due to the opposition from the national liberals. Both these Laws did not cover all types of workers. Compulsory old age insurance, covering all types of workers was introduced in 1889. Under this Law, the cost of insurance was shared by the employee, employer and the government. This Law of 1889 can be considered as the first social security legislation which provided a pension annuity for workers when they reached the age of 70 years, but in 1916 this age was lowered to 65 years.

Before Bismarck, in the United States and other Western nations some programmes were occasionally undertaken to alleviate poverty and to provide relieves to the aged, disabled, blind, lonely and sick, which were mainly motivated by the biblical doctrines. The Brehon Laws of Ireland imposed responsibilities on the kin groups to take care of
the aged, sick and disabled members. In England, poverty was regarded as a quasi-criminal condition, the Vagabonds and Beggars Act of 1495 even imprisoned beggars. But the passing of the Poor Law in 1601 changed the situation to some extent as then onwards poor were seen as simply morally degraded who should be forced to do labour. However, the Law established the responsibility of the state to care for the weaker vulnerable sections of the society. The Law taxed the households for relief of the destitute. The early colonists transported the English Poor law to America where some local volunteer groups and religious associations also provided various social welfare services. But, until the Great Depression of 1929, social welfare services were regarded mainly as a local responsibility (Encyclopedia America, 1998).

In Japan, Confucianism and Buddhism taught people to undertake some charity activities for the poor elderly. The institutions like ‘Shikain’, established in 539 and the Buddhist temples provided relieves to the poor and weak elderly without family.

One of the first pension arrangements to appear in history is the widow’s funds. Duke Ernest the Pious of Gotha in Germany founded a widows' fund for clergy in 1645 and in 1662 another one for teachers (Haberman & Sibbett, 1995). At about the start of the eighteenth century, various schemes of provision for ministers' widows were established throughout Europe. Some of them were based on a single premium while others were based on yearly premiums to be distributed as benefits in the same year. (Hald A., 1990).

The first social insurance programme in Britain was enacted in 1911 which was sponsored by Chancellor of the Exchequer David Lloyd George. In the U.S.A., the first social security legislation was enacted in 1935. President Franklin D. Roosevelt termed this law as “a cornerstone in a structure which is being built but is by no means complete.” The constitutionality of the Social Security Act of 1935 was upheld by the U.S. Supreme Court in the Helvering vs. Davis case of 1937. Although the 1935 Act was the first formal social security legislation of the U.S.A., yet prior to that during the period of Civil War, some social security arrangements were made. In early 1776, the first national pension programme for soldiers was passed. In 1795, war revolutionary
Thomas Paine published his last pamphlet ‘Agrarian Justice’ which called for the establishment of a public system providing social security. It proposed a system where a special fund would be created by imposing a 10 per cent inheritance tax on property inheritance. The fund thus created was to be used for payment of a one-time stipend of 15 pound sterling to every citizen at the age of 21 and 10 pound sterling annually to every person aged 50 or older. However, the first legislation of the Civil War Pension programme began in 1862 and in the last two decades of the 19th century some companies introduced company pension plans for industrial workers.

After the Second World War, formal national social security systems were introduced in many countries. In France, such a system was adopted in 1945. In Japan, Article 25 of the Constitution enacted in 1947 presented the fundamental principles necessary for developing a social security system which formed the basis of the social security laws passed in the post-War period.

3.3 Evolution of Retirement Programmes in India

Although care for the aged was regarded as one of the prime duties of the society even in ancient India, but formal retirement benefit schemes began only during the British period. Since the second half of the 19th century, the British rulers adopted large scale industrial production in India which resulted in exploitation of labourers in many forms like low wages, long hours of work, overcrowding in factories etc. As a result of protest by some sections of the society, the government tried to remove some of these evils by various Factory Acts which regulated hours and conditions of work. Various social security legislations were also taken providing provident funds, maternity benefits and securities against accident, death and sickness. Some non-governmental organizations like Y.M.C.A., the Bombay Social Service League, Seva Sadan Societies, missionary societies etc. also took part in the work of labour welfare. After the introduction of provincial autonomy in 1937, provincial governments of some provinces like Bombay, U.P., Sind, Bengal, Bihar and C.P. began to take interest in the works involving labour welfare. Welfare centres were established at different places like Bombay, Calcutta, Madras, Nagpur etc. An advisor in Industrial Welfare was appointed by the Central
Government. Social security and welfare activities were initiated in the private sector also by some enlightened employers like Tata Iron and Steel Company, Sassoon Group of Mills at Bombay and Buckingham, and Carnatic Mills at Madras. Tata Iron and Steel Company and Lever Brothers introduced some retirement benefit schemes. Indian Railways took some works of labour welfare which were supervised by welfare officers. Gratuities were paid to the railway employees and the employees of the local bodies and large public companies if they completed certain specified period of approved service. Contributory Provident Fund Schemes were also introduced by Railways and some public utility services like the Tata Electric Plant, Tata Iron and Steel Company, Bombay Electric Supply and Tramway Company. Although such efforts were made by governments and some private industrialist, but most of the employers were either unaware or reluctant to provide social security measures to their employees.

In 1881, government employees were awarded pension benefits for the first time by the Royal Commission on Civil Establishments. The scheme was contributory in nature as the Indian Civil Service members had to contribute 4 per cent of their basic salaries. There was a provision for family pensions also under the Indian Civil service Family Pension Rules. In 1920, the pensions of the civil servants were made fully non-contributory as the government decided to bear all the expenditures of the civil servants’ pensions by abolishing the 4 per cent contributions as recommended by the Royal Commission, presided over by Lord Islington. The Government of India Act of 1919 allowed pensions on retirement in proportion to the length of their services to the temporary government servants joining the service before 1920. Lee Commission of 1924 recommended an increase in the pensions and establishment of provident funds which would act as alternatives to the existing system of pensions. Some other provisions regarding pensions of government employees were made by the Government of India Act of 1935. Later on all the schemes were consolidated and expanded to provide retirement benefits to the entire population working in the public sector.

Remarkable progress in the area of social security of India was achieved with passing of some important legislation like the Workmen’s Compensation Act of 1923, The
Workmen’s State Insurance Act, 1948 and The Employees’ Provident Fund Act, 1952. Till the passing of the Workmen’s Compensation Act of 1923, the workers were paid no compensation except in the event of death. The Act recognized the right of the workmen to compensation in all cases of personal injury by accident and specified industrial diseases. Originally, the Act covered ten classes of workers, but the subsequent amending Acts of 1929, 1931 and 1933 expanded the scope of the original Act.

The Workmen’s State insurance Act 1948 made provision for insurance against sickness, accident and maternity benefits for workers. Workers were categorized into eight groups and the lowest group need not make any contribution to the insurance fund. This act also made provisions for the disabled and the dependents.

Although these two Acts, namely the Workmen’s Compensation Act of 1923 and the Workmen’s State Insurance Act 1948 provided social security benefits to the private sector workers, but they were not concerned with the retirement benefits or old age security. Passing of the Employees’ Provident Fund Act 1952 brought some change in this direction; however the model rules for provident fund for workers were drawn earlier by the Fourth Tripartite Conference in 1944. The Act of 1952 provided for compulsory provident fund for workers in certain industrial establishments. For the effective implementation of the Act, Central Provident Fund Commissioner, Regional Provident Fund Commissioners and inspectors were appointed.

3.4 Operational Retirement Programmes around the World

In this section a discussion is undertaken to present a perspective of contemporary social security structure present in different countries across the globe. For a comprehensive perception of operational retirement plans across the world, six representative countries are selected, namely, China, Egypt, Japan, Sri Lanka, Sweden and U.S.A. Among these countries, China, Egypt and Sri Lanka are developing countries while the rest three are developed nations. Again, China, Sri Lanka and Japan are Asian countries, the first two being India’s neighbours. Egypt, Sweden and U.S.A. are from the continents of Africa, Europe and North America respectively.
3.4.1 China

The Peoples’ Republic of China, located in Eastern Asia, is the most populous country of the world. But, strict population control policies of the Chinese government have resulted in the considerable fall in the birth rate. Average annual percentage of population growth rate was 0.6 during 2010-2015 and the life expectancy at birth was 76.6 years for females and 74 years for males. According to the World Bank data, population aged 65 and above constituted 10 per cent of the total population in 2015 which was only 4 per cent in 1960.

