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**Contributory Pension
Schemes for the Poor:
Issues and Ways Forward**

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CONTRIBUTORY PENSION SCHEMES FOR THE POOR: ISSUES AND WAYS FORWARD

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Abstract

The issue of old-age income security in India assumes significance in view of the expected rise in the elderly population in the years to come, problems of poverty and vulnerability among them and their limited coverage by the existing old age pension schemes. Schemes aiming to promote contributions from the poor unorganised workers for their old age security have been promoted by the government since 2010. By comparing and contrasting the design features of India's two contributory pension schemes, NPS-Lite and APY, and discussing the strengths and limitations of each of these schemes in addressing the needs of low-income workers with the help of available data and studies, this paper argues that the design features of these schemes are such that they fail to take the specific characteristics of unorganised worker households into account. Also discussed is how the current design of contributory social security schemes can be improved to meet the pension requirements of unorganised workers.

Introduction

Publicly funded old age pension schemes have been implemented in India for the elderly poor in the last three decades. Although the issuesⁱ of poor coverage, insufficiency of pension amounts, poor governance in the selection and disbursement of pension amounts have been raised from time to time, the pension schemes have nevertheless been hailedⁱⁱ as successful in helping the elderly poor. Central Government schemes aimed at raising contributions from the poor for their old age security have only been promoted since 2010ⁱⁱⁱ. It is argued in this paper that though the contributory pension schemes for the poor such as National Pension Scheme (NPS) Lite and Atal Pension Yojana (APY) have been formulated with the best of intentions, the design features of these schemes are such that they often fail to take the specific income and savings characteristics of unorganised worker households into account.

The paper is presented in five sections. After this brief introduction, the importance of old age income security is discussed in the second section with the help of existing studies. In the third section, illiteracy, poverty and vulnerability are key characteristics of unorganised workers in India. In the fourth section, the design features of India's two contributory pension schemes, i.e. NPS-Lite and APY, are compared and contrasted. The strengths and limitations of these schemes in addressing the needs of low-income workers are evaluated with the help of available data and literature. In the final section a discussion on how the current design of contributory social security schemes can be improved to meet the pension requirements of unorganised workers is taken up.

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Importance of Old Age Income Security

The issue of old-age income security^{iv} in India assumes significance in view of the expected increase in the number of elderly people in the years to come, their poverty and vulnerability, and the limited coverage of the existing old age pension schemes for them.

As per the latest census data (2011), the proportion of elderly population (aged 60 years and above) in India is 8 per cent, consisting of 7.7 percent males and 8.4 percent females. As far as rural-urban distribution is concerned, the proportion of elderly was marginally higher in rural areas (8.1 per cent) than in urban areas (7.9 per cent) in 2011.

Population projections^v by the United Nations (2013: 65) show that the proportion of the elderly is expected to rise to 18.3 per cent by 2050 and to around 30.2 per cent by the year 2100 largely because of increased life expectancy^{vi} and decreased death rates^{vii}. The sex ratio among the elderly is likely to be in favour of women. The number of females to 100 males in the age group of 60+ years will be 105 in 2026 (Subaiya and Bansod 2011:6). On the other hand, the sex ratio in the age group of 80+ years is projected to be very high at 136, thus implying greater vulnerability among women in this group, who are also more likely to be widows (Subaiya and Bansod 2011: 6).

Old age income security also becomes important in the context of the dependency of the elderly on others. Modernisation theory holds that in pre-industrialised economies when the joint family system was by and large the norm, elders had a place in the society and were having a role. However, the theory reasons that, as societies modernise, the elders find it difficult to work outside the home and have little to contribute economically to the household. As a result, elders are seen as a burden in the household. Modernisation theory thus suggests that elders are likely to be abandoned without much financial support from the children as they are perceived to be non-productive economic burden (Cowgill and Holmes 1972). They will also get socially excluded. However, the literature also suggests that whether the elderly will be dependent on family members or not depends on the personal capabilities of aged persons in terms of their financial status, health, education, employment and social support (Zaidi 2014). But, there is consensus that elderly from poor households are vulnerable.

The evidence also shows that a significant proportion of the elderly do not have much support from their household members. About 65 per cent of the elderly population are economically dependent on others; this situation was the worst among elderly females in both rural (86 per cent) and urban (83 per cent) areas as compared to their male counterparts in rural (49 per cent) and urban (44 per cent) areas (Gol 2011a: 11-12). Over 5 per cent of persons aged 60 years were found to be residing alone, while 12 per cent were residing only with their spouses and about 4 per cent stayed with either other relatives or non-relative members (Gol 2011a). Dutta *et al* (2010: 66) note that old persons living on their own are poor, vulnerable, and are less likely to receive household support. There is no clarity on whether those elders staying with their spouses and other family members or those staying with their children were being well taken care of by their families.

