WORKING PAPER NO: 498

Social Security Schemes: A Case for Universalisation

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Year of Publication – December 2015

Abstract

Prime minister's recent introduction of new social security schemes to ensure insurance and pension for all remains a laudable step. These schemes were launched on May 9, 2015 and are expected to enhance welfare of citizens, especially workers in unorganized sector. The schemes are Pradhan Mantri Suraksha Bima Yojna (PMSBY), an ultra-low cost accident insurance scheme, a life insurance scheme, Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY), and Atal Pension Yojana (APY), a contributory pension scheme with defined benefit outgo. The paper attempts to evaluate the nature of social security schemes in the field of life/accident insurance and pensions, with special reference to the recently announced schemes. Primarily, it argues that an introduction of contribution element in new schemes limits the coverage. It recommends the need for a properly crafted universal scheme for social security to achieve wider coverage. A defined flat benefit scheme financed through taxation in the areas of life/accident insurance and pensions remains a better option as it can guarantee wider coverage of social security.

Key words: universal pension, old age security, social security schemes.

Social Security Schemes:
A Case for Universalisation

Prime minister's recent introduction of new social security schemes to ensure insurance and pension for all is a laudable step. These schemes were launched on May 9, 2015 and are expected to enhance the welfare of the citizens, especially for the workers in the unorganized sector. The schemes are Pradhan Mantri Suraksha Bima Yojna (PMSBY), an ultra-low cost accident insurance scheme; Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY), a life insurance scheme; and Atal Pension Yojana (APY), a contributory pension scheme with defined benefit outgo. Since, these schemes are considered to be welfare oriented, they remain significant for a developing country like India because development requires not only attaining high GDP but also improvement in the quality of life of citizens. Therefore, to promote improvement in the quality of life, ensuring provision of adequate social security to citizen becomes important.

Social security might be defined as a provision of protection for individuals, and households, to ensure their health and income, especially in cases of old age, unemployment, sickness, invalidity, work injury, maternity or loss of a sole earning member. Thus, social security can help in reduction of poverty and inequality and therefore support inclusive growth through enhancing human capital and productivity. It indirectly also influences domestic demand and facilitates growth of an economy.

The need for such highly subsidised programs arises in India because nearly ninety percent of workers in India earn their livelihood in the unorganised sector, which lacks social security schemes. The population in the unorganised sector thus remains most vulnerable to various unforeseen shocks which hinder poverty alleviation and inclusive growth.

Social security schemes are mainly of two types. The first being unfunded and the second being funded. An unfunded scheme is one in which there is no creation of fund specified for the purpose of social security. The benefits are paid directly from the taxes and financed from government budgets. In contrast a funded scheme is based on contributors' payments. The amount of fund collected is invested in markets and returns on the fund are used to pay to the contributor on his exit from the scheme. The conditions of exit from the scheme are decided prior to joining the scheme. The social security benefits are received by respective contributors of the scheme, exclusively.

The paper tries to critically analyse the nature of social security schemes in the field of life/accident insurance and pensions with special reference to the newly announced schemes by the Central Government in India. It puts forth the need for a properly crafted universal scheme in this arena because of its better coverage feature in numbers, though there could be a trade-off in quality, depending on the fiscal cost to the exchequer. Primarily, new schemes are limited in coverage because 'contribution' element limits the coverage of citizens. It further argues that defined flat benefit schemes financed through taxation (benefits without direct individual contribution) remains a better option to provide social security in the areas of life/accident insurance and pensions, as it can ensure better social protection and coverage, especially in India where poverty is rampant and generally per capita income levels are low, thus, implying that in the present stage of development of the economy, it may be more appropriate to have an unfunded scheme, universal in nature.

The remainder of the paper is organised into five sections. Section 2 discusses the importance of social security and the different social security schemes that were available in India for the unorganised sector prior to announcement of new schemes. Section 3 discusses about government expenditure on pensions and their coverage. The salient features of recently launched new schemes are discussed in Section 4. The arguments for universalisation of schemes with some estimations and projections are presented in section 5. Section 6 finally, offers some conclusions and recommendations.

Section II: Social Security - A Review

Since independence, social protection policies in India largely covered workers in organised sector. The workers belonging to the unorganized sector have largely remained outside the social security net and had to depend largely on their families for an informal arrangement of social security. But with increasing nuclearisation of families, a need for social security in India for workers in the unorganised sectors has emerged.

