



Research Article

OLD AGE SECURITY IN INDIA: AN ANALYSIS OF THE OPERATIONAL RETIREMENT PROGRAMMES

Angana Barua*

Department of Economics, Pandu College, Guwahati, Assam

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ABSTRACT

Old Age Security is one of the most critical aspects of social security and has immense socio-economic significance, especially in a developing country. In developing and underdeveloped countries, subsistence income and meager saving combines lethally with inflation and rising cost of health care, thus pushing those affected to a frightening chasm of poverty and destitution. Under the circumstances, expenditures on retirement programmes, both public and private have been increasing at a tremendous rate, and are rationalized by the fact that pension plans are merit goods that carry enormous welfare implications for a very large and venerated section of the society which is very vulnerable.

In India, the issue of old age security is addressed in multiple levels. While there are interventions by the central, state and local governments for both their employees as well as for the public, the private sector independently has their own versions of retirement plans for their employees. The state pursues an affirmative action plan to provide succor to the workers of the unorganized sector which presents the biggest challenge to the objective of universal pension coverage of the aged in India. The market demand for pension plans is serviced by the corporate sector which responds to market signals with their offerings of multi-featured private pension plans.

Over the years the government pension system was found to be unsustainable, especially with the exigencies of fiscal prudence as articulated by the central and the various state FRBM Acts. The state has responded to the crisis by adopting the New Pension Scheme which was designed to be self-sustaining and which dramatically reduced the pension liabilities of the state towards its employees.

The state has been sensitive to the grossly inadequate provision of old age security in the country, especially for the poor and vulnerable, in the unorganized sector. While it has sought to cover the private sector employees with the The Employees' Provident Fund Scheme, 1952, and the The Employees' Pension Scheme, 1995, the real challenge lies in extending the protection of pension to the unorganized sector. The introduction of the Swavalamban Scheme and the Atal Pension Yojana constitute affirmative action in the right direction, which seeks to fulfil a task that is as magnanimous as it is gargantuan. Obviously, state intervention is inadequate unless the process is supported and supplemented by the civil society.

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INTRODUCTION

In economics *social security* refers to the protection that the society can provide to the vulnerable groups within the population from adverse circumstances. Such protection is provided by interventions through institutionalized programmes or schemes targeting people who are disadvantaged due to retirement, illness, unemployment, disability etc. *Old Age Security* is one of the most critical aspects of social security and has immense socio-economic significance, especially in a developing country.

Given that a large proportion of the population ekes out a subsistence living in the informal sector, both in the rural and urban milieu, old age is synonymous with a sudden disruption even to this meagre flow of income.

In developed countries, enhanced private saving is undertaken as an alternative safeguard to social security subscription, as in the absence of a credible social security support people have strong incentive to save during their working years which constitutes the source of financial support in retirement. This has been substantiated by Feldstein (1977) who furnished evidence that other things remaining the same, the countries with larger social security system tended to have lower private saving rates. However, this hardly applies to developing and

**Corresponding author: Angana Barua*

Department of Economics, Pandu College, Guwahati, Assam

underdeveloped countries, where subsistence income and meager saving combines lethally with inflation and rising cost of health care, thus pushing those affected to a frightening chasm of poverty and destitution. In fact, in the absence of any safety net for the aged, a significant proportion of the population are forced to continue working, well past their retirement age which have negative health implications for the individuals concerned and adverse ethical insinuation for the society that allows it.

Traditionally the poor in the underdeveloped economies sought to indemnify their old age by having a large number of children who were considered to be a source of old age support. Thus, old age security or more precisely, the lack of it has always had an overwhelming impact on fertility rate of such poor economies accentuating the uncontrollable population growth. However, in recent years growing modernization and urbanization has gradually reduced the expectations on children as a source of security for the old age. In fact, in India the erosion of the joint family system has led to a huge crisis for the huge aged population who has been put in a very vulnerable position with no universal support system to take over their responsibility. Thus poverty and fear has penetrated the core of such a population thus infringing on their legitimate and basic right to spend their remaining days in dignity and tranquility.

While for the developed countries, the share of population over 60 years was 23 percent in 2013, it is expected to rise to 32 per cent in 2050. But more significantly, less developed countries are also experiencing increase in the size of the aged population, and it is expected that their proportion will increase from 9 per cent in 2013 to 19 percent in 2050. (World Population Ageing, 2013). Under the circumstances, provision of old age security to such a large component of the population presents a huge challenge for the society in general and the state in particular. The developed countries that had already traversed the demographic transition have an operational infrastructure in place to address the problem. Hence the present crisis of a huge population of unsecured and destitute aged is mainly confined to the developing countries, which has the political and ethical responsibility to ensure that their senior citizens live a life of dignity that is free from the anxiety of deprivation and destitution.