The dependence of the elderly in India has also been increasing. The old age dependency ratio (ratio of persons aged 60 years and above to working age population), which increased since 1961, is likely to rise from 12 to 20 per cent during 2011 to 2026 (Subaiya and Bansod 2011: 4). Rising dependency means that most of the elderly depend on other household members for their consumption

needs (Tripathi 2014: 219), leading to considerable stress and strain especially among poor households and those depending on informal labour markets (Subaiya and Bansod 2011: 10). Rising dependency, however, does not necessarily mean poverty as households with elderly population differ in their carrying capacity which is influenced by age, gender, marital status, health and education of the elderly, economic institutions offering work and social (including familial) institutions supporting them with care (Cohen 2010: 35-36).

There is some debate on whether the elderly suffer from disproportionate burden of poverty. Barrientos *et al* (2003) have shown that poverty rates among the elderly in many developing countries typically tend to be more than that in the general population. However, a recent study in 62 low and middle income countries by Evans and Palacios (2015) covering more than half of the world's elderly population finds that the elderly and adults are generally the least poverty-stricken group, while children are the poorest group. The lower incidence of poverty among elderly population is attributed to higher work participation rates.

With regard to poverty among elderly persons in India as well, there is some disagreement. Pal and Palacios (2006) find that poverty tends to be low among households having elderly persons (above 60 years) in India as compared to those not having elderly. The low incidence of poverty in households with elderly is explained in terms of participation of most of the elder persons in the household, especially male members in the informal/ non-farm labour market to supplement the household income^{viii}. Because of this, dependency ratios tend to be lower for households having aged members (Pal and Palacios 2006: 7-8).

Srivastava and Mohanty (2012: 512) estimate the number of elderly persons living below the poverty line in India at about 18 million. They find a positive association between the incidence of poverty and size of the household (i.e. higher incidence of poverty among larger households and vice versa). But they did not find evidence in support of any association between the incidence of poverty and presence of elderly in a household. Contrary to the findings of Pal and Palacios (2006), Srivastava and Mohanty (2012: 512) conclude that there was no significant difference between households consisting of elderly and non-elderly in so far as the incidence of poverty is concerned.

In the literature, there is discussion on the vicious cycle of disability leading to poverty and vice versa. Pandey (2009: 20) analyses NSSO data to examine the relationship between disability and poverty among elderly persons in India. He finds that poverty as well as income inequality are at higher levels among the disabled elderly persons and suggests causal relationship between poverty and disability among elderly in India. Pandey (2009: 20) calls for strengthening the social security safety nets to improve the economic conditions of elderly as also providing better health care facilities to reduce the risk of disability among them.

The elderly persons spend considerable sums on living expenses. GoI (2011a: 13) notes that the monthly per capita expenditure of about 50 per cent of the elderly persons ranged from ₹ 420 to ₹ 775 in rural areas, while it was ₹ 665 to ₹ 1,500 in urban areas during 2002. Dutta *et al* (2010) note that pension was the primary source of support for a majority of pensioners in Rajasthan. Chopra and Pudussery (2014) present primary data to show that pension amounts were used by the elderly primarily for meeting the expenditure on their food and health. This means that there is a definite need

for social pensions to address the increasing old age dependency and declining support system (Subaiya and Bansod 2011). This further calls for more attention by the government to enhance care and support to elderly persons because of the high level of poverty and low health status among ageing population in rural areas (Alam 2006 cited in Subaiya and Bansod 2011).

Recent research by Kaushal (2014) throws further light on the impact of publicly provided pensions on the well-being of elderly people. With the help of the 2006 expansion in the National Old Age Pension Scheme (NOAPS), he could control for, in parsimonious manner, the changes in the economy and society that may have had an impact on employment and incomes of the elderly. He argues that an increase of ₹ 100 in pension amount is associated with a 1-2 percentage decline in employment of men in the age group of 55 to 70 years with less than primary level education. No such effect was found in the case of women. Another important finding was that an increase of ₹ 100 in pension amount was associated with almost the same rise in expenditure on medical care and education, thus implying that most of the pension amount was invested in human capital and in improving the health and education of the elderly and their household members (Kaushal 2014: 222-223).

International experience shows that good social security system and economic development are the main factors responsible for low rates of old-age poverty (Barrientos 2007). Indian government is making efforts to promote social security system, and within this, publicly funded old age pension scheme is an important component. Though there is a growing demand for old age pension because of its positive impact on poverty, the coverage of elderly persons under old age pension schemes was less at 16 per cent (Narayana 2015); worse it has been suggested that the poor are being left out (Kaushal 2014). This calls for improved coverage of social pension scheme.