The first law regarding social security of China was enacted on 26th February, 1951. State sector employees were benefited from this law. In subsequent years, several legislations were enacted in the years 1953, 1978, 1995, 1997, 1999, 2005, 2009, 2010 and 2011.

Generally, Basic Pension Insurance covers the employees in urban enterprises and the urban institutions which are managed as enterprises as well as the urban self-employeds. Urban enterprises comprise all state-owned enterprises, regardless of their location. In some provinces, coverage for the urban self-employed is voluntary. In some provinces, special arrangements are made for former farmers who migrate to work in urban areas. Normally, under Basic Pension Insurance the insured persons except the self-employeds contribute nothing. But, local government regulation may determine some contribution rates for them also. Self-employed persons contribute about 12 per cent of local average wages. For the employer, the maximum contribution is 20 per cent of payroll, depending on local government regulations. Contribution rates are not the same in all provinces. For the Basic Pension Insurance, central and local governments provide subsidies when needed.

Pilot rural pension schemes are gradually being merged into the social assistance and individual accounts. In case of rural pilot pension, the insured persons including the self-employeds contribute nothing, but under mandatory individual account they have to contribute 8 per cent of gross insured earnings. The minimum earnings used to calculate contributions are 60 per cent of the local average wage for the previous year.
and although there are variations in the maximum earnings, they may be as high as 300 per cent of the local average wage for the previous year. The employer contributes nothing towards the mandatory individual account, but under rural pilot pension an annual contribution of 100 yuan to 500 yuan is paid to an individual rural pension account. Central and local governments provide subsidies as needed to the individual accounts of insured persons. For rural pilot pension, the government makes a tax-financed contribution of 55 yuan per month per insured person. In the central and western regions, the central government pays the total cost of the scheme; but in the eastern region only partial cost of the scheme is borne by the central government.

Special government-funded, employer-administered systems cover the employees of government and communist party organizations and employees of cultural, educational, and scientific institutions except for the institutions which are not financed under budget.

The qualifying age for basic pension insurance is 60 years for men and professional women, 55 years for nonprofessional salaried women and 50 years for other categories of women. At least 15 years of coverage is necessary for receiving the benefits. If engaged in risky or unhealthy work, the qualifying age is reduced to 55 years for men and 45 years for women with at least 15 years of coverage. Early pension under basic pension insurance is allowed at age 50 for men and age 45 for women with at least 10 years of coverage and with a total disability. It is also allowed at age 55 for men and at age 45 for women with at least 8 to 10 years of continuous coverage and if employed in arduous or unhealthy work.

According to the Central Government guidelines, under mandatory individual account, the qualifying ages are the same as under the basic pension insurance. Here also, the insured must have at least 15 years of coverage to receive the benefits. Lump-sum compensation under mandatory individual account is paid if the insured has less than 15 years of contributions.

The qualifying age for rural pilot pension is 60 for both men and women. Moreover, the person must not be entitled to the urban basic pension. In several provinces, insured persons who have not completed 15 years of contributions are allowed to make a lump-
sum payment or continue to make contributions until qualified for the monthly pension benefits.

A residence-based monthly welfare pension is granted in some areas such as Beijing to both urban and rural residents who have reached retirement age but are not covered under any pension program.

### 3.4.2 Egypt

The Northern African country, Egypt, had an average annual percentage of population growth rate of 1.6 percent during 2010-15 and the life expectancies were 68.7 years for male and 73.5 years for female. Out of the total male population, 7.8 per cent are above 60 years of age while this percentage was 9.7 for females in 2014.

Public pensions in Egypt are provided through three social insurance schemes, which are mandatory. They are: (i) Government Employees Pension Fund, (ii) Pension Fund for military personnel and (iii) Public and Private Enterprises Employees Pension Fund (PPEEPF). The PPEEPF also manages some special schemes for employers and self-employed, individuals working abroad along with casual and informal sector workers.

Alternative social insurance schemes can be established on a voluntary basis by companies employing at least of 100 workers and with total capital of EGP (Egyptian Pound) 10 million. The schemes must provide higher pension benefits than the PPEEPF, but the contribution rates should not exceed the levels of the later. Such schemes are mostly operated by Egyptian banks, affiliated to international financial groups.

Egyptian public pension scheme is a defined benefit scheme financed mainly on a pay-as-you-go principle. The public pension schemes are managed by the government according to the pooling principle, the pension funds of the three schemes are pooled together. All pension reserves and the surpluses thereon are deposited and invested through National Investment Bank.
The public pension system provides coverage to more than 80 per cent of workers in the public and private sectors. Contribution rates to PPEEPF vary according to the category of workers. The insured persons contribute 13 per cent of basic wage or 10 per cent of variable wage. The basic wage includes basic pay up to 650 EGP while the variable wage includes basic pay over 650 EGP and various types of compensations. The employer contributes 17 per cent of basic wage or 15 per cent of variable wage. The government makes 1 per cent matching contribution and holds the responsibility for any deficit. The self-employeds, within the income range of EGP 50 to EGP 900, contribute 15 per cent of monthly income.

Usually, pension benefits are paid at age 60 after 120 months of contributing to basic wage pension and at age 50 with 240 months of contributing to variable wage pensions.

Early retirement pension is authorized after at least 240 months of contributions but with the reduction of pension benefits. Egyptians working abroad can claim pension at age 60 with 180 months of contributions; and casual workers are entitled to receive pension at age 65 after 120 months of contribution.

The pension benefits in each scheme are calculated in accordance with pre-determined formulas. The maximum pension is calculated at 80 percent of the average earning, including basic and variable wages, during the last year before retirement or 920 EGP a month, whichever is less. The minimum pension of 100 EGP a month is paid to all citizens, including the unemployed. Since 1975, voluntary occupational pension plans have been established in Egypt known as ‘Special Insurance Funds’ (SIF). In addition to pension payments, SIFs can provide a range of other benefits at the time of marriage, disability, death of the member, etc. However, these should be in accordance with the decision of a Fund’s board of directors and approval by the Egyptian Insurance Supervisory Authority (EISA). All schemes have to obtain license from the EISA in order to legally operate in Egypt. The SIFs are fully funded.

The private pension schemes are managed by the board of directors, who are elected amongst scheme members at the annual general assembly. In case if an employer, partly or fully finances the pension scheme, can nominate the members of the board
according to the charter of the fund. Moreover, almost all trade unions in Egypt may sponsor occupational plans which provide flat-rate pensions and under certain condition lump sum payments to the adherent members after the attainment of retirement age.

Although the law prescribes voluntary membership in SIFs, however, in practice, participation becomes quasi mandatory due to related mode of financing of most pension funds.

The sources of finance of SIF are: establishing pension fund company’s budget surpluses & other revenues related to its activities, members’ contributions, investment returns and any other sources decided by the fund’s board of directors. Members’ contributions are determined either as a percentage of basic salary or a premium, paid on an annual basis. The rate of the premium depends on the age of the contributor.

There are prescribed investment regulations regarding the investment of pension fund assets. At least 25 percent of total fund assets must be invested in the government guaranteed securities. Not more than 50 percent should be invested in bank deposits. But, at least 60 percent must be invested in real estate, securities listed on the stock market, bank deposits with fixed rate of return or any other investments with fixed return if approved by the EISA.

Although the benefits of SIF are paid mainly in the form of lump sum payments at the time of retirement, it is also paid in case of death and disability. Under special circumstances like marriage, medical treatment, relatives’ death etc., withdrawals prior to retirement are authorised. The SIF are also entitled to provide loans to the members.

3.4.3 Japan

Japan is situated in the eastern part of Asia with the highest proportion of elderly in the world. U. N. data revealed that in 2014, 29.9 per cent of total male population and 35.5 per cent of total female population of Japan were above 60 years of age during 2010-15. Population aged 65 years and above also increased tremendously from 6 per cent of the total population in 1960 to 26 per cent in 2015 (World Bank Data).
expectancies at birth for male and female were 80 years and 86.9 years respectively during 2010-15. But during the same period, average annual percentage of population growth rate was negative (−0.1%).

In Japan, during the pre-modern era, there were charity-oriented communal services for the poor. In the period between the Meiji era and World War II, some measures were adopted to help the poor. *Indigent Person’s Relief Regulation of 1884, Poor Relief Law of 1929, Health Insurance Act of 1927, National Health Insurance Act of 1938 and Labor Pension Insurance Act of 1941* were some of the laws and social insurance schemes introduced during this period. Although these were some steps towards building a mature social security system in future, but they were quite inadequate in terms of coverage as they fail to cover the entire population.