This paper explores the concept of old age security, especially the variants of pension programmes. It seeks to analyse various old age security programmes that are in operation in India and their implications.

Retirements Programmes Models

Expenditures on retirement programmes, both public and private have been increasing at a tremendous rate, such that, today it constitutes a major head of expenditures in most countries. There is a major intervention by the state in the retirement programmes, where substantial amount of public money is expended on pension plans which do not possess any public goods characteristics. Such interventions are rationalized by the fact that pension plans are merit goods that carry enormous welfare implications for a very larger and venerated section of the society which is so very vulnerable. The positive externalities emanating from a well functioning old age system has an all pervading impact on the social, political, economic and most important moral spheres of the society.

Most of the old age security system are operated either on funded or unfunded basis. In a funded pension system, a fund is built up from matching contributions by the employers and employees who are covered under the system. In a fully funded system, at any point of time the fund must be adequate to pay the benefits to the retired workers. For this, the money value of this fund must equal at least the discounted present value of pensions promised to the members of the system in the future. However, this system excludes those people who do not join the fund as benefits are exclusively confined to the fund.

On the other hand, when the pensions for retired workers are entirely financed by tax contributions of currently employed workers, it is known as the Pay-As -You -Go (PAYG) system. In this version of pension system, a payroll tax is imposed whose proceeds are earmarked for the payment of retirement benefits in the particular year. The present workers who pay these taxes will get the same benefits after retirement which will be borne by the future workers.

Pension Programmes can further be classified into a *defined benefit* system, where the benefits of the system are defined beforehand and do not depend on the contributions of the people covered by the system. Conversely, in a *defined contribution* system only the rates of contributions are defined and the benefits are linked to the contributions of the participants. The employer bears all the risks relating to inflation, investment return and longevity under a *defined benefit* system whereas in a *defined contribution* system, the account holder bears all such risks. The funded systems are defined contribution systems while the PAYG systems generally belong to the defined benefit category. The PAYG system favours the earlier generation too much while a funded system is in excessive favour of the later generations. This implies that in case of a PAYG system the burden falls heavily on the younger generation while opposite is the case in a funded system. (Mirrlees, 1997).

Operational Retirement Programmes in India

In India, the issue of old age security is addressed at multiple levels. While there are interventions by the central, state and local governments for both their employees as well as for the public, the private sector independently has their own versions of retirement plans for their employees. The state pursues an affirmative action plan to provide succor to the workers of the unorganized sector which presents the biggest challenge to the objective of universal pension coverage of the aged in India. The market demand for pension plans is serviced by the corporate sector which responds to market signals with their offerings of multi-featured private pension plans.

Retirement Programmes for the Government Employees

In India, the total number of government employees in 2011-12 was 284.85 lakh (Directorate General Employment and Training, 2016), that included 20.33 lakh central government employees and 171.42 lakh employees of the state governments. Constituting a privileged section of the population, the government employees across the country are privy to retirement benefits that include *Pension, General Provident Fund, Gratuity, Group Insurance* and *Commutation of Pension*. A government employee is eligible to draw pension after completion of ten years of service though a full

pension is entitled only after completion of a minimum of twenty years of service.

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 that cannot exceed forty percent of the pension. The monthly pension is reduced by the portion commuted and the commuted pension is restored on the expiry of fifteen years from the date of receipt of the commuted amount.

Moreover all permanent government servants covered under pension can subscribe to the *General Provident Fund (G.P.F.)* at rates that are not less than six per cent of subscriber's emoluments and not more than his or her total emoluments. The rate of interest accruing in G.P.F. deposits is fixed at the discretion of the government and was 8.7 percent in the financial year 2015-16. However for non-pensionable employees, the *Contributory Provident Fund Rules (India), 1962* are applicable which entitles an employee to subscribe at least ten per cent of the emolument to his or her account that is enhanced by a matching contribution of ten percent by the government.

On retirement government employees is entitled to *Gratuity*, which is a one-time lump sum benefit which is paid to the employees in gratitude of the service rendered by them. The gratuity admissible is one-fourth of a month's basic pay plus dearness allowance for each completed six monthly period of qualifying service with a maximum limit of twenty lakh rupees.