While making efforts to address the deficiencies of the NOAPS, the central government has introduced contributory pension schemes for unorganised workers, allegedly heeding to the advice of advocates of neoliberalism. "The advocates of neoliberalism as an ideology emphasise economic deregulation, the curtailment of welfare state, and the market solutions to social problems; as a structure, neoliberalism involves the transformation of the global market in a way that increases the power of certain social actors, such as transnational corporations and investors ..." (Williamson and Williams 2005: 486). Though the two contributory pension schemes – NPS-Lite and APY – are within the government fold, they are based on neoliberal principles at ideological and structural levels. Both the schemes are based on the principles of curtailment of welfare state and providing market solutions to social problems. Likewise, they open up the space for the insurance companies to play an important role and investment of poor subscribers' money into the stock market. There is therefore a need to examine whether the design and management of these contributory pension schemes suit the conditions of unorganised workers in India, for whom these two schemes are primarily meant for.

Conditions of Unorganized Workers in India

An important characteristic of the labour market in India is informalisation. According to the National Commission for Enterprises in the Unorganised Sector (NCEUS), unorganised sector comprises “all unincorporated private enterprises owned by individuals or households engaged in the sale and production of goods and services operated on a proprietary or partnership basis and with less than ten workers” (NCEUS 2007: 3). NCEUS has defined informal workers as “those working in the informal 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” (NCEUS 2007: 3).

The total workforce in India has increased from 397 million in 1999-2000 to 458 million in 2004-05 and to 474 million in 2011-12 (Table 1). The number of formal sector workers has gone up from 54.1 to 81.9 million during the period 1999-2000 to 2011-12. In terms of proportion also, there was an increase from about 14 to 17 per cent during this period. However, Table 1 reveals that the proportion of formal workers in the organized sector has in fact declined from 62.2 per cent in 1999-2000 to 45.4 per cent in 2011-12. Such a decline can be attributed to downsizing of the government, emergence of e-governance, pressure on public sector units to reduce their surplus staff for becoming modern and globally competitive, slow growth of employment in the organized private sector due to labour reforms and labour saving technological changes (Rao *et al*/2006: 1913).

The share of informal workers in the organized sector has, however, gone up from 37.8 to 54.6 per cent during the period 1999-2000 to 2011-12. Thus, whatever increase in the total number of formal workers that one observes in Table 1 is confined mainly to the informal sector. NCEUS (2007: 4) writes that: “What this means in simple terms is that the entire increase in the employment in the organised sector over this period has been informal in nature i.e., without any job and social security. This constitutes what can be termed as informalisation of the formal sector, where any employment increase consists of regular workers without social security benefits and casual or contract workers again without the benefits that should accrue to formal workers”. Rao *et al* (2006: 1913) also write that “some of the employment growth in the organised sector – like expanding employment in call centres and transfer of functions like security, maintenance of buildings and gardens, etc., to outside contractors – resembles the unorganised sector in working conditions, wage levels, security of employment and social security benefits”.

Table 1: Distribution of Total Indian Workforce by Formal and Informal Sectors in 1999-2000, 2004-05 and 2011-12

Sector/ Worker	Total Employment (Million)		
	Formal/ Organised Worker	Informal/ Unorganised Worker	Total
1999-2000			
Formal/ Organised sector	33.7 (62.2)	20.5 (37.8)	54.1 (100.0)
Informal/ Unorganised sector	1.4 (0.4)	341.3 (99.6)	342.6 (100.0)
Total	35.0 (8.8)	361.7 (91.2)	396.8 (100.0)
2004-2005			
Formal/ Organised sector	33.4 (53.4)	29.1 (46.6)	62.6 (100.0)
Informal/ Unorganised sector	1.4 (0.4)	393.5 (99.6)	394.9 (100.0)
Total	34.9 (7.6)	422.6 (92.4)	457.5 (100.0)
2011-12			
Formal/ Organised sector	37.2 (45.4)	44.7 (54.6)	81.9 (100.0)
Informal/ Unorganised sector	1.4 (0.4)	390.92 (99.6)	392.31 (100.0)
Total	38.56 (8.1)	453.66 (91.9)	474.23 (100.0)

Note: Figures in brackets are percentages.

Sources: 1) Figures for 1999-2000 and 2004-05 are computed by NCEUS (2007) from NSS 61st Round 2004 - 2005 and NSS 55th Round, 1999-2000, Employment-Unemployment Survey.

2) Figures for 2011-12 are obtained by Srija and Shirke (2014).

Informalisation of the labour market in India is predominant in agricultural sector, followed by services and manufacturing. Table 2 shows that the proportion of agricultural workers has declined during the period 2004-05 to 2011-12 in the formal as well as informal sectors. Correspondingly, there was an increase in the proportion of non-agricultural workers in the manufacturing, non-manufacturing and services sectors. The increase in the percentage of informal workers in the non-manufacturing sector has been steep.

Table 2: Sectoral Distribution (%) of Formal and Informal Employment

Sectors	Formal	Informal	Total
2004-05			
Agriculture	0.8	57.7	58.5
Manufacturing	1.3	10.4	11.7
Non-Manufacturing	0.5	5.9	6.4
Services	4.7	18.7	23.4
Total	7.3	92.7	100.0
2011-12			
Agriculture	0.1	48.8	48.9
Manufacturing	1.5	11.1	12.6
Non-Manufacturing	0.7	11.0	11.7
Services	5.8	21.0	26.9
Total	8.1	91.9	100.0

Source: Calculated from Srija and Shirke (2014: 42).