World War II caused havoc and social turmoil in Japan which necessitated the introduction of various social security measures. Various measures were undertaken for helping the needy and for the prevention of infectious diseases. Article 25 of the Constitution of Japan, enacted in 1947, emphasized on the fundamental principles to develop a social security system and laid the foundation for the social security laws enacted in later years. After World War II, Japan’s economy grew rapidly and public pension and health insurance were expanded to cover most of the population. In the end of 1950s, self-employed persons, persons engaged in agriculture and the persons with no previous social security coverage got eligibility for national pensions and national health insurance through the *National Health Insurance Law* and the *National Pension Law*. ‘Universal coverage in public pension and health insurance’ were introduced in April 1961 to cover all Japanese citizens. The pensions were of three types: ‘Kokumin Nenkin’ or the National Pension for the self-employeds, ‘Kosei Nenkin’ or the Employees’ Pension for salaried persons and ‘Kyosai Nenkin’ or Mutual Aid Pension for civil servants. *The Act on Social Welfare Service for Elderly* and the *Maternal and Child Welfare Act* were also enacted.

Since the World War II, Japan experienced not only rapid economic growth to become one of the developed countries, but also prominent demographic changes. Until the
early 21\textsuperscript{st} century, population of Japan was increasing steadily, but the proportion of younger population to the aged have fallen rapidly due to fall in both birth and death rates. Change in family composition, employment structure, growing urbanization, social advancement of women made it necessary to change the social security policies. Facing the challenge of aging society, various laws were enacted. In 1983, \textit{the Health and Medical Service Law for the Aged} was introduced. The \textit{Old People’s Health Care Law}, enacted in August 1982, became effective on 1\textsuperscript{st} February, 1983. The \textit{1984 Health Insurance Amendment}, enacted in August, 1984, became effective on 1\textsuperscript{st} October, 1984 and the \textit{Pension Insurance Amendment} which was enacted in April, 1985, became effective on 1\textsuperscript{st} April, 1986. Finally, in April 1986, the New Pension System was inaugurated, which was a two -tier system. The first tier of this, i.e., the national pension covers the entire population. In addition to this pension, the eligible also receives employees’ pension and mutual aid pension in the second tier.

To the national pension, people contribute from age 20 to 60 and receive benefit at 65. The persons covered under the national pension are classified into three categories according to the method of pension insurance contribution and eligibility to receive the second tier of the pension. Category 1 insured persons are the students and the self-employed who make the insurance contributions as individuals. Category 2 insured persons are mainly the salaried persons who work for the government, companies etc. and the Category 3 insured persons are the spouses, supported by the persons in Category 2. Category 3 persons are exempted from insurance contributions.

In March 2000, the Government of Japan passed a package of pension reform bills. Employees’ pension benefits for new recipients were cut by 5 per cent from April 2000. It was also decided that the age at which employees’ pension benefit is received would be progressively raised from 60 to 65 in such a way that the final level of age 65 would be achieved in 2025 for men and in 2030 for women. In 2004 also, certain pension reform measures were passed which raised the pension contribution amount of both the national pension and the employees’ pension.
Japan’s social security expenditures amounted to 57 trillion yen in 1994 which increased to 94.8 trillion yen in fiscal 2008. In 1994, Social security expenditure was 11.9 per cent of Japan’s GDP and public pension accounted for 51.3 per cent of it. In 2008, the social security benefits for the elderly constituted about 69.5 per cent of total social security expenditures while pension alone constituted 52.8 per cent.

3.4.4 Sri Lanka

India’s neighbour Sri Lanka had an average annual population growth rate of 0.8 per cent during 2010-15 and life expectancies of 71.1 years for male and 77.4 years for female during the same period. According to the World Bank Data, in 1960 about 5 per cent of Sri Lanka’s total population was 65 years or over which has increased to 9 per cent in 2015.

In Sri Lanka, formal private sector employees are covered by defined contribution plans like employee private fund, employee trust fund or approved private sector provident fund. Civil servants were formally covered by public service pension scheme (PSPS), but since 2003 a contributory pension scheme was also introduced, which is a defined benefit type social security scheme. PSPS is a non-contributory pension scheme which is financed from general revenue. It accounted for 2 per cent of GDP in 2005. PSPS benefits are not taxable and are not indexed for inflation too. There is no explicit spousal benefit, but the widows and widowers receive survivor’s benefit. Moreover, there is one separate contributory Widows, Widowers and Orphans Pension Scheme that provides benefits to survivors of public sector workers who die in service. (Willmore & Kidd, 2008).

For public sector workers, the normal retirement age is 60. For others, the qualifying age is 55 years for men and 50 years for women. However, benefits can be received at any age if the company is closed by the government or if the employed women get married.

The Employees’ Provident Fund (EPF) system is governed by the law enacted in 1958. It covers all employed persons including certain self-employed persons. But it excludes
the civil servants, family labour, farmers and fishermen. Employees covered by equivalent schemes may come out of this scheme. The insured persons contribute 8 per cent of their monthly earnings, additional voluntary contribution is permitted. The employer contributes 12 per cent of monthly payroll and can make additional contributions voluntarily. Government contributes nothing to the provident fund.

The EPF does not provide a retirement pension; rather it provides only lump sum payments. A lump sum of total employee and employer contributions plus interest is paid as old age benefit. The Monetary Board of the Employees' Provident Fund sets the interest rate periodically. The interest rate must be at least 2.5 per cent annually. At the time of exit, the entire amount is paid as a lump sum. But, it is possible to withdraw funds from the account every five years. At the end of 2006, the EPF had 11.3 million member accounts, of which 2.0 million were active. The PSPS and EPF cover only the formal sector employees. For the informal sector, there are different contributory pension schemes, but the performance of these schemes is not at all satisfactory. The schemes are voluntary in nature. The oldest and the largest among these schemes is the Farmers' Pension Scheme, started in 1987 and administered by the Agricultural and Agrarian Insurance Board. The Scheme has over 6.8 lakhs accounts, but it is not known how many of them are active. Contributions are collected half-yearly and the benefit received at age 60 is dependent on the age of joining the scheme. The other voluntary schemes are much smaller. For example, the Fishermen's Pension Scheme has only 48000 accounts. The Self-employed Persons' Pension Scheme (Sahana), started in 1996, is administered by the Social Security Board (SSB). In 2006, SSB started five new schemes, namely, ‘Thilina’, ‘Isuru’, ‘Sarana’, ‘Surakuma’, and ‘Dhanalakshmi’. In addition to these, the SSB has introduced various programmes that target different types of workers like ‘Sesatha’, introduced in 2007 for migrant workers, ‘Kam Diriya’, introduced in 2006 for small and medium entrepreneurs, ‘Saraswathi’, introduced in 2008 for artists etc.

There are other schemes like the Sammrudhi and Public Welfare Assistance Allowance. Sammrudhi was started in 1995, but the later is an older scheme, started in 1939. Strictly speaking, Sammrudhi is not a pension scheme, but among other activities, it
also provides income support to the poorest old people. Both the schemes target household with monthly income less than 1500 rupees. But, the performance of the schemes is far from being satisfactory and there is lack of coordination between the two schemes.

In spite of the existence of various schemes for both formal and informal workers, the coverage of pensions is very small in Sri Lanka. Not more than 10 to 15 per cent of population is covered by any form of pension scheme (Willmore & Kidd, 2008).

3.4.5 Sweden

Located in Northern Europe, Sweden is a developed country with life expectancies at birth of 83.8 years for females and 79.7 years for males during 2010-15. In 2014, 23.9 per cent of the total male population and 27.2 per cent of total female population of the country was above 60 years of age (U. N. data).

In Sweden, the public social welfare expenditures for family benefits are the highest among the countries associated with OECD (Ozawa, 2004). As maintained by the 2015 Pension Adequacy Report, “The Swedish pension system is robust, financially sustainable and performs well in terms of income adequacy.” The first social security law of the country was enacted in 1913 and the current system is governed by the laws enacted in 1962; 1998, implemented in 1999; 2000, 2008, 2010, implemented in 2011. A new old-age pension system came into force on 1 January 1999 with certain transitional provisions. Prior to that, a universal and social system existed which still continue to exist along with the new system. The old system provided Guarantee Pension to all persons residing in Sweden and Earnings-related Pension to persons born in 1937 or earlier and earning more than 43,300 kronor a year. Guarantee pension ensures a minimum pension for those who have not worked long enough to be entitled to an adequate earnings-based pension. It is a basic pension for all with no or low capacity to contribute.