Social security measures, especially accident and health insurance, can help in increasing longevity of life. Various studies have observed that an increase in life expectancy contributes economic growth of a nation (Barro and Lee, 1994; Barro and Sala-I- Martin 1995; Barro, 1996; Sachs and Warner, 1997; Bloom and Malaney, 1998; Bloom and Williamson, 1998; Bloom and Sachs, 1998; Hamoudi and Sachs, 1999; Bloom et al, 1999; Bloom, Canning and Malaney, 2000; Gallup and Sachs, 2000). Another interesting study found that an increase in life expectancy by a year contributes to four percent increase in output (Bloom, Canning and Sevilla, 2004). It can therefore be argued that social expenditure on merit goods like health not only enhance welfare but also increase labor productivity and contribute to economic growth.

The lack of preparation for retirement in terms of social security contribution is not unique to developing countries but has also been observed in advanced economies as retirement process takes place over the course of a working life and there could be competing objectives for prioritization of income (Schieber and Rappaport, 1993). In general, the population is not prepared for old age and retirement period even in advanced countries. This is for various reasons like rising needs of income and shrinking retirement income (Munnell, Hou and Webb, 2015).

Absence of social security arrangement is not merely a problem for individual workers and their families but has wider implications for the economy and society. A low earning power coupled with health and economic vulnerabilities lead to poverty that reduce aggregate demand in the economy. The indirect cost of absence of social security might well be increasing social costs resulting from monitoring and managing of ill health accompanied by various related social and labour problems, including absenteeism. On the contrary, a work force with higher capability and social security could contribute to higher growth, which in turn would enhance aggregate demand in economy through higher purchasing power of the vast mass of the work force in unorganised sector (NCEUS, 2006).

It is estimated that in 2004-05, the total labour force in informal sector was 92 percent and contribution of the sector to gross value added was 50 percent (NCEUS, 2008). [1] This implies that unorganised sector contributes significantly to the Indian economy. However, workers engaged in unorganized sector are generally considered the poorest in India and most exposed to shocks and stresses which threaten their livelihood (Breman, 1996). This is because the average productivity (and hence average income and savings) of workers employed in unorganized sector is much lower in comparison to their counterparts employed in the formal sector. This can be attributed, partly, to lack of appropriate labour and social security laws, which also hinder growth of the sector (Storm and Naastepad, 2007).

[1] NSSO 61st Round

The social security problems of workers in the unorganized sector may be divided into December 1, 201512/1/2015two categories**.** The first being deficiency or lack of capability to save because of inadequate employment, low earnings, low health and educational status, amongst other factors, as these workers belong to poor sections of society. The second arises out of adversity in the sense of an absence of adequate safety net to meet emergencies such as ill-health, accident, death and old age **(**Kannan and Srivastava, 2006**)**.

Historically, a number of initiatives have been taken by the central government to extend social security to workers. However, such social security entitlements initially have remained mainly for workers in organized sector, and, in some cases, if available for the unorganised sector have been discretionary based on occupation. To directly address issues related to workers in unorganised sector, certain social security initiatives were introduced in 1995 under the National Social Assistance Programme (NSAP). It mainly involved transfer of cash from the government to the individual and was launched with the objective of providing some financial security to poor and destitute persons in event of old age, death of breadwinner, and maternity. The scheme is 100 percent funded by the central government to ensure that a minimum level of social protection is available for poor and old persons, throughout the country. This protective social security programme is provided to very poor citizens without any reference to their status as workers. Apart from this, there are also other initiatives (from both central and state governments) that are targeted for poorer sections of society and select occupational groups, but are mostly contributory in nature. The major objectives of these measures were to reduce poverty and economic inequality, and to improve quality of life. These schemes are Baristha Pension Bima, National Family Benefit Scheme, Janashree Bima Yojana, Universal Health Insurance Scheme, Rastriya Swasthya Bima Yojana, Indira Gandhi National Old Age Pension Scheme (IGNOAPS), Annapurna Scheme, New Pension Scheme (NPS) and Swavlamban scheme (also known as NPS Lite).