During the period 2004-05 to 2011-12, the proportion of informal workers steeply increased in the construction sub-sector, while the increase in the 'real estate and other business activities' and 'finance' has been marginal (Table 3). One can, in fact, see a decline in the proportion of informal workers in manufacturing, trade, hotel and restaurant, and education.

Table 3: Distribution of Informal Non-agricultural Workers by Sub-sectors

Non-agricultural sub-sectors	2004-05	2011-12
Mining	0.7	0.5
Manufacturing	28.2	24.5
Electricity & water supply	0.1	0.3
Construction	14.2	20.5
Trade, hotel & restaurant	32.6	29.7
Transportation, storage & communications	9.8	9.8
Real estate & other business activities	2.2	2.5
Education	2.0	1.7
Finance	0.5	0.7
Health	1.1	1.0
Public administration, defence	0.1	0.0
Other services	8.6	8.7
Total	100.0 (135.81)	100.0 (160.03)

Thus, whatever increase that one sees in the non-manufacturing sector was mainly confined to construction. It has been shown that the number of construction workers (in the formal and informal sectors) has almost doubled from 24.94 million in 2004-05 to 48.92 million in 2011-12 (Srija and Shirke 2014: 42).

Poverty and Vulnerability among Informal Workers

On the whole, most of the informal workers in agriculture eke out their livelihood either as agricultural labourers or marginal cultivators. Marginal farmers, with tiny landholdings, are compelled to go for cash crop cultivation, experience frequent crop failures and irregular incomes, and thus, live in poor conditions (GoI 2011b). The agricultural labourers, facing the problem of uncertain employment and irregular incomes, live in poverty and vulnerability.

In the non-agricultural sector, informal workers are engaged either as construction workers or workers in the informal enterprises relating to hotels (suppliers, cooks, etc.), trade, transport (drivers and cleaners of autos and other commercial vehicles, cycle rickshaw pullers). They suffer from the problems of low educational status, low productivity as compared to formal sector, lower wages, poor working conditions, uncertain and seasonal employment and lack of access to sufficient and reliable social security. Unorganised workers, who face several deprivations (Rao *et al* 2006), are scattered, do not have their own organizations and hence, lack voice.

It is therefore unsurprising that there is a high congruence between the poor and the vulnerable segments since unorganised workers form a large proportion of the workforce in India. In order to bring out this congruence, NCEUS (2007) has categorised the total population of the country into six groups based on their consumption expenditure. The first group of "Extremely Poor" are those who have a monthly per capita consumer expenditure of up to three-fourths of the official poverty line (i.e. an average of ₹ 8.9 per capita per day (pcpd) in 2004-05); the second group "Poor" are those between the Extremely Poor and up to the official poverty line (average expenditure of ₹ 11.6 pcpd); the third is called "Marginally Poor" with per capita consumer expenditure of only 1.25 times the poverty line (i.e. ₹ 14.6 pcpd); and the fourth called "Vulnerable" have per capita consumer expenditure of only two times the poverty line (i.e. ₹ 20.3 pcpd). The poor and vulnerable together constitute about 77 per cent of the population. This group, totalling 836 million people with an income roughly below \$2 in PPP terms, can be called as the poor and vulnerable segment of the Indian population.

It can be seen from Table 4 that 79 per cent of the informal or unorganised workers belong to the poor and vulnerable group. "They have remained poor at a bare subsistence level without any job or social security, working in the most miserable, unhygienic and unlivable conditions, throughout this period of high economic growth since the early nineties" (NCEUS 2007: 8).

Table 4: Percentage Distribution of Expenditure Classes by Social Identity, Informal Work Status and Education, 2004-2005

SI No	Economic Status	Social Categories (percentage share in own total)				Percentage of unorganized workers	Education*	
		STs/ SCs	All OBCs except Muslims	All Muslim except STs/ SCs	Others (without STs/ SCs, OBCs & Muslim)		Illiterates	Primary and below primary
1	Extremely poor	10.9	5.1	8.2	2.1	5.8	8.1	5.0
2	Poor	21.5	15.1	19.2	6.4	15	19.0	14.2
3	Marginally poor	22.4	20.4	22.3	11.1	19.6	22.2	19.4
4	Vulnerable	33	39.2	34.8	35.2	38.4	36.9	40.0
5	Middle income	11.1	17.8	13.3	34.2	18.7	12.8	18.9
6	High income	1	2.4	2.2	11	2.7	1.0	2.5
7	Extremely poor and poor (1+2)	32.4	20.3	27.4	8.5	20.8	27.1	19.2
8	Marginal and vulnerable (3+4)	55.4	59.6	57.1	46.3	57.9	59.1	59.4
9	Poor and vulnerable (7+8)	87.8	79.9	84.5	54.8	78.7	86.2	78.6
10	Middle & high income (5+6)	12.2	20.1	15.5	45.2	21.3	13.8	21.4
All (%)		100.0	100.0	100.0	100.0	100.0	100.0	100.0
All (million)		302	391	138	258	423	270	164

Note: * Refers to persons aged 15 and above.