Persons born in or after 1954 are fully covered by the new system. Those born between 1938 and 1953 are covered partly by the old system and partly by the new system.
Those born in 1938 are covered 4/20 by the new system and 16/20 by the old; those born in 1939 are covered 5/20 by the new system and 15/20 by the old; and so on. As such a person born in 1953 is covered 16/20 by the new system and 4/20 by the old system.

The new system is a notional defined contribution (NDC) and mandatory individual accounts system. Like the old system, it also provides Guarantee Pension to all persons residing in Sweden. Moreover, it provides Earnings-related Pension to all employed and self-employed persons born in 1954 or later and earning more than 18781 kronor a year in 2014. A Premium Pension is also provided to all employed and self-employed persons earning more than 18781 kronor a year.

The insured person contributes 7 per cent of assessable income for old-age insurance and the maximum annual income used to calculate contribution was 459183 kronor in 2014. The self-employed persons contribute 17.21 per cent of assessable income for old-age insurance. Moreover, insured persons including the self-employeds covered by the new system pay administrative fees for the premium pension. In 2013, it was an average of 0.42 per cent of asset value. The employer pays 10.21 per cent of payroll for old-age insurance plus 1.17 per cent of payroll for the survivor pension. Of the total contributions, 16 per cent finances the earnings-related component and 2.5 per cent finances the premium pension component. The government bears the total cost of the guarantee pension of the new system and permanent disability benefits. In addition the government pays earnings-related contributions for central government civil servants.

For receiving Guarantee Pension under both the old and new system, a person must be of age 65 and a resident of Sweden for at least 3 years. If born in 1938 or later, 94572 kronor a year is paid in 2014 for a single pensioner and 84360 kronor for a married pensioner with at least 40 years of residence and without an earnings-related pension. If born in 1937 or earlier, 96854 kronor a year is paid for a single pensioner and 86287 kronor for a married pensioner. Pensions are payable abroad only within the European Union and European Economic Area and, under certain conditions, in Canada. Benefits are adjusted annually according to changes in prices.
Under the old system, the qualifying conditions for the Earnings-related old-age pension are age 65 and at least 3 years of coverage. For receiving full pension at least 30 years of coverage is needed. The pension is 60 per cent of the insured's average income above 43,300 kronor in the 15 best years of income. Income in years in which earnings were below 43,300 kronor is compensated at 96 per cent for an unmarried pensioner and 78.5 per cent for a married pensioner. The average income level which is used to calculate benefits varies from year to year and the pension is reduced proportionately for periods of coverage of less than 30 years. A reduced pension may be paid from age 61 to 64 or the pension may be deferred until age 70. If the pension is taken before attaining 65 years of age, for each month before age 65 the pension is permanently reduced by 0.5 per cent and it is permanently increased by 0.7 per cent for each month after 65 if the pension is deferred from age 65 to age 70. Benefits are adjusted annually according to changes in wages.

Earnings-related pensions under the new system are based on lifetime earnings reported to the system. Here, the retirement age is flexible; beginning at age 61 and the insured must have annual earnings in excess of 18781 kronor in 2014. For the Premium pension also, the retirement age is flexible, beginning at age 61. The NDC pension is based on an annual index of trends in average wages (other social insurance benefits are counted as earnings), an annuity factor depending on average life expectancy at the time of retirement for the appropriate age cohort (based on the most recent 5-year average of unisex life expectancy projections), and the expected increase of average wages in future years (1.6%). The system has an automatic stabilizer which ensures financial stability by activating the balancing mechanism when the ratio of assets to liabilities falls below one.

Premium pension is based on contributions plus net returns converted into an individual, joint, fixed or variable annuity. One of the controversies related to Premium pension is that as the system is based on individual investment choice, due to financial market fluctuations pensions of people with same lifetime incomes may vary significantly.
For both Earning-related and Premium pensions under the new system, benefits are adjusted annually according to changes in wages. Under the Earning-related pension the entitling contribution is 18.5 per cent of the base income per year. The Earning-related pension system is financed on a Pay-As-You-Go basis, but the Premium pension is a fully funded scheme with individual accounts. Earning-related pension under both old and new systems as well as the Premium pensions are payable abroad.

In addition to the publicly provided pension systems, there are two layers of privately managed pension systems also, namely collective occupational pension, based on collective tariff agreement and personal pension saving scheme.

3.4.6 The U.S.A.

In the U.S.A., about 15 per cent of the total population was aged 65 years or more in 2015. Life expectancy of male was 76.4 years and that of female was 81.2 years during 2010-15. Average annual population growth rate was 0.8 per cent during the same period as per the U.N. data.

The social security retirement plans cover most of the people of the U.S.A. About 96 per cent of American workers are covered by these plans. A worker earns credits towards social security benefits by paying social security taxes. The number of credits that a person needs to get the retirement benefits depends on the year of his or her birth. If a person is born in 1929 or later, 40 credits are needed to receive the retirement benefits. If someone stops working before having enough credits to qualify for benefits, the credits will remain on his or her social security record. He or she can qualify for retirement benefits by adding more credits after returning to work later on. Retirement benefits are directly linked to how much one has earned during the working years. Benefit payment is also affected by the age of retirement. Social security retirement benefits can be received as early as at age 62. However, only reduced benefit is received before attaining the full retirement age. If a person takes early retirement due to health reasons, he or she can apply for social security disability benefits and at the
age of full retirement, these social security disability benefits can be converted into retirement benefits. If someone works beyond the full retirement age, such delayed retirement can lead to more earnings because one additional year of work will add one year of earning to the social security record. Moreover, benefits increase by a certain percentage after the full retirement age.

Widows and widowers can receive Social Security benefits at age 60, or at age 50 if they are disabled. They can also take a reduced benefit on one record and later switch to a full benefit on the other record. For example, a working widow can take widow’s benefit at age 60 and can later switch to her own retirement benefit while attaining the full retirement age, if her retirement benefit is more than the widow’s benefit.

If one is getting social security retirement benefits, some of his or her family members like spouses of age 62 or older, disabled children etc. can also receive benefits. As much as half of the retired worker’s full benefit can be received by a spouse who has not worked or who has low earnings. Each child, up to the age of 18 (19, if a full time student who has not graduated from high school), receives up to one half of the full benefit of the employee. But, there is an upper limit of the benefit that can be paid to a family, normally 150 per cent to 180 per cent of the benefit payment of the employee. If the total benefit is more than this limit, benefits of the spouse and the children will be reduced. However, the benefits of the employee will not be affected. Only the unmarried children can receive the children’s benefits. But in some situation a disabled child can receive benefits if he or she marries someone who is also disabled since childhood.

If someone gets an additional pension from work covered by social security, such a pension will not reduce the social security benefits. But there are some services like the federal civil service, some state or local government employment, work in a foreign country etc., which are not covered by social security. The employees of such services do not pay social security taxes. Still they receive some reduced social security benefits in addition to the pension from their respective work.

Employees of the federal civil service are covered by Federal Employees Retirement System (FERS), which was created in 1986 and became effective from 1st January,
1987. It replaced the Civil Service Retirement System (CSRS). FERS is a retirement plan which provides benefits from three different sources: (i) Basic Benefit Plan (ii) Social Security and (iii) Thrift Saving Plan (TSP). For Basic Benefit and Social Security, the employee has to pay his or her share in each pay period. The employer also pays its share and after retirement, the employee receives the benefits as annuity payments. If the employee quits the federal service, Social Security and TSP can be carried on to the new job.