In India, targeted social measures, though lacking coverage, yield substantial results for beneficiaries. In Karnataka, ninety percent of surveyed workers for a study observed that benefits of schemes towards old age, unemployment, death, sickness and employment injury were relevant for them. Similarly, women in the reproductive age groups also felt that maternity benefits were important (Rajasekhar, et. al., 2005).

Section III: Performance of the Existing Pension and Life/Accident Insurance Scheme

This section discusses about the performance of pension and insurance schemes by government. Social security schemes were introduced for formal sector after independence but in form of provident funds. However, from pre-independence period, India has had social security schemes for formal sector, especially for the civil servants. A state managed pension scheme for formal sector, managed by the Employees Provident Fund Organisation (EPFO) was introduced in 1995. In order to address workers in the informal sector, IGNOAPS was set up in the same year, targeting those who were below poverty line.

A major reform was introduced in 2009 when NPS was floated for all Indian citizens. Earlier, from January 1, 2004, a mandatory NPS had already been introduced for new recruits in central government civil services. A meagre 1.2 percent of working population had subscribed to NPS till 2013. Amongst these, more than half were civil servants for whom the scheme was mandatory (Sanyal, Gayithri and Erappa, 2011; Singh, Bharati and Sanyal, 2015). However, over the last two years, there has been some increase in number of subscribers (Table 1).

Table 1: Number of Subscribers in NPS

Year	Total Subscribers	Funds (Rs. Billions)
2011-12	2813000	131.9
2012-13	4493589	284.9
2013-14	6252544	462.7

Source: http://financialservices.gov.in/

The nominal weighted rate of returns on NPS (Table 2) except for the NPS Lite, and real rate of return are persistently negative (Table 3) which implies that there is a need to think of alternative pension schemes which extend income security as well as extensive coverage for Indian citizens.

Table 2: Nominal Weighted Returns of NPS[2] (per cent)

	Date of Inception	2008-09	2009-10	2010-11	2011-12	2012-13
Central Government	April 1, 2008	13.8	10.0	8.3	5.8	12.4
State Government	June 25, 2009	-	8.1	10.7	6.6	13.0
Equities Tier1	May 1, 2009	-	13.1	8.8	-7.4	8.4
Corporate Bonds Tier 1	May 1, 2009	-	10.3	11.8	11.0	14.2
Government Bonds Tier1	May 1, 2009	-	9.7	11.7	5.5	13.5
NPS lite	October 4, 2010	-	-	13.5	9.0	13.4
Corporate CG	November 5, 2012	-	-	-	-	12.5
Equities Tier 2	November 14, 2009	-	1.9	9.03	-8.5	8.6
Corporate Bond Tier 2	November 14, 2009	-	5.8	11.7	11.1	13.0
Government Bonds Tier 2	November 14, 2009	-	12.2	10.3	5.5	13.7

Source: http://financialservices.gov.in/pensionreforms/PRStatistics/NPS%20Returns.pdf

Table 3: Real Weighted Returns of NPS[3]

	Date of Inception	2008-09	2009-10	2010-11	2011-12	2012-13
Central Government	April 1, 2008	7.4	1.6	-3.8	-3.1	3.1
State Government	June 25, 2009	-	-0.3	-1.4	-2.3	3.7
Equities Tier 1	May 1, 2009	-	4.7	-3.2	-16.3	-0.9
Corporate Bonds Tier 1	May 1, 2009	-	1.9	-0.2	2.1	4.9
Government Bonds Tier 1	May 1, 2009	-	1.3	-0.3	-3.4	4.2
NPS lite	October 4, 2010	-	-	1.5	0.1	4.1
Corporate CG	November 5, 2012	-	-	-	-	3.2
Equities Tier 2	November 14, 2009	-	-6.5	-3.0	-17.4	-0.7
Corporate Bonds Tier 2	November 14, 2009	-	-2.6	-0.3	2.2	3.7
Government Bonds Tier 2	November 14, 2009	-	3.8	-1.7	-3.5	4.4

Source: Authors' computation.