Source: Computed by NCEUS (2007) from NSS 61st Round 2004 - 2005, Employment-Unemployment Survey.

It can also be seen that there is congruence between the caste and the incidence of unorganised workers; most of the unorganised workers belong to SC/ST community. There is also congruence between illiterates and unorganised workers. Over 86 per cent of the poor and vulnerable are illiterate.

The high congruence between informal work status and poverty/vulnerability becomes almost total in the case of casual workers, 90 per cent of whom belong to the group of the poor and vulnerable (Table 5). As noted earlier, this group includes an overwhelming proportion of *dalits* and *adivasis*, OBCs and Muslims.

Table 5: Percentage Distribution of Unorganised Workers across Expenditure Classes

Status	Total	Self-employed	Regular wage workers	Casual workers
Poor and vulnerable	78.7	74.7	66.7	90.0
Higher income group	21.3	25.3	33.3	10.0
Total	100.0	100.0	100.0	100.0

Source: Computed by NCEUS (2007) from NSS 61st Round 2004 - 2005, Employment-Unemployment Survey.

Social Security for the Unorganised Workers

NCEUS has suggested legislations to expand the coverage of social security among unorganized workers and to improve the working conditions of the unorganized workers. The Commission is of the view that social security problems of unorganized workers are of two types. The first one "arises out of deficiency or capability deprivation in terms of inadequate employment, low earnings, low health and educational status and so on. The second one arises out of adversity in the sense of absence of adequate fallback mechanisms (safety nets) to meet such contingencies as ill health, accident, death, and old age" (NCEUS 2006: 98). While the former can be called as promotional social security, the latter can be termed as protective social security. The Commission focuses "on protective social security for workers in the informal economy though the complementarities of promotional social security that should form a part of an overall and integrated social policy are well recognized" (NCEUS 2006: 98).

According to NCEUS, the social security framework in India operates at three levels. The universal programmes and schemes for basic social/human development such as the mission for literacy, schooling, health care services, drinking water and sanitation, technical training, etc., constitute the first level, and should be viewed as foundational to any sound social and economic development policy. These programmes address the issue of creation and enhancement of human capabilities through creating entitlements to all citizens funded by the public exchequer. The effectiveness and advancement of these functions of the state are often a pre-requisite for the effectiveness of specific protective social security policies and schemes such as the one proposed here.

The social/human development schemes intended to provide a measure of socio-economic security to the poorer citizens irrespective of their status as working or non-working poor constitute the second level. The underlying idea here is to meet both promotional and protective needs of some sections of the population in their basic social security needs. Over time, a number of such programmes like ICDS, PDS, Mid-day meal programme, NREGS, etc have come to stay in the country.

The third level should, according to the Commission, constitute a social security system for the unorganised/informal workers. This should address both deficiency and adversity. The social security concerns arising out of deficiency relate to access to credit/finance (especially for the self-employed), loans for upgrading skills, loans for housing, children's education, etc. The adversity arises out of various contingencies such as absence of social security cover for ill health, accidents/death and old age.

NCEUS (2006) restricted its recommendations only to protective social security and proposed to cover hospitalization, maternity, life insurance and old age security. The Commission also proposed

defined contributions as premiums for insurance to cover (a) hospitalisation, (b) maternity, life insurance and (c) old age security. The State Social Security Boards are expected to negotiate with the insurance provider regarding nature and extent of benefits, taking into account the state specific contexts, in order to ensure the best possible cover to the registered worker. The Commission also suggested a legislation providing minimum social security covering life insurance, health insurance and pensions *for all the unorganized workers in the country*.

Subsequently, the Unorganised Sector Workers' Social Security Bill, 2008 proposed a minimum social security cover consisting of life insurance, old age pension and health insurance for unorganised sector workers *belonging to Below Poverty Line (BPL) households*. Since 2005, the elderly in India have been receiving benefits from the reformed old age pension programme. Although only about one-tenth of workers in India are covered by formal pension scheme (Adiraja and Palacios 2005, cited in Pal and Palacios 2006), publicly funded pension scheme has been found to be positively contributing to the alleviation of poverty among the elderly (Dutta *et al* 2010; Chopra and Pudussery 2014; Kaushal 2014; Narayana 2015). Importantly, government has now become an important player in the arena of contributory pension schemes and these endeavours are discussed in the next section.

Pension Schemes for Unorganised Workers in India

In 2010, a new pension scheme called *National Pension Scheme (NPS) Lite* was launched by the central government for all the unorganised workers in the age group of 18-60 years and this scheme was implemented through the Department of Labour. More recently, within five years of NPS Lite, a new pension scheme called Atal Pension Yojana (APY) scheme was launched in 2015, which was a more refined version of the NPS Lite. The key features, progress made by these schemes and key problems of these two schemes are discussed in the ensuing paragraphs.