The TSP part of FERS is an account that the employing agency automatically sets up for the employee. For each pay period 1 per cent of the basic pay of the employee is deposited in his or her account by the agency. The employee can make additional contribution to the TSP account and the agency also makes the matching contribution. The TSP is administered by the Federal Retirement Thrift Investment Board. Basic benefit is a defined benefit plan, but the TSP is a defined contribution plan like the 401(k) plans. The 401(k) plans are named after that section of the Internal Revenue Code which determines the conditions for the favourable tax treatment. In 2007, defined benefit plans covered only 17 per cent of the population while the defined contribution plans contributed about 41 per cent of the population. The Employee Income Security Retirement Act (ERISA), passed in 1974 and other subsequent legislation up to the Pension Protection Act (PPA) of 2006 paved the way for the dominance of 401(k) plans and the decline of the traditional plans. ERISA prescribes some complicated nondiscrimination rules to prevent pension benefits and coverage from being excessively concentrated on high-income employees. The law does not require a very high rate of coverage of the workforce, but is more concerned with parity of treatment of well paid and not so well paid workers. (Mackenzie, 2010)

‘Trust’ is the standard pension-plan vehicle in the U.S.A. According to the Trust fund Data, asset reserves of Old Age, Survivors and Disability Insurance Trust Funds increased from 23042 million dollars in 1957 to 2789476 million dollars in 2014. Although labour unions can also establish plans, but such types of plan are very uncommon. The labour representatives are not given any particular share in the administration and committees of plans sponsored by the corporations.
In all the six countries discussed above, demographic changes have pressurized the systems of retirement benefits. Increasing number of senior citizens along with low birth rate has increased the financial burden and has put a challenge to the sustainability of the pension systems. In the recent decades most of the countries has adopted reforms in social security arrangements to tackle the problem.

The developed countries, Japan, Sweden and the U.S.A. have pension systems which have better coverage and adequacy than the developing countries, China, Egypt and Sri Lanka. In these countries the importance of pension funds relative to the size of the economies (measured in terms of GDP) is also more (Fig. 3.1).

![Fig. 3.1 Pension Fund as a Percentage of GDP](image)

Source: OECD Global Pension Statistics, 2014

In the U.S.A., pension fund is 83 per cent of Gross Domestic Product (GDP) of the country. In Japan and Sweden, the percentages are 30.2 and 9.3 respectively which is much higher than that of the developing countries, Egypt (2%) and China (1.2%) [Fig. 3.1]
3.5 Operational Retirement Programmes in India

Different types of retirement benefit programmes are operating in present India. The Central Government offers various retirement benefit programmes to its employees, similarly different state governments also has their own programmes. Employees of the private organized sector, defence personnel and unorganized sector workers are covered by different plans. Moreover, different retirement plans are offered by the private insurance companies, banks and asset management companies (AMC).

In the current chapter, attempt has been made to discuss the retirement programmes for the Central Government employees, retirement programmes for the military personnel, retirement programme in the private sector, retirement programmes in the unorganized sector and private retirement plans. Retirement programmes of the Government of Assam are discussed in Chapter-4.

3.5.1 Retirement Programmes for the Central Government Employees

Retirement benefits of Central Government employees all-over India include Pension, General Provident Fund, Gratuity, Group Insurance and Commutation of Pension. Although a person can receive pension after completion of 10 years of service but, full pension is received only after completion of minimum 20 years of service. Before 1\textsuperscript{st} January, 2006, for receiving full pension qualifying service of at least 33 years was required. As per the recommendations of the 6\textsuperscript{th} Central Pay Commission, retirees aged 80 years or more receive additional pensions which increase with the increase in their age up to 100 years. On attaining 100 years of age the retirees receive additional pensions equal to 100 per cent of their basic pensions.

For less than 10 years of qualifying service, an employee does not receive any pension but receives a special type of gratuity, known as ‘service gratuity’. Service gratuity is different from retirement gratuity and is received in addition to it. Admissible amount of service gratuity is half month’s emoluments for each completed six monthly period of qualifying service. While calculating qualifying service, if a fraction of a year has to be
taken into account, then three months or more is treated as one completed six monthly period.

Pension is calculated with reference to average emoluments and the full pension is half of the average of the emoluments drawn during the last 10 months of the service or half of the last working month’s emoluments drawn, whichever is more.

It is optional for a Central Government servant to commute a portion of pension, into a lump sum payment. However, such commutation should not exceed 40 per cent of the pension. Payable lump sum amount is calculated with reference to the Commutation Table constructed on an actuarial basis. The monthly pension is reduced by the portion commuted and the commuted pension is restored on the expiry of 15 years from the date of receipt of the commuted amount.

According to the General Provident Fund (Central Services) Rules, 1960, all permanent government servants can subscribe to the General Provident Fund (G.P.F.). All temporary government servants after continuous service of one year and all re-employed pensioners excluding those eligible for the Contributory Provident Fund, are also eligible to subscribe to the G.P.F. Subscribers subscribe monthly to the Fund but cannot subscribe during the period of suspension, if the case arises. Subscriptions to the G.P.F. are stopped 3 months prior to the date of retirement. Rates of subscription are not less than 6 per cent of subscriber’s emoluments and not more than his or her total emoluments. The rate of interest on G.P.F. is subject to change according to the notifications of the government and for the financial year 2015-16, the rate was 8.7 per cent. General Provident Fund Rules are applicable only to the employees who receive pensions. For non-pensionable employees, the Contributory Provident Fund Rules (India), 1962 are applicable. In case of Contributory Provident Fund (CPF) also, a subscriber subscribes monthly to the Fund, except during the period of suspension. Rates of subscription are not less than 10 per cent of the emoluments and not more than the total emoluments of the employee. The Government also contributes to the Fund at the rate of 10 per cent which is credited to the subscriber’s account.
Retirement gratuity or gratuity is a one-time lump sum benefit which is paid to the employees in gratitude of the service rendered by them. The minimum 5 years' of qualifying service along with the eligibility to receive service gratuity is essential to receive the gratuity. The rate of gratuity is one-fourth of a month’s basic pay plus dearness allowance for each completed six monthly period of qualifying service. There is no minimum limit for the amount of gratuity for a Central Government employee, but the maximum limit is Rs. 10 lakhs. The 7th Central Pay Commission has increased the maximum limit of gratuity to Rs. 20 lakhs.

Central Government employees also receive Group Insurance benefits. While in service, a monthly contribution is paid by the employee, which is credited in a Saving Fund and on which interest is received. Soon after retirement, payments under this scheme are made in accordance with the Table of Benefit which takes into account interest up to the date of retirement.

Central Government employees and the employees of the central autonomous bodies, joining the services on or after 01.01.2004, are covered by National Pension System (NPS). NPS is mandatory for all employees of central government (except armed forces) appointed on or after 1st January 2004. It is a defined contribution system which was introduced to reduce the fiscal liability arising out of the existing defined benefit system.

The NPS has two tiers. Tier-I is mandatory for all government servants joining service on or after 1.1.2004. In Tier-I, government servants make a contribution of 10 per cent of their Basic Pay, Dearness Pay (DP) and Dearness Allowance (DA) which is deducted from their salary bill every month. The government makes an equal matching contribution. Since 1st April 2008, the pension contributions of central government employees covered by the NPS are being invested by professional Pension Fund Managers (PFM) in line with the investment guidelines of government. The contributions and returns thereon are deposited in a non-withdrawable pension account. In addition to the above pension account, it is optional for each individual to join Tier-II account, which is withdrawable. The government makes no contribution into this account. The assets under this account would be managed in the same manner as the pension. The
accumulations in this account can be withdrawn anytime without assigning any reason. But, a government servant can exit from the Tier-I of NPS only after attaining the age of superannuation. At the time of exit, it would be mandatory for the employee to invest 40 per cent of pension wealth for purchase of an annuity from a life insurance company authorized by the Insurance Regulatory and Development Authority (IRDA). The rest 60 per cent can be withdrawn as a lump sum. Up to 40 per cent of the NPS corpus is made tax free by the union budget 2016. The annuity would provide for pensions for the lifetime of the employee. If any government servant leaves the scheme before attaining the age of superannuation, the mandatory annuitisation will be 80 per cent of the pension wealth.

According to the Annual Report 2013-14 of Pension Fund Regulatory and Development Authority (PFRDA), on 31st March, 2014 there were 6.5 million subscribers of NPS out of which 21 per cent were central government and central autonomous bodies’ employees and 31 per cent state government and state autonomous bodies’ employees. Central government and central autonomous bodies accounted for 50 per cent of the total asset under management of NPS and state governments and state autonomous bodies accounted for 42 per cent of the assets.

The expenditure of the government on retirement benefits is increasing over the years (Fig.3.2). The combined revenue expenditures of the centre and the states on pension and other retirement benefits have increased from Rs. 5184 crores in 1990-91 to Rs. 238328 crores in 2013-14 (Revised Estimate).
Fig. 3.2: Combined Revenue Expenditures of the Centre and the States on Pension and Other Retirement Benefits (in Rs. Crores)

Source: Indian Public Finance Statistics, 2014-15

3.5.2 Retirement Programmes for the Military Personnel

Military personnel of India are not covered by the defined contribution NPS. There is a defined benefit pension system for the persons retired from military services, which is based on the Pension Regulations for the Army 1961 (revised as Pension Regulations for the Army, 2008), Pension Regulations for the Air Force 1961, Navy (Pension) Regulations 1964 and Entitlement Rules for Casualty Pensionary Awards 1982 (revised as Entitlement Rules for Casualty Pension Awards 2008).