The total government expenditure on pensions in 2010-11 was 3.2 percent of GDP or 15.8 percent of total revenue receipts of the central and state governments. It implies, prima facie, that 8.6 percent of total population is receiving 3.2 percent of GDP, which is quite substantial for a developing country like India. However, a disaggregated analysis reveals that the expenditure on social pensions in 2010-

[2]The contributory new pension scheme was initially introduced for central government and state government employees. The scheme was extended for corporates in 2012 in such a manner that the investment pattern is same as central government (i.e. the funds will be managed by three fund managers, Life Insurance Corporation of India, State Bank of India and Unit Trust of India). This came to be known as Corporate CG scheme. In February 2013 the scheme was discontinued. Tier 1 represents the pension account based on mandatory contribution where as Tier 2 is pension account based on voluntary contribution. Further, for opening of a Tier 2 pension account, opening of Tier 1 account is mandatory. The money accumulated in Tier 1 and Tier 2 can be invested in Equities (E), Corporate Bonds (C), and Government Bonds (G).

[3]Inflation has been proximated by GDP Deflator. Real Interest rate = Nominal Interest Rate – Inflation Rate.

11 for elderly who have worked in the non-government sector accounted for 0.1 percent of GDP and 0.5 percent of revenue receipts. On the contrary, civil service pension expenditure for retired government employees was as high as 3.1 percent of GDP and 15.3 percent of the revenue receipts of India (Singh, Bharati and Sanyal, 2015).

Thus, as discussed above, of number of beneficiaries covered under the existing pension system about 11.1 percent of the 60+ population or 1.0 percent of total population is receiving 3.1 percent of GDP or 15.3 percent of the revenue receipts under civil service pension schemes. In contrast, 17.4 percent of the 60+ population or 1.5 percent of the total population is receiving only 0.1 percent of GDP or 0.5 percent of total revenue receipts under IGNOAPS. An approximate 71.5 percent of the total 60+ population of country receives no pension at all. This highlights the need for fresh thinking on a minimum Beveredgian pension to cover majority of working force.

There are also numerous issues with existing schemes of life insurance in India. The total direct expenditure on life insurance schemes by Government of India in 2008-09 was about Rs. 55 crore that is 0.001 percent of GDP. However, the indirect support to life insurance schemes through contribution from social security fund was only about Rs. 267 crore in 2008-09 which was approximately about 0.005 percent of GDP (Choudhury and Srinivasan, 2011). Further, according to NCAER, a total of 18.5 percent of the 'uninsured households' (those who do not have life insurance) have a perception that insurance is irrelevant because households either prefer present to future, and/or have distrust on the companies, and/or feel no need of insurance (NCAER, 2011). Thus, existing myopia of these households about future will clearly be an impediment to coverage of newly announced schemes.

Section IV: New Schemes: A Critical Appraisal

This section deals with newly launched schemes in sectors of Insurance (life and accident) and Pension (old age) that provides social security to its subscribers. An attempt is made to critically analyse these schemes and finally proposing some recommendations.

IV.1: Pradhan Mantri Suraksha Bima Yojna (PMSBJ)

This contributory scheme of PMSBJ is an annual accident insurance scheme offering a cover for death and disability because of an accident, at a nominal subscription of Rs.12 per annum per member. It intends to cover all willing-to-join savings bank account holders in age group of 18 to 70 years in participating banks. Under the PMSBJ, benefit to victims (death by accident) family is Rs. 2 lakh, while in case of disability it is Rs. 1 lakh.

Empirically, according to National Crime Records Bureau (2013), 0.3 million people in the age group of 18-60 years died because of accidents in 2013. Of these, seventy-five percent were male. One can assume that many of the victims (given age group) were earning members who travelled outside and therefore were more likely to meet with accidents. Thus, in case of a death by accident, it is family or household members of the victim who are likely to be most affected due to sudden economic shock. It is also necessary to extend coverage of this scheme to all elderly and not restrict to some elderly below 70 years.

IV.2 Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY)

PMJJBY is a life insurance scheme and all savings bank account holders in the age of 18 to 50 years in participating banks will be entitled to join. In case of multiple saving bank accounts held by an individual in one or different banks, the person would be eligible to join the scheme through one savings bank account only. The annual contribution is Rs.330/- per member which translates to less than Re. 1 per day. The benefits are Rs. 2 Lakh in case of death.[4]

In PMJBY, the most important gap is the same amount of premium irrespective of the age of person who joins the scheme. This part of the scheme remains confusing as the person who joins at a young age and renews regularly ends up contributing more than a person who joins late, and in spite of this, they get the same amount in case of death. Also the scheme is restricted to individuals with age below 50 years and excludes all elderly.