NPS Lite: Features, Progress and Key Problems

The NPS (National Pension Scheme) is India's largest contributory pension program for all Indian citizens, which is regulated by the Pensions Fund Regulatory Authority (PFRDA). In 2010, PFRDA instituted a new variant of NPS called NPS-Lite^{ix} to extend the benefits of old age security to unorganized low income workers and other economically disadvantaged sections of society. Every NPS-Lite subscriber gets a unique Pension Retirement Account Number (PRAN) and a PRAN card to keep track of his contributions and retirement corpus. The National Securities Depository Limited (NSDL) serves as the central recordkeeping agency (CRA) for both NPS and NPS-Lite.

In order to make the scheme affordable for subscribers with a significantly lower savings potential, NPS-Lite employed a low cost service architecture with an intermediate layer of facilitators called "Aggregators" who serve as a subscriber's single point of contact for scheme related issues. All service interactions between a subscriber and PFRDA related to scheme registration, transactions and account administration are handled by the Aggregator who enrolls the subscriber in the NPS-Lite scheme. Further, as a special incentive to promote increased pension savings by low-income workers, the central government also announced a Swavalamban scheme to provide matching contribution of ₹ 1000 per annum to all NPS-Lite account holders who saved a minimum of ₹ 1000 every year.

Progress

In spite of its many attractive features, NPS-Lite succeeded in attracting only 44.63 lakh registered subscribers over the last six years with a cumulative corpus of ₹ 1982 crore as on 30.01.2016 (PFRDA 2016). While NPS-Lite accounts for 38.8 per cent of subscribers registered under all NPS sectors today, the assets so mobilized account for only 1.8 per cent of the total Assets under Management (AUM)^x by PFRDA. Also, the total number of those enrolled under this scheme constitutes just about 1 per cent of the total number of informal workers. After the new government assumed power at the Centre, NPS-Lite was discontinued. In its place came a new guaranteed pension scheme called the Atal Pension Yojana (APY) with effect from 1st April 2015.

Limitations of NPS-Lite

The failure of NPS-Lite in promoting retirement savings among low income workers is widely attributed to the following:

- i) Under the NPS-Lite scheme, pension Aggregators are paid commissions (₹ 100 per client) only for those subscribers who save amounts equal to or more than the Swavalamban threshold of ₹ 1000 per year. As a result, most Aggregator firms focused their enrolment efforts on workers with a more steady income stream who are likely to meet this annual savings target. This automatically excluded a large population of low-income unorganized workers, who otherwise would have made small contributions to obtain the membership in NPS-Lite. This is evident from a recent study by Palacios and Sane (2013) who showed that higher income households and more educated were more likely to participate in the scheme. In addition, women were more likely to take up the scheme.
- ii) Most Aggregators preferred to collect a single lump sum of ₹ 1000 as pension deposit from a client in order to minimize their field collection costs and to lower commission risks through missed instalments. This dissuaded workers with lower disposable incomes from joining the program, since the scheme did not have the flexibility for them to make multiple small contributions over the year. In order to address lacunae in NPS-Lite, there is need for re-alignment of incentives of service provider with that of beneficiary (Palacios and Sane 2013: 255).
- iii) A large section of low-income workers have poor financial literacy and found it difficult to comprehend the salient features of the scheme related to fund management, prescribed debt and equity mix, annual corpus value computations, annuitization requirements, pre-mature withdrawal clauses etc. Since the old age pension provided was contingent on the quantum of savings realized over the subscription period, it was difficult for the agency to guarantee a fixed pension amount to the subscriber on retirement. Overall, the scheme suffered from the absence of a comprehensive communication plan to inform the target groups about the features and benefits of NPS-Lite.
- iv) As this was the first contributory pension scheme, the government was not successful in generating adequate awareness among households especially among poor households. Creating awareness was essential given that poor in India, generally, give preference to current consumption rather than future consumption; hence any reform to the existing contributory pension scheme should aim

at promoting welfare of workers (Sanyal *et al* 2011). Thus, there is a need for pension reform which takes care of the workers interest rather than employer interest (Sanyal *et al* 2011: 19).

Atal Pension Yojana: Features, Progress and Problems

As stated earlier, the new Guaranteed Pension Scheme called Atal Pension Yojana (APY) was introduced in June 2015 by Government of India. The scheme, though open to all citizens of India, is specifically targeted to workers in the unorganized sector, who are encouraged to make regular small savings in their APY accounts during their working years in order to avail pension benefits in old age^{xi}. The scheme promises a minimum fixed monthly pension between ₹ 1000 and ₹ 5000 to any APY subscriber on reaching retirement age (60 years) provided he/she contributes a certain prescribed amount for at least 20 years. Unorganized workers who are not covered under any formal social security schemes and are not income-tax payers receive a government co-contribution as incentive for 5 years.