With the state governments employees also enjoying similar retirement benefits the expenditure of the government on retirement benefits has been growing at an explosive rate. As evident in Fig.1, the combined revenue expenditures of the centre and the states on pension and other retirement benefits have increased from Rs. 5184 crore in 1990-91 to Rs. 238328 crore in 2013-14, making the fiscal liability for the state untenable (Ministry of Finance, 2015). A massive restructuring of the state pension system was undertaken with the introduction of the *New Pension System*, which aimed to structure the pension system in a self-sustaining mode thus easing the fiscal pressure on the government.

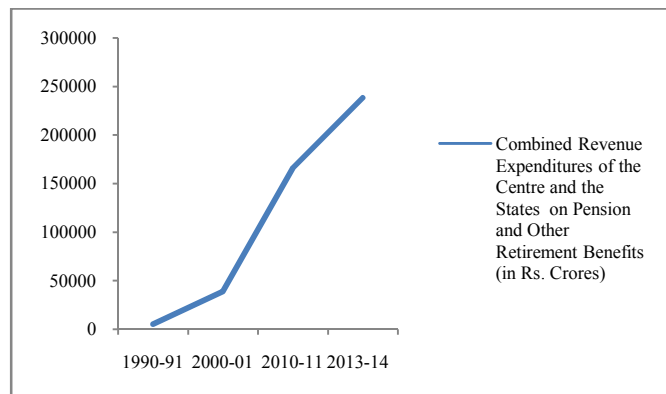


Fig 1 Combined Revenue Expenditures of the Centre and the States on Pension and Other Retirement Benefits

Source: Indian Public Finance Statistics, 2014-15

The New Pension System

The Indian government, despite being one of the largest employers, can claim to enjoy one of the lowest government employees to population ratio in the world. This is evident when India's government employees to population ratio of 1.5 percent is compared with Sri Lanka (4.5 percent), China (3 percent) and more starkly with that of USA (6-8 percent) and other Scandinavian countries (15 percent) (Schiavo-Campo *et al*, 1997).

However despite the evidence against the accusation of over-hiring by the government it remains a fact that the burden of pension payment of the central government has been increasing at a tremendous pace. The situation is far more serious among the state governments whose aggregate pension liabilities have gone up from 5.2 percent of their revenue receipt in 1980-90 to 11.0 percent in 2001-02 (Bhattacharya, 2003). Bhattacharya has projected that the state pension liabilities would increase from Rs. 28,197 crores in 2001-02 to Rs. 1, 89,000 crores in 2010-11 implying a doubling of the ratio of pension liabilities to total revenue receipt of the states from 11.0 percent to 22.3 percent.

The rapidly growing pension liabilities of the various tiers of government were putting immense pressure on the public budget which was already under strain with its commitments under the FRBM Act that was demanding urgent fiscal consolidation, inter-generational equity in fiscal management, and long run macroeconomic stability. Under the circumstances, the country undertook a major restructuring exercise where the entire state pension system was converted into a defined contribution system and rechristened as the *New Pension System (NPS)*. Under the regime, all government employees and the employees of the government autonomous bodies, joining the services on or after 01.01.2004, are covered by NPS.

The NPS has been structured into two tiers. Tier-I is mandatory for all government servants who make a contribution of 10 per cent of their Basic Pay, Dearness Pay (DP) and Dearness Allowance (DA) that is supplemented by equal matching contribution by the government. The contributions and returns thereon are deposited in a non-withdrawable pension account. To ensure the safety and viability of the fund, the pension contributions of the government employees covered by the NPS are invested by professional Pension Fund Managers (PFM) in line with the investment guidelines of government.

Besides the Tier-I account, it is optional for each individual to join Tier-II account where the government makes no contribution, but which is withdrawable. In contrast, a government servant can exit from the Tier-I of NPS only after 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) that would provide for lifetime pension.

The Pension Fund Regulatory and Development Authority (2014), has estimated that in 2014 there were 6.5 million subscribers of NPS, out of which 21 per cent were central government and central autonomous bodies' employees while 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.

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*. The Employees Provident Fund Organisation (EPFO) covers not only the employees of private sector establishments, but also the workers of public sector undertakings like Bombay Port Trust, ONGC, MTNL, NHAI, Indian Railways, Jawaharlal Nehru Port Trust and others. Thus, the EPF is applicable to all establishments, whether belonging to private sector or public sector, which falls under the notified classes of establishment pursuing any one of the 187 activities, listed in the schedules of factory and non-factory activities. Over the years the ambit of the Act has been extended to cover more and more sectors encompassing diversified goods and 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. An amendment of 1997 has made it mandatory for both the employees and employer to contribute to the fund, 12 per cent of the basic wages, dearness allowance and retaining allowance, if any, payable to employees per month.