[4]http://financialservices.gov.in/jansuraksha/final%20rules%20PMJJBY.pdf

In any social security scheme, it is important to note that benefits declared are not inflation indexed. Therefore, in the long run the amount is bound to be paltry because of inflation.

IV.3 Pension: Atal Pension Yojana (APY)

This is a pension scheme which explicitly aims to provide old age income security to those working in unorganised sector by encouraging them to voluntarily save for their retirement, who do not have any formal pension provision.[5] Unorganised workers constitute 88 percent of the total labour force of 47.29 crore in India (NSSO, 2011). This system enables people in the age cohort of 18 to 40 years to join the NPS by contributing some amount in their working years. The scheme can be considered as an extension of the *Swavalamban Scheme* initiated earlier by the government in 2010-11. Under the scheme, on the basis of contributions, subscribers would receive fixed pension of Rs. 1,000 per month, Rs. 2,000 per month, Rs. 3,000 per month, Rs. 4000 per month or Rs. 5,000 per month, respectively, from the age of 60 years. The amount of contribution would be based on age of joining the APY. The benefits under the APY not only include a monthly pension but also reimbursement of a defined corpus.[6]

In terms of performance, nearly 0.8 million people have joined APY until September 30, 2015. The weak performance could be due to certain aspects of APY that need attention. Persons with low income are myopic about savings for future. A scheme which demand Rs 291/- monthly and pay a pension of Rs. 1,000/- per month after 20 years may remain less attractive to them. This is because poor people might need this savings, even though it seems meager to some, for meeting short term precautionary needs. In contrast, for population that can afford that amount of monthly contribution may find that Rs. 1,000 per month, two decades from now, without inflation adjustment is too meager to take the trouble of joining and operating the scheme.

In Table 4 the study has taken the contribution required at different age groups by APY for paying a pension of Rs. 1,000/-. The study has assumed various rates of return for APY. It then uses the compound interest rate to calculate the corpus at the end of all contributions. Thus, an 18 year old

[5]http://www.pmjdy.gov.in/JanSuraksha/pdf/English/Atal%20Pension%20Yojana/APY_Brochure.pdf
[6]It is observed that coverage under *Swavalamban Scheme* is inadequate mainly due to lack of guaranteed pension benefits at the age of 60.

person after contributing Rs. 42 for 504 months (42 years) and receiving a fixed interest rate of 8 percent accumulates a pension wealth corpus of Rs. 1,71,412/-. At the same rate of interest the contributor is entitled to an approximate pension of Rs. 1,148/-. It is easy to understand that at 8 percent the entire scheme is self sufficient.

Further, keeping its focus on the unorganised sector the government is co-contributing Rs 1000 up to 5 years to the workers who join the scheme before 31st December 2015, which implies that the assumed discount rate is less than 8 percent. Also there are a number of financial instruments, including those offered by post offices, that gives higher rates of interest, certainly more than 8 percent.

Table 4: Pension Corpus and Monthly Pension under Hypothetical Interest Rates

Interest Rates			**7**	**8**	**9**	**10**
Age	**Monthly Contribution in Rs**	**Months of Contribution**	**Pension Corpus (in Rs)**			
18	42	504	127040	171412	233147	319379
20	50	480	130515	173052	231194	310695
25	76	420	136358	173239	221498	284841
30	116	360	141210	172179	211006	259804
35	181	300	146536	171803	202186	238788
40	291	240	151724	171419	194158	220453
Average Pension/ Month (in Rs)			810	1148	1616	2269

Source: Authors' Calculation

Further, there are certain other schemes like EPFO, Coal Mines Provident Fund (CMPF), Public Provident Fund (PPF), and General Provident Fund (GPF) which yield comparatively higher interest rates. Table 5 gives the 21 year average rate of interest under different provident funds. It is clearly seen that these rates are higher than the interest rate offered by APY.