As in the case of NPS-Lite, APY also operates within the NPS architecture and is regulated by PFRDA. NSDL continues to be the CRA for the APY scheme and is responsible for performing record keeping, administration and customer service functions of all APY accounts. Similarly, a Permanent Retirement Account (PRAN) is also assigned to all APY subscribers. However, APY differs from NPS-Lite in a few important respects as shown in Chart 1 below.

Progress

As per the official statistics, APY has enrolled 19.77 lakh subscribers as on 30-01-2016 with ₹ 328 crore of AUM, with 359 Banks registered under APY (PFRDA 2016). APY has been registering the highest month-on-month subscriber growth (9.1 per cent in January 2016) and asset growth (25 per cent in January 2016) among all NPS sectors.

Benefits and Challenges in APY

By remodelling APY as a guaranteed pension scheme with a fixed monthly retirement benefit, Government of India has addressed issues of clarity and transparency in the NPS-Lite scheme. Government has tied the APY scheme to its broader mission of financial inclusion under PMJDY (Pradhan Mantri Jan Dhan Yojana) by using Banks as intermediaries for promoting, administering and extending pension benefits to low income workers. Compared to NPS-Lite, APY lays greater emphasis on e-governance and uses modern-day ICT platforms such as mobile SMS reminders/alerts, electronic KYC (Know your Customer) based registration and online exit/withdrawal/claims settlement processes to overcome the last mile challenges and to simplify the subscriber experience.

Chart 1: A Comparison between NPS-Lite and APY

Feature	NPS-Lite	APY
Joining Age	Under 60 years of age at the time of joining.	Between 18 and 40 years at the time of joining.
Minimum Contribution	₹ 100 at the time of registration. No minimum prescribed amount in subsequent years.	Fixed amount depends on age of joining/minimum pension desired
Pension Amount	Variable. Depends on subscriber contributions during the subscription term.	Minimum Guaranteed amount. ₹ 1000/2000/3000/4000/5000
Penalty for Payment Delay	None	Up to ₹ 10 per month for overdue payments
Penalty for Payment Default	None	APY Account Frozen/Deactivated/Closed after 6/12/24 months of continuous non-payment
Government Co-contribution	₹ 1000 per year for contributions between ₹ 1000 and ₹ 12000 per year	50 per cent of contribution up to ₹ 1000 per annum
Co-contribution period	Till 2016-2017	Till 2019-2020, provided before March 31, 2016
Agency Incentive	₹ 120 for new enrolments and ₹ 100 for persistent subscribers who contribute at least ₹ 1000/yr	Volume-based incentive of up to ₹ 150 for new enrolments to Banks
Bank account requirement	None. Administered through licensed Aggregators and MFIs	Yes. Administered through Banks and Post Offices
Contribution mode	Physical payment to enrolment agency.	Auto-debit from savings account.
Customer service interface	Aggregator and CRA (for sms alerts)	Bank and CRA (for sms alerts including reminders)
Exit Criterion	Before 60 years – 20 per cent as lump sum, 80 per cent as annuity After 60 – 40 per cent minimum annuity	Before 60 years – 100 per cent lump sum withdrawal After 60 – 100 per cent monthly pension

Source: a) Atal Pension Yojana. Gazette Notification issued by Ministry of Finance on October 16, 2015.

b) Atal Pension Yojana Training Manual at PFRDA [<http://www.pfrda.org.in/MyAuth/Admin/showimg.cshtml?ID=676>] (Accessed on February 28, 2016).

In spite of the above mentioned benefits, the APY scheme has certain inherent problems that are likely to limit its adoption among unorganized workers.