The eligibility condition and the benefits of the retirement programme are not the same for all the military personnel. For the Personnel Below Officer Rank (PBOR), the eligibility for receiving the pensions is 15 years of service while the officers need 20 years of service to get the pension benefits. The method of calculating pension is also different for the two categories. For the officers the pension is equal to the 50 per cent of the average quantifiable (reckonable) emoluments they draw during the last 10 months of service. The basis for calculation of pensions for the PBORs is the maximum
scale of pay of the rank and group they hold in the last 10 months before retirement. From April 2004, the minimum pension is fixed at Rs 1913 per month.

In case of natural death of military personnel during service or after retirement, their dependent family members get family pension at the uniform rate of 30 per cent of the quantifiable emoluments drawn by the deceased personnel in the last month of service. However, the lower limit of family pension is set at Rs 1913 per month. The dependent family members of those military personnel who are re-employed after leaving military service and are members of Employees Provident Fund Organisation, are also eligible for receiving military family pension. In case of death attributable to military service, special family pension is granted at the uniform rate of 60 per cent of quantifiable emoluments last drawn by the deceased personnel and the minimum amount of special family pension is fixed at Rs. 7000 per month. There is also liberalised family pension which is granted to the dependents of such military personnel who was killed in war or war like operations, encounter with terrorists, anti-insurgency operations etc. Such pension is equal to the quantifiable amount last drawn by the deceased. In addition, there are various provisions for disability and war pension for the defence personnel. Moreover, military officers can commute 43 per cent while PBOR can commute 45 per cent of their pensions. These rates are higher than the civilians who cannot commute more than 40 per cent of their pensions.

The pension system for the non-military government servants of India has already shifted to the defined contribution NPS. But, the shifting of the military pension system to a defined contribution system will be very complicated as the service tenures of military personnel are low as compared to the civilians. They will require a high contribution rate to replace the Net Present Value (NPV) of the benefits payable from a very early age (Sane & Shah, 2011).

A significant pension reform movement by the ex-servicemen of the Indian Armed Forces is the movement for One Rank One Pension (OROP). For decades, the Armed Forces were demanding that irrespective of the date of retirement, persons retiring from the same rank after rendering same length of service should get same pension.
Presently, instances are there when pensions of personnel who retired from higher ranks decades ago are lower than those of personnel who retired from lower ranks recently. In November, 2015 the Central Government has notified the OROP scheme, but it is not fully accepted by the veterans. The scheme proposed to revise pension every five years while the ex-serviceman are demanding at least two yearly pension revisions.

3.5.3 Retirement Programmes Focusing on the Private Sector

Retirement benefits of the employees of organized private sector of India are governed by the *Employees’ Provident Fund and Miscellaneous Act, 1952*. This Act which is applicable to all the states of India except Jammu & Kashmir, defines an employee as “any person who is employee for wages in any kind of work, manual or otherwise, in or in connection with the work of an establishment and who gets wages directly or indirectly from the employer and includes any person employed by or through a contractor in or in connection with the work of the establishment.” This Act is the principal Act under which social security schemes for employees, working in industrial and service establishments are provided. The Employees Provident Fund Organisation (EPFO) is looking after not only the employees of private sector establishments, but the workers of public sector undertakings like Bombay Port Trust, BSNL (Bharat Sanchar Nigam Limited), ONGC (Oil and Natural Gas Corporation), MTNL (Mahanagar Telephone Nigam Limited), NHAI (National Highway Authority of India), Indian Railways, CPWD (Central Public Works Department), Jawaharlal Nehru Port Trust are also covered by it. However, the student-trainees of any establishment who are paid stipends during their training periods are not covered by the EPF (Employees’ Provident Fund). The EPF is applicable to all establishments, whether belonging to private sector or public sector, which fall under the notified classes of establishment pursuing any one of the 187 activities listed in the schedules of factory and non-factory activities.

*The Employees’ Provident Fund and Miscellaneous Act, 1952* applies to:

a) Every establishment which is a factory engaged in industry specified in Schedule I to the Act and in which 20 or more persons are employed and
b) Any other establishment or class of establishment employing 20 or more persons which may be specified by Central Government by notification in official gazette.

However, there are certain exceptions to this rule, e.g., in case of cinema halls the ceiling is set at 5 or more employees.

Even if the provisions of Provident Fund Act are not applicable in a particular establishment, if employer and majority of employees agree, the Central Provident Fund Commissioner can apply the provisions to that establishment by issuing a notification in Official Gazette. Once the provisions of Act become applicable, it continues to be applicable even if number of employees fall below 20. In subsequent years, the Act has been extended to factories, mines other than coal mines, plantation of tea, coffee, rubber (excluding the Tea Factories in Assam), agricultural farms, trading and commercial establishments engaged in purchase, sale or storage of goods, establishments of exporters, importers, advertisers, stock exchanges, hotels and restaurants, canteens, establishments of Attorneys, CA (Chartered Accountants), engineers and contractors, architects and medical practitioners, hospitals, travel agencies, banks doing business only in one state, some financial establishments other than banks, General Insurance, expert services, clubs and societies rendering services to their members, building and construction Industry, poultry farming, private university, college or schools etc. With effect from 01.04.2001., the Act has been extended to courier services, aircraft or airlines other than aircraft or airline owned or controlled by government and establishment engaged in rendering cleaning and sweeping services. The Act provides for contributory provident fund, pension and deposit linked insurance scheme.

*The Employees’ Provident Fund Scheme, 1952,* is a defined contribution plan whereby employees contribute a portion of their wages to provident fund with a matching contribution by employers. Amendment dated 22.09.1997. made it necessary for both the employees and employer to contribute to the fund at the rate of 12 per cent of the basic wages, dearness allowance and retaining allowance, if any, payable to employees per month.
The Employees’ Pension Scheme, 1995 is applicable to all the establishments to which The Employees’ Provident Fund and Miscellaneous Act, 1952 is applicable. It incorporates the Employees’ Family Pension Scheme, 1971. The 1995 scheme provides for superannuation pension and survivor pension. In addition to the employers’ contribution, government contributes to it at the rate of 1.16 per cent of employees’ wages. Employees do not contribute to this scheme although they contributed towards the 1971 scheme. From 05.09.2014, the statutory wage ceiling has been fixed at Rs. 15000 per month or below. This means that only those employees whose monthly basic pay plus dearness allowance is Rs 15000 or below, is considered as compulsory contributors. Persons exceeding this limit can also be subscribers to EPF, but from 01.09.2014, such voluntary members are debarred from getting the benefits of the pension scheme while the compulsory members are automatically linked to it. Once a person becomes a member of EPF, even if he or she changes employment and starts to receive more than Rs. 15000 per month, continues to be a member and remains eligible to receive all the benefits including those of the pension scheme. Employers’ contribution is bifurcated into provident fund and pension fund.

Employers in some establishments in order to reduce the costs by avoiding EPF keep the salaries of the employees slightly above Rs. 15000 so that they do not fall under the compulsory contributor category. Again, some show the small basic pay with larger share of allowances to reduce the share of employer’s contribution.

The Employees’ Deposit Linked Insurance Scheme, 1976, provides insurance cover in the event of employees’ death. The employer contributes towards the insurance fund at the rate of 0.5 per cent of wages, while government contributes at the rate of 0.25 per cent of wages of the covered employee. The employee does not contribute to the fund.

The Employees’ Provident Fund and Miscellaneous Act, 1952 is not applicable to certain establishments. It is not applicable to (a) any establishment registered under Cooperative Societies Act or State law relating to cooperative societies, employing less than 50 persons and running without the aid of power (b) any establishment belonging to or under control of Central Government or a State Government and whose
employees are entitled to benefit of contributory provident fund or old age pension. (c) to any establishment set up under any Central or State Act and whose employees are entitled to benefit of contributory provident fund or old age pension.