Table 5: Interest rates of EPFO, GPF and PPF

Year	EPF	GPF (CG)	PPF
1995-96	12.0	12.0	12.0
1996-97	12.0	12.0	12.0
1997-98	12.0	12.0	12.0
1998-99	12.0	12.0	12.0
1999-00	12.0	12.0	12.0
2000-01	11.2	11	11
2001-02	9.5	9.5	9.5
2002-03	9.5	9.0	9.0
2003-04	9.5	8.0	8.0
2004-05	9.5	8.0	8.0
2005-06	8.5	8.0	8.0
2006-07	8.5	8.0	8.0
2007-08	8.5	8.0	8.0
2008-09	8.5	8.0	8.0
2009-10	8.5	8.0	8.0
2010-11	9.5	8.0	8.0
2011-12	8.25	8.2	8.6
2012-13	8.5	8.8	8.8
2013-14	8.7	8.7	8.7
2014-15	8.7	8.7	8.7
2015-16	8.7	8.7	8.7
Average	9.72	9.36	9.38

Source: Authors' Compilation from various Government Orders

All of the above mentioned schemes are essentially contributory in nature. Further, all of these schemes are targeted to people who are financially included i.e. for all persons who have a bank account. In general a large number of female citizens do not have bank account especially elderly widowed women. In many households, women do not venture out of home and cannot have a bank account. In addition, it excludes a significant proportion of 31 percent (as per 2011 census) of citizens who are above the age of 40 years.

Section V: Universalisation: A New Policy Option

Exclusive nature of recently introduced schemes (because they are targeted and are contributory) brings to the forefront need and importance of universalisation of these schemes. Although certain existing schemes have ensured economic security to certain masses but there are significant shortcomings in terms of coverage. Such dichotomous situation where a smaller population is receiving substantial benefits, and a larger population is not receiving any social security requires some consideration in country which prides in nurturing and nourishing a welfare state. The need to extend these schemes to later segment thus becomes essential. Hence, universalisation of certain schemes is conceded to be a better alternative because it would ensure security for all the workers and citizens, including elderly in the country. Moreover, compared to existing contributory schemes, non-contributory universal schemes would be more inclusive and would cover wider population, though at some cost, not exorbitant, to the exchequer.

It is believed that as a country develops there will be formalisation of the economy and thus contributory schemes will succeed. However, empirical evidence shows that for developing countries, though development continued, size of economy increasingly became informal instead of being otherwise (NCEUS, 2007). Contributory schemes or targeted schemes may burden the fisc to a lesser extent but they have high maintenance costs and lack in terms of coverage. Further, awareness of these initiatives are also important. In India, proper attention is not paid to disseminate information, spread financial literacy and communicate different aspects of schemes to the public. Therefore, people living in remote areas are largely neglected. A lack of a clear idea about all the aspects of a scheme due to deficient financial literacy can hamper its successful coverage, as people would hesitate to spend their time, money and energy if they do not have proper knowledge of its supposed benefits (PRC-GOI, 2009).

In contrast, universalisation has its advantage as it is easy to monitor, and has very low administrative costs in comparison to other schemes. This scheme can be implemented by government under direct benefit transfer scheme, which is expected to be efficiently operational with efforts placed on financial inclusion being extended on mission mode. However, given the nature, the amount provided by the Government, understandably would be limited because of need to contain fiscal deficit.

Despite advantages, universalisation of certain schemes is seen with doubt as it is often criticised for high fiscal costs. It is often argued that with universalisation of certain social security schemes there will be a rise of government liabilities in country. However, such debates often fail to take account holistic development in terms of economic growth, and consequent increase in income, following country's development and labor friendly policies that promote health and social security. Ideally, consequent to better social security, growth in per capita income would imply better tax compliance and eventually enable certain universal programmes to become less burdensome on government fisc over time.

In case of pensions the World Bank (WB), which earlier used to recommend a three pillar model is currently recommending a five-pillar model.[7] However, WB also suggests that these pillars should be tweaked according to country scenarios. The model consists of a zero pillar that is basically a non-contributory tax-financed basic pension scheme. India does not have it since pension here is means-tested or targeted like IGNOAPS. The first pillar is described as a mandatory first pillar, which has a defined contributory element and a defined benefit outgo. Clearly, the scheme of APY resembles this scheme but it is voluntary in nature because of the structure of Indian economy and targeted for informal sector only. A mandatory second pillar has a defined contributions (DC) element supported by outgo option of Individual Retirement Accounts (IRAs). In India, in NPS there is a complete provision for this. Nevertheless, this scheme also remains voluntary. Further, to tap extra savings, government has introduced another provision, NPS Tier II. This is in accordance with the third pillar of pension promoted by the WB. The final pillar is a non-financial pillar support to family, health care, remortgage of homes option, etc. which is absent in India. An interesting feature to be noted is that all these pillars (except for pillar zero) are contributory in nature (Willmore, 2007). [8]