The Employees' Pension Scheme, 1995 provides for superannuation and survivor pension exclusively for those employees whose monthly basic pay plus dearness allowance is Rs 15000 or below. Here the employees do not have any liabilities; rather it is the employers and the government who contributes to the account at the rate of 1.16 per cent of employees' wages. Employers in some establishments seek to avoid EPF and compulsory employer's contributor by keeping the salaries of the employees slightly above Rs. 15000 while others, attempts to reduce their liabilities by breaking up the salary into smaller basic pay with larger share of allowances.

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.

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 they choose not to invest the amount in annuity schemes. The aim of this proposal was to encourage the private sector employees to invest in retirement schemes thus bringing in some degree of conformity between EPF and NPS, which is not tax free. However, due to strong protest from different corners, the proposal had to be withdrawn.

Retirement Programmes in the Unorganized Sector

Unorganized or informal sector has been define 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." (National Commission for Enterprises in the Unorganised Sector, 2007)

Unorganized labourers constituted 88 per cent of the total labour force of the country (NSSO, 2013), though until 2010-11, they were not protected by any formal pension system. Initially, 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 as an extension of NPS, that was confined to only government employees.

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. Under the scheme, the central government contributes Rs. 1000 per annum to each of the NPS account opened, subject to the fulfillment of the eligibility criteria. A person could exit from the *Swavalamban* scheme if he or she attained 50 years of age and had 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. 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 (Pension Fund Regulatory and Development Authority, 2014).

However, to enlarge 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. 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 with the passing of the spouse, 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.

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.

Despite the good intensions, widespread illiteracy and ignorance among the unorganized sector workers constitute major impediments in expanding the coverage of APY. Most of the illiterate workers are either unaware about APY or are reluctant to join the scheme in apprehending official hassle.

In comparison to *Swavalamban*, Atal Pension Yojana (APY), which offers a defined pension, is much more attractive. Under *Swavalamban*, the pension amount depends on the amount of annuitized pension wealth, whereas in the 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.

However, in APY, the subscriber has to wait a minimum of twenty years before he or she has access to the pension. Under the circumstances, high inflation and rising cost of living will devalue the fixed pension that is receivable. This is a major

reason that makes APY unappealing for many of the potential subscribers.

Private Retirement Plans

In India, there is a huge market for pension products that is being harnessed by corporate entities like insurance companies, banks and the Asset Management Companies (AMC). These plans are characterized by their built-in flexibility and variety in terms of mode of premium payment, pattern of asset allocation, types of annuities offered etc. Moreover, in order to meet multiple requirements of subscribers, some hybrid plans provide life coverage in addition to the retirement benefits.

The highest growth potential are vested with the unit-linked plans which invest a major component 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. Thus younger people who have more years to retirement can absorb greater risks and hence are offered more equity exposures in contrast to older subscriber. *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 major 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 which offer high degree of safety to its subscribers as the fund is predominantly parked in debt instruments which are relatively less subject to market risk. In contrast, the unit-linked pension plans generally provide higher returns, but that is accompanied with higher risks as their asset allocation is greatly affected by market fluctuations. The factors affecting securities markets lead to volatility of the equity based plans. However, some unit linked plans had managed to combine high returns with some modicum of safety by providing capital protection and guaranteed maturity benefits. A case in the point is *Bajaj Allianz Retire Rich*, which provides guaranteed vesting benefit of 101 per cent of the total premiums paid.

Many companies have responded to multiple requirements of their clients by offering hybrid plans that ensures life insurance coverage along with retirement benefits. Thus in plans like *ICICI Forever Life* and *Aviva Next Innings Pension Plan* the sum assured with guaranteed additions and vested bonuses is payable to the nominee in the unfortunate event of death of the policy holder. On the other hand, 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 one such a plan that provides guaranteed death benefit up to 300 per cent of the sum assured.

Another variation of retirement plans are the deferred annuity plans. Here the corpus accumulated through premium payments over the policy term are invested by the company in approve securities which generate the annual pension. In such plans the subscriber can withdraw up to 33 per cent of the accumulated amount as a lump sum and the rest can be received as pension. Deferred annuity plans like *LIC New Jeevan Needhi* and *Bajaj Allianz Retire Rich* are examples of deferred annuity plans which are mostly preferred by company executives, small businessmen etc. who are not covered by

formal retirement plans. As opposed to deferred annuity plans, immediate annuity plans starts pension payment immediately after the lump sum amount is deposited. Such plans includes *Bajaj Allianz Pension Guarantee, SBI Life- Annuity Plus, and LIC Jeevan Akshay VI*, and are generally subscribed by retired government officers who on 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.