In the union budget of 2016, the government proposed to levy a tax on 60 per cent of the EPF corpus of private sector employees, if the employees do not invest the amount in annuity schemes. The aim of this proposal was to encourage the private sector employees to invest in retirement schemes. An attempt was also made to bring EPF in conformity with the NPS, which is not tax free. However, due to strong protest from different corners, the proposal has to be withdrawn.

**3.5.4 Retirement Programmes in the Unorganised Sector**

National Commission for Enterprises in the Unorganised Sector in their Report on Conditions of Work and Promotion of Livelihoods in the Unorganised Sector defined the term unorganised or informal sector as the sector “consisting of all unincorporated private enterprises owned by individuals or households engaged in the sale or production of goods and services operated on a proprietary or partnership basis and with less than ten total workers.” Entry to this sector is comparatively easier and the scale of operation is small and the production technique is mostly labour intensive. The same Commission maintains that the unorganized workers “consists of those working in the unorganized sector or households excluding regular workers with social security benefits provided by the employers and the workers in the formal sector without any employment and social security benefits provided by the employers.”

According to the 66th round of NSSO (National Sample Survey Organisation) survey of 2011-12, the unorganized labourers constituted 88 per cent of the total labour force of the country. But until 2010-11, these labourers did not have any formal pension system. Initially, NPS was only for government employees. In an attempt to provide old age income security to all citizens of India including the economically disadvantaged sections of the society, government along with PFRDA introduced NPS-Lite. In the Union Budget of 2010-11, the Finance Minister announced the ‘Swavalamban’ scheme which was applicable to all the unorganized sector workers who opened accounts under
the National Pension Scheme (NPS) with a contribution of Rs. 1000 to Rs. 12000 per annum. The Government of India contributed Rs. 1000 per annum to each of the NPS account opened in the years 2010-11, 2011-12, 2012-13 and 2013-14. Subject to the fulfillment of the eligibility criterion, the NPS accounts opened in the year 2009-2010 were also allowed to be benefitted from Swavalamban. Grants from Government of India were used to fund the scheme. A person could exit from the Swavalamban scheme if he or she attained 50 years of age and has completed 20 years under the scheme. However at the time of exit the person had to annuitise at least 40 per cent of pension wealth. The mandatory annuitisation increased to 80 per cent if the person had chosen to exit before the age of 50 or with tenure of less than 20 years. In any situation the annuitized amount had to be sufficient to provide a minimum pension of Rs. 1000 per month. As on 31st March, 2014 there were 2.8 million Swavalamban subscribers who accounted for 43 per cent of total subscribers of NPS (Annual Report 2013-14, PFRDA).

However, to increase further the coverage of old age security to the unorganized workers, the government in the union budget of 2015-16 announced the Atal Pension Yojana (APY) which came into effect from 1st June, 2015. Indian citizens in the age group 18 to 40 years can join this scheme, but they must not be covered by any formal pension scheme and must not be income tax payers. The existing Swavalamban subscribers, aged 18-40 years are automatically shifted to APY. Depending on the contribution the person will receive fixed monthly pension of Rs.1000, Rs. 2000, Rs. 3000, Rs. 4000 or Rs. 5000 at the age of 60 years. After the death of the subscriber, his or her spouse will get the pension at the same rate and when the spouse will die, the nominee will get back the pension wealth. The pension wealth ranges between Rs. 1.7 lakhs to Rs. 8.5 lakhs depending on the contributions.

To be eligible for joining APY, the person must be a bank account holder and the Aadhaar is regarded as the primary document for identification of beneficiaries. The subscriber has to choose the monthly pension amount and the contribution is calculated accordingly depending on his or her age. However, during the accumulation phase the subscriber can change the chosen pension amount and the contribution amount gets
changed accordingly. Lower the age of entry, lower is the rate of contribution and vice versa. For example, to get a monthly pension of Rs. 5000 at the age of 60 years, a person who joins APY at 18 years has to contribute Rs. 210 monthly while a person who joins APY at 40 years has to contribute Rs. 1454 monthly. Similarly to get a monthly pension of Rs. 1000 at 60, an entrant of 40 years has to contribute Rs. 291 monthly while a person who enters the scheme at 18 years has to contribute only Rs. 42 per month.

The government co-contributes to the accounts of every subscriber at the rate of 50 per cent of total contributions of the subscriber or Rs. 1000 per annum, whichever is lower. But, this co-contribution of the government will continue only for 5 years, from financial year 2015-16 to 2019-20 and only for those subscribers who joined the scheme during the period 1st June - 31st December, 2015. Later, the date is extended up to 31st March, 2016.

From the personal interviews with bank officials dealing APY, it is known that widespread illiteracy of the unorganized sector workers is a major impediment in expanding the coverage of APY. Most of the illiterate workers are either unaware about APY or are reluctant to join the scheme in the fear of official hassle.

In comparison to Swavalamban, Atal Pension Yojana (APY) offers a defined pension. Under Swavalamban, the pension amount depended on the amount of annuitized pension wealth, although the minimum pension had to be Rs. 1000 per month. But, in case of APY, the subscriber knows even at the time of entry the amount of pension he or she is going to receive at the age of 60.

The maximum age of entry to APY is 40 years and therefore a person joining APY has to wait for at least 20 years to get the benefits. However, taking into consideration the rate of inflation, the cost of living will be more after 20 years and the value of the fixed amount of pension of Rs.1000 to Rs. 5000 will also be less. Hence, such a fixed amount of pension may not be of much help after 20 years or more. This is one of the reasons of the workers not getting attracted towards APY.


3.5.5 Private Retirement Plans

Different private retirement plans, managed by the insurance companies, banks and the Asset Management Companies (AMC) are operating in India. These plans differ in terms of mode of premium payment, pattern of asset allocation, types of annuities offered etc. Moreover, some plans provide life coverage in addition to the retirement benefits.

The unit-linked plans invest maximum amount of their assets in equities or equity related instruments like convertible preference shares, fully or partly convertible debentures etc. Usually such plans offer different types of equity exposures depending on age of the policy holders and their willingness to take risks. Younger people who have more years to retirement can take more risks and hence offered more equity exposures. Kotak Retirement Income, Life Time Super Pension of ICICI, HDFC Unit-Linked Pension, Bajaj Allianz Retire Rich, Reliance Smart Pension Plan, SBI Life-Retire Smart are examples of some unit-linked pension plans operating in India. On the other hand, traditional plans are generally non unit-linked plans. SBI Life-Saral Pension, LIC New Jeevan Needhi, ICICI Forever Life are traditional pension plans. The unit-linked pension plans generally provide high returns, but they are subject to higher risks. Equity based asset allocation is highly affected by various types of market fluctuations. The factors affecting securities markets lead to volatility of the equity based plans. However, some unit linked plans provide capital protection and guaranteed maturity benefits. For example, Bajaj Allianz Retire Rich provides guaranteed vesting benefit of 101 per cent of the total premiums paid.

Along with retirement benefits, life insurance coverage is provided by many plans like ICICI Forever Life, Aviva Next Innings Pension Plan. In the unfortunate event of death of the policy holder, ICICI Forever Life gives the sum assured with guaranteed additions and vested bonuses to the nominee. Many retirement plans are endowment plans which give life coverage and a lump sum amount at the time of maturity. Bajaj Allianz Life Long Assure is such a plan. This plan provides guaranteed death benefit up to 300 per cent of the sum assured.
In case of deferred annuity plans, a corpus is accumulated through premium payments over the policy term after which the pensions start. Such plans offered by the life insurance companies have two stages. In the first stage, which is the accumulation stage, premiums are paid which leads to the accumulation of money. This accumulated money is invested by the company in securities approved by IRDA (Insurance Regulatory and Development Authority). In the second stage, which is the annuity stage, the policyholder starts to get pension. He or she can withdraw up to 33 per cent of the accumulated amount as a lump sum and the rest can be received as pension. But, in case of immediate annuity plans, pension begins immediately after depositing a lump sum amount. Generally the retired government officers who get a sizeable amount at the time of retirement invest in immediate annuity plans to get an annuity which can help in maintaining their pre-retirement standard of living as the government pension is only the half of the last pay drawn before retirement. Deferred annuity plans are mostly preferred by company executives, small businessmen etc. Bajaj Allianz Pension Guarantee, SBI Life- Annuity Plus, LIC Jeevan Akshay VI are some immediate annuity plans while LIC New Jeevan Needhi, Bajaj Allianz Retire Rich are examples of deferred annuity plans.