If India adopts universal pension then it would join the league of welfare-oriented countries such as Netherlands and Norway that provide universal basic pension to its citizens that are tax-financed. Similarly, South Africa, Australia, Brazil, Lesotho, and Chile also have inclusive pension schemes that exclude only a few. A basic universal pension based on the criteria of citizenship, residence and age is provided by countries such as New Zealand, Mauritius, Botswana, Namibia, Bolivia, Nepal, Samoa, Brunei, Kosovo and Mexico City. It can be concluded that various developing countries have also been providing economic security to their elderly population by formulating Universal Pension Scheme (UPS) that seems more inclusive in nature in comparison to other means-tested schemes.

[7] These are non-contributory basic pension, a contributory (forced savings) pension scheme and contributory (voluntary savings) pension scheme.

[8] However, in India, widow pensions for BPL families and disability pensions are non-contributory in nature.

The study tries to validate an argument of universalisation through presentation of scenarios with estimates in case the new schemes launched by the Government become universal and non-contributory. It argues that as against its present contributory feature, if the schemes become non-contributory, even then there would not be any significant fiscal stress.

Table 6 shows accident death statistics due to unnatural causes in India in 2013 and maximum expected payout of accident insurance scheme had it been implemented then. The study observes that the payout doesn't reduce much due to a contributory scheme. Nevertheless, due to information asymmetry, lack of financial inclusion and knowledge of schemes, a large segment of population especially from the weaker sections remain deprived of benefits. In broad terms, an approximate annual contribution of Rs. 100/- per member is required to make an accident insurance scheme (with a payout of Rs. 2, 00,000/- in case of a death) self reliant. This is under the assumption that everybody in the 18-70 age cohort contributes into the scheme. [9]

Table 6: Hypothetical Payout of the Scheme

Nature of scheme	**Total Accidents in 2013-14**	**Expected Payout from Government (in Rs. Billion)**	**% of GDP**
Universal	346007	69.20	0.06
Contributory		53.22	0.05

Source: http://ncrb.gov.in/adsi2013/ADSI-2013.pdf, Authors' Calculation.

The next scheme, life insurance, announced by the central Government remains costly in India although it is less than Re. 1/- per day. This is because a large number of people, especially poor, are characterised by income volatility, which results in low level of savings. This vulnerability clearly reduces the number of subscribers and thereby success of PMJJBY. Instead, a universal provision of basic gratuity on death for the working class will solve these issues and clearly increase its coverage. The year-wise burden on the fisc of the Government of introducing a universal gratuity on death scheme for 20-60 years (Table 7) is based on estimates prepared on the following assumptions –

[9] Authors' Calculation. For more details see Appendix I

(a) The real GDP (Base Year 2004-05) is assumed to grow at the rate of 4.0, 5.0, and 6.0 percent. (CAGR from 1950-51 to 2012-13 is 5.0 percent).
(b) The qualifying age for insurance is 20-60 years.
(c) All persons of the qualifying age and above will receive a lump sum amount on death.
(d) The death benefits are assumed to be Rs. 50,000, Rs. One lakh, and Rs. Two lakh (Base Year 2004-05).
(e) The future population of India has been calculated from data presented in UNDESA, 2010.[10]

Table 7: A Hypothetical Universal Death Benefit Scheme (UDBS)

Payment in case of Death	Rs. 50,000			Rs. 1,00,000			Rs. 2,00,000		
Growth Rates of GDP	4	5	6	4	5	6	4	5	6
Year	Expenditure as a percentage to projected GDP								
2015	1.17	1.14	1.12	2.33	2.29	2.25	4.67	4.58	4.49
2020	0.99	0.93	0.87	1.98	1.85	1.73	3.96	3.71	3.47
2025	0.83	0.74	0.66	1.67	1.48	1.32	3.33	2.97	2.65
2030	0.70	0.59	0.50	1.39	1.18	1.01	2.78	2.37	2.01
2035	0.58	0.47	0.38	1.16	0.94	0.76	2.31	1.87	1.52
2040	0.48	0.37	0.29	0.95	0.74	0.57	1.91	1.47	1.14
2045	0.39	0.29	0.21	0.78	0.57	0.42	1.56	1.15	0.85
2050	0.31	0.22	0.16	0.63	0.44	0.31	1.26	0.88	0.62