Depending on the scheme, there are different modes of premium payments like monthly, quarterly, half yearly or annual. Some plans like *ICICI Pru-Life Link Pension SP, IDBI Retiresurance Milestone Pension Plan, Reliance Immediate Annuity Plan, LIC Jeevan Akshay VI* offer single premium option where premium is to be paid only once. In return, 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 while in 'annuity certain' the annuity is paid for a specific number of years.

The importance of mutual funds as an instrument of retirement support has been growing in the last few years. Till recently only two assets management companies, namely, *Unit Trust of India (UTI)* and *Franklin Templeton* were allowed to operate retirement funds. But, of late *Reliance Capital Asset Management Limited, Housing Development Finance Corporation (HDFC)* and *State Bank of India (SBI)* have also opened their retirement funds that are mostly equity based. Though such growth oriented funds promise high returns on investment, but if there is decline in the value of the securities held in the scheme, the policy holders run the risk of losing their investments. Moreover, if the asset management company invests in unlisted securities, the risk of the portfolio increases further.

In order to meet unexpected financial 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 lakh 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.

CONCLUSION

The universal provision of old age security is without doubt an essential prerequisite to ensure that the aged population do not experience the indignity of impoverishment and destitution, especially in the developing countries where nearly half the population survive on subsistence level income and where saving is practically non-existent. In fact, designing such a critical form of social security structure can shield the old and the vulnerable from a sense of helplessness that results in a deep gnawing fear and hopelessness, which is nothing but another manifestation of deep rooted poverty.

In India, with the slowdown of the mortality rates, the population is expected to age in the coming decades. The problem of security of the aged population is exaggerated by the breakdown of the traditional joint family which was refuge for those who retire from the labour force and also the exigencies of modern urban life where the time-honored community support structure is absent leaving the old and vulnerable, totally exposed without anybody to fall back upon.

The provision of pension support was initially available only for the government employees and also to those who were in selected public sector organizations. Over the years the government pension system was found to be unsustainable, especially with the exigencies of fiscal prudence as articulated by the central and the various state FRBM Acts.

The state has responded to the crisis by adopting the New Pension Scheme which was designed to be self-sustaining and which dramatically reduced the pension liabilities of the state towards its employees. A big lacuna has been removed in the NPS, as it allows individuals who are not in government service to participate in process, thus doing away with the discrimination of earlier systems.

The state has been sensitive to the grossly inadequate provision of old age security in the country, especially for the poor and vulnerable, in the unorganized sector. While it has sought to cover the private sector employees with the *The Employees' Provident Fund Scheme, 1952*, and the *The Employees' Pension Scheme, 1995*, the real challenge lies in extending the protection of pension to the unorganized sector. The introduction of the *Swavalamban Scheme* and the *Atal Pension Yojana* constitute affirmative action in the right direction, which seeks to fulfil a task that is as magnanimous as it is gargantuan. Obviously, state intervention is inadequate unless the process is supported and supplemented by the civil society.

References

1. Bhattacharya B.K.(October, 2003) *Report of the Group to Study the Pension Liabilities of the State Governments*. New Delhi: Reserve Bank of India
2. Directorate General Employment and Training (2016) *Statistical Year Book India 2016*, Ministry of Labour and Employment, Government of India
3. Feldstein M. (1977), 'Social Security and Private Savings: International Evidence in an Extended Life Cycle Model', *The Economics of Public Services*, an International Economic Association Conference Volume, 1977
4. Ministry of Finance (2015), *Indian Public Finance Statistics 2014-2015*, New Delhi, Government of India
5. Mirrlees J.A. (1997), 'The Economic Consequences Of Ageing Populations', *Philosophical Transactions: Biological Sciences*, 352(1363):1881-1886
6. National Commission for Enterprises in the Unorganised Sector (2007) *Report on Conditions of Work and Promotion of Livelihoods in the Unorganised Sector*, New Delhi, Government of India
7. NSSO(2013), *Employment and Unemployment Survey: NSS 66th Round: July 2009-June 2010, 8th Quinquennial Survey*, New Delhi, Government of India
8. Pension Fund Regulatory and Development Authority (2014) *Annual Report 2013-14*. New Delhi, Government of India
9. Schiavo-Campo, Tommaso & Mukherjee (1997), *Government Employment and Pay in Global Perspective*. Washington D.C.: World Bank
10. United Nations, Department of Economic and Social Affairs, Population Division (2013) *World Population Ageing 2013*. New York: United Nations Organisation.

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