Depending on the scheme, there are different modes of premium payments like monthly, quarterly, half yearly or annual. Some plans offer single premium option where premium is to be paid only once. ICICI Pru-Life Link Pension SP, IDBI Retiresurance Milestone Pension Plan, Reliance Immediate Annuity Plan, LIC Jeevan Akshay VI are some single premium plans.

Some plans offer 'life annuity' while some others provide 'annuity certain' or 'guaranteed period annuity'. In case of 'life annuity' the pension is paid to the annuitant until his or her death. In case of 'annuity certain' or 'guaranteed period annuity' the annuity is paid for a specific number of years. Again, some plans offer different annuity options, for example, ‘Annuity Plus’ plan of SBI Life offers as many as 14 annuity options.

The mutual funds are very useful instruments for long term financial planning. They provide the opportunity of professionally managed diversified investments. But in India
until recently, only two asset management companies were allowed to operate retirement funds, namely Unit Trust of India (UTI) and Franklin Templeton. But, recently Reliance Capital Asset Management Limited, Housing Development Finance Corporation (HDFC) and State Bank of India (SBI) have also opened their retirement funds.

UTI Retirement Benefit Pension Fund and Templeton India Pension Fund, which was formerly known as Kothari Pioneer Pension Plan, are debt oriented mutual funds. They invest up to 40 per cent of their assets in equities and equity related instruments and the rest is invested in fixed income securities like non-convertible debentures, bonds etc. The large percentage of investments in such type of stable low risk securities provides protection against market fluctuations. But they cannot provide high return as compared to the equity based investment. The mutual funds that recently entered the Indian financial market are mostly equity oriented as for example, The Reliance Retirement Fund, launched in February 2015, has a Wealth Creation Scheme which allocates 65 to 100 per cent of assets in equities and 0 to 35 per cent in debt and money market securities. Although high return can be expected from equity based funds, but if there is decline in the value of the securities held in the scheme, the policy holders have the risk of losing their investments. Moreover, if the asset management company invests in unlisted securities, the risk of the portfolio increases further.

The pensioner may sometimes face some situations like sudden deterioration of health when there is urgent need of funds. In order to meet such unexpected needs of the pensioners, many nationalized banks like State Bank of India, United Bank of India, Bank of India, Canara Bank, Central Bank of India provide loans to the pensioners. State bank of India (SBI) offers pension loans to all the central government and state government employees who have accounts in the SBI, but the age of the pensioner should not be more than 72 years. The maximum amount of pension loan that can be taken from SBI by a pensioner is his or her total pensions of 12 months or Rs. 1 lakh, whichever is less. The United Bank of India offers loans up to the maximum amount of Rs. 2 lakhs subject to 12 months’ gross pensions. This bank also offers a housing loan
to senior citizens for repairing existing houses, purchasing new houses or securing shelter in old age home.

3.6 Long Run Relationship of Pension and Provident Fund with Some Other Financial Assets in the Household Sector of India

Bank deposits, non-bank deposits, shares and debentures, pension and provident fund are some important financial assets held by the household sector of India. Assets held under pension and provident fund is directly related to post retirement security, but assets under shares and debentures, bank deposits and non bank deposits also provide retirement security. For example, assets under shares and debentures provide immediate earnings as well as post retirement earnings. In order to study the interrelationship between changes in pension and provident fund and changes in some other financial assets of the household sector of India, a multivariate time series analysis is done by using RBI (Reserve Bank of India) data for the period 1974-2014. In the beginning the variables are log transformed and all the transformed variables are found to be non-stationary at level but stationary at first difference by using the Augmented Dickey-Fuller Unit Root Test. Then the lag order of ‘3’ is selected at the minimum AIC (Akaike Information Criterion) [Table3.1]

<table>
<thead>
<tr>
<th>Lag</th>
<th>AIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>10.333</td>
</tr>
<tr>
<td>1</td>
<td>4.75917</td>
</tr>
<tr>
<td>2</td>
<td>4.91755</td>
</tr>
<tr>
<td>3</td>
<td>4.54898*</td>
</tr>
<tr>
<td>4</td>
<td>4.6537</td>
</tr>
</tbody>
</table>

Source: RBI Data
After finding out the lag order, Johansen Test of Cointegration is used and from this test it is found that there is cointegration of rank ‘1’ as both trace statistic and max statistic are less than 5 per cent critical values for rank ‘1’ (Table 3.2).

### Table 3.2: Johansen Test of Cointegration

<table>
<thead>
<tr>
<th>Maximum Rank</th>
<th>Trace Statistic</th>
<th>5% Critical Value</th>
<th>Max Statistic</th>
<th>5% Critical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>48.8847</td>
<td>47.21</td>
<td>32.2985</td>
<td>27.07</td>
</tr>
<tr>
<td>1</td>
<td>16.5862*</td>
<td>29.68</td>
<td>9.6778</td>
<td>20.97</td>
</tr>
<tr>
<td>2</td>
<td>6.9084</td>
<td>15.41</td>
<td>6.5354</td>
<td>14.07</td>
</tr>
<tr>
<td>3</td>
<td>0.3730</td>
<td>3.76</td>
<td>0.3730</td>
<td>3.76</td>
</tr>
</tbody>
</table>

Source: RBI Data

Since there is cointegration, we have used the Vector Error Correction Model (VECM), the result of which is presented in Table 3.3 and Table 3.4.

### Table 3.3: Result of VECM

<table>
<thead>
<tr>
<th>D_InPP</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>ce1 L1</td>
<td>-0.0943*</td>
</tr>
<tr>
<td>InSD LD</td>
<td>-0.1313***</td>
</tr>
<tr>
<td>L2D</td>
<td>-0.1049***</td>
</tr>
</tbody>
</table>

PP---- Pension and Provident Fund
SD---- Shares and Debentures
* & **** Significant at 10% and 1% respectively

<table>
<thead>
<tr>
<th>Equation</th>
<th>Chi Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>ce1</td>
<td>574.0013***</td>
</tr>
</tbody>
</table>

Source: RBI Data
The result shows that there is no long run causality running from the other variables to the changes in pension and provident fund. Although the L1 coefficient in the model of D-InPP (1st difference of InPP) is negative, but it is not significant at 5 per cent. But, all the lagged values of changes in shares and debentures individually have short run causality with the changes in provident and pension fund as the lagged coefficients of changes in shares and debentures are significant at 1 per cent. The lagged coefficients of changes in bank deposits and that of non-bank deposits are not significant indicating that the lagged values of these variables individually do not have short run causality with the changes in provident and pension fund.

In the cointegrating equation, the beta coefficients for changes in bank deposits and changes in shares and debentures are both significant indicating cointegration of these two variables with changes in pension and provident fund. The signs of the coefficients

```
Table 3.4: Result of VECM (continued)

<table>
<thead>
<tr>
<th></th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>lnPP</td>
<td>1</td>
</tr>
<tr>
<td>lnBD</td>
<td>-0.4816***</td>
</tr>
<tr>
<td>lnSD</td>
<td>-0.8687***</td>
</tr>
<tr>
<td>lnNBD</td>
<td>-0.1173</td>
</tr>
<tr>
<td>Constant</td>
<td>1.7790</td>
</tr>
</tbody>
</table>

BD---- Bank Deposits
NBD---- Non Bank Deposits
****---- Significant at 1%

Postestimation Test for Linear Hypothesis: chi2(9): 40.21***
No autocorrelation at lag order 1,2,3 by Lagrange-multiplier Test

Source: RBI Data
```
are negative implying that decrease in the assets held as bank deposits and shares and debentures leads to increase in the amount of assets held as pension and provident fund and vice versa. Along with pension and provident fund, people regard bank deposits as well as shares and debentures as sources of post retirement security and therefore when they increase their investments in these assets they reduce investments in pension and provident fund and vice versa.

3.7 Conclusion

Since the last part of the 19th century, starting from Germany, institutionalized retirement benefit programmes have evolved in different parts of the world which are providing retirement support to the senior citizens. At present, there are a plethora of retirement benefit programmes across the globe, each trying to provide economically secure lives to the elderly citizens. The British rulers introduced formal retirement benefit programmes in India, but at that time those were not as diversified as they are today. The contemporary Indian retirement benefit system is well diversified with the intent of providing retirement benefits to all sections of the society. Besides retirement benefit programmes people also invest in other alternative forms of assets to secure their post retirement earnings. However given the fact that the coverage of population under retirement programmes is extremely limited, India still has a long way to go in the path of achieving the target of universal coverage of retirement benefits.