Source: Authors' Calculation

Table 7 suggests that if real payment (Base Year- 2004-05) of a UDBS is Rs. 50,000 and if growth rate of economy is 6 percent, then expenditure of government is 1.12 of projected GDP in 2015. The expenditure as a percentage of projected GDP reduces to as low as 0.16 percent in 2050 due to the fact that mortality in mentioned age group will reduce and there is a persistent growth in real GDP but no growth in real value of benefit. In case of a conservative growth rate of 4 percent, expenditure in 2015 will be 1.17 of projected GDP whereas it will reduce to 0.31 percent in 2050. It can be argued that it is not monetarily equivalent with current scheme but analysis suggests that this can be achieved in future through a gradual increase of amount.

[10] The details of the death in 20-60 age cohort is given in Appendix 1.

In case the qualifying age for a universal pension scheme is 60 years and universal pension amount is Rs. 500/- per month (Base Year 2004-05), it would entail an additional expenditure of 1.0 percent of GDP in 2015 given that the economy grows at a conservative real rate of 4.0 percent per annum (Singh, Bharati, and Sanyal, 2015). This will mean that a gratuity scheme of Rs. 50,000 and pension scheme of Rs. 500 (Base Year 2004-05) can be introduced at a cost of 2.5 percent of GDP even if a conservative growth rate of 4 percent for the economy is considered.

The expenditure is not large when compared with actuals. Illustratively in 2012-13, all (centre and states) civil service pension expenditure amounted to 2.3 percent of GDP. This expenditure was only for a very small proportion of the elderly in India. Further, as NPS has been implemented for civil servants, pension expenditure is expected to come down to 1.0 percent of GDP in future provided growth rate of average real annual salary of civil servants exceeds 3.0 percent (Sanyal, 2014). Therefore, there is some fiscal space to accommodate additional expenditure on account of welfare schemes.

Section VI: Conclusions

In recent times, generally, social security definition has been narrowed down to imply post retirement income, unemployment benefits, medical benefits and monetary benefits in the event of accidental death and permanent disability. However, only 27 percent of the global population enjoys social security in any form where as 73 percent does not receive any social security at all (ILO, 2014). Thus, newly launched schemes by government are in a right direction as they aim to provide social security along with accident insurance. However, due to their targeted nature, mainly contributory, these schemes would suffer from lack of coverage like earlier schemes of the government.

A well-defined social security programme needs to be welfare oriented, are inclusive, wider-based and better implemented. Making schemes targeted and contributory could negatively affect these features. Considering that government is already spending nearly 3 percent of GDP on pensions, it is thus argued that a universal pension and gratuity schemes are possible within a limited expenditure, without placing any significantly large additional stress on the fisc.

In order to implement proposed universal schemes, collaborative exercise with post offices in addition to banks can be considered. Thus, people having accounts in post offices can also be offered these schemes. Further, even if people have bank accounts in cooperative banks can also be offered the schemes to ensure wider coverage.

Another dimension of universal pension scheme can be that preference for a male child as a support in old age could come down though this area needs further research to empirically establish a causal relationship. This could improve the sex ratio in the country, something that the governments have been trying since the last few decades.

Finally, adequate social security enhances economic growth and thus reduces the burden of tax-financed schemes through generation of additional revenue. Unlike present set of social security schemes, a non-contributory universal scheme is probably the need of the country that has remained ignored till date. It would be advantageous to have universal schemes at least for the next few decades, until India achieves a better per capita income and has achieved total eradication of poverty.

Appendix

Appendix 1: Approximate Population of India in the Age Group 18-70

Age Group	Population (in Millions)
18-70	725.72

Source: Authors' own Calculation from Census 2011

Appendix 2: Deaths in India, 000 (Medium Variant) in the Cohort 20-59 years

Year	Deaths
2015	15639
2020	16154
2025	16517
2030	16802
2035	16989
2040	17059
2045	16976
2050	16658

Source: UNDESA, 2010.

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