- i. *Stringent Default Penalties:* As can be seen in Chart 1, APY has introduced severe penalties for discontinuities in making pension contributions. Thus if an APY subscriber misses up to 6 consecutive contributions, his/her account is frozen, after 12 months his account is deactivated and beyond 24 months his account is permanently closed. Considering that APY has been designed to benefit unorganized workers with irregular income streams, this feature is likely to dissuade such workers from enrolling in the scheme and existing subscribers from availing its post-retirement benefits.
- ii. *Limited Government co-contribution:* While APY has extended the co-contribution period till 2019-2020, currently these benefits are extended to those who enrol in the scheme before 31st March, 2016. Since less than one per cent of the total unorganized workforce in the country is currently participating in APY, a large section of the target population who join the scheme in the coming years will remain excluded from this incentive.
- iii. *Poor Agent Incentivisation:* Unlike NPS-Lite which appointed Aggregator entities (NGOs, MFIs, NBFCs) with strong field networks and rural presence to promote the pension scheme, APY relies on banks to serve as nodal points for administering the scheme. The objective is to utilize government schemes such as APY for seeding new bank accounts opened under PMJDY and further expand financial inclusion to the economically excluded. However, as a result, the success of APY in reaching low income workers living in semi-urban/rural areas is now contingent upon the degree of geographic/demographic penetration of bank branches and the depth of their respective business correspondent (BC) networks in these areas. Moreover, agent incentives are considerably lower than in the case of NPS-Lite since incentives from PFRDA have to be mutually negotiated and shared between the Bank and the BCs.
- iv. *Lower Flexibility in Exit and Withdrawal:* NPS-Lite permitted pre-mature withdrawals before retirement age (before 60 years) whereby up to 20 per cent of the accumulated corpus could be claimed as a lump sum amount to meet a worker's emergency household needs and the remaining 80 per cent retained for an annuity. APY, in contrast, did not initially provide exit option except in the event of death or terminal disease of the beneficiary. Subsequently, exit option was given to the beneficiary if she/he gives up government's contribution and interest earned on his/her contributions. Considering that a large segment of low-income workers in the informal sector are highly vulnerable to workplace injuries, accidents and disability, the APY scheme should have a more compassionate approach and not deny them the benefits of social protection.
- v. *Benefits not indexed to inflation:* An analysis of the APY scheme conducted by IFMR^{xii} shows that, in the absence of inflation indexation, there is a real risk of significant shortfalls in monthly income for all age-groups. It also shows that shortfalls occur irrespective of whether they are at the lower end (₹ 1000^{xiii}) or at the higher end (₹ 5000^{xiv}) of the prescribed benefit band. In these calculations, a 5 per cent discount rate has been used to estimate the real pension benefit received by an APY subscriber after retirement. The discount rate used is one percentage point higher than the long-term inflation target set by RBI. However, historical inflation rate in India is 8%, and if this rate is

applied, then the pension amount received by unorganised worker will fall well short of her monthly expenditure.

Conclusions and Recommendations

An important improvement of APY over NPS-Lite is that the end benefits are clearly spelled out in the former. However, some of the features of APY are rigid and not in alignment with the characteristics of unorganised workers from a financial perspective, thus calling for an improvement in the design.

In the light of challenges discussed in the preceding section, the following modifications to the APY scheme are suggested so that it is truly effective, and generates the expected impact in enhancing old age security among unorganized workers in the country.

- a. *Remove Account Closure for Defaults:* In the event of sustained non-payment of over two years, the subscriber can be migrated to an NPS-Lite model whereby he is no longer entitled to a fixed monthly pension on retirement but can continue making suitable contributions to the APY account at his/her discretion. At retirement, 40 per cent of the accumulated corpus can be converted into an annuity and the rest can be offered as a lump sum to the subscriber.
- b. *Mobilize Private Co-contributions:* Under the current scheme, GoI co-contributions for new APY enrolments are expected to lapse by March 31, 2016. Government should actively seek private co-contributions such as through Internet crowd-funding to supplement Government funds to meet co-payment obligations on pension contributions by the poor subscribers. As per a recent report published by World Bank (2013), households in the developing world can potentially deploy up to \$96 Billion a year through crowd-funding platforms by 2025. Besides pension co-payments, private contributions can also include other forms of incentives such as gifts/giveaways, product discounts or lotteries to reward low income workers on making regular savings.
- c. *Encourage Mobile Money Payments:* APY scheme hopes to leverage the success of PMJDY to expand its coverage among low income workers. However, as per a recent RBI report, while PMJDY has increased account density among under-served communities, account usage continues to be a challenge. Nearly 35 per cent of the accounts across all banks were zero-balance accounts as on November 2015 (RBI 2015). Government should promote the deployment of low cost and flexible mobile money channels to improve last mile access to banks for the underprivileged in rural areas.
- d. *Ease of Premature Exits and Withdrawals:* APY should have adequate provisions for partial withdrawal of corpus by low income subscribers in the event of an emergency after a reasonable lock-in period of 5 or 10 years. For example, PPF schemes that have a 15-year lock-in period prior to full withdrawal allow 50 per cent withdrawal after the end of the sixth year. A similar level of flexibility should be allowed in APY as well since the targeted beneficiaries are low income workers who are highly susceptible to negative financial shocks due to the precarious nature of their livelihoods.
- e. *Enhance Behavioural Interventions:* In recent years, behavioural interventions or “nudges”^{xv} have attracted significant attention as low cost policy tools to elicit desired savings behaviour among households (Thaler and Sunstein 2009). Randomized experiments from around the world have shown that various behavioural design elements such as peer comparisons, commitment devices,

goal-setting calendars and personalization are effective in overcoming self-control issues and at prompting regular, habitual micro-savings by poor households (Fiorillo, Potok and Wright 2014). Although APY incorporates SMS reminders and auto-debit facility, there is greater scope for embedding behavioural nudges into the design.

Notes

- ⁱ Notable issues include cumbersome and time-consuming selection process (GOI 2006), applicants incurring considerable expenditure for accessing benefits, delays in the sanction of applications (Bloom *et al* 2010, Dutta *et al* 2010, Rajasekhar *et al* 2016), irregular receipt of pension benefits (Kumar and Anand 2006), and unauthorized payment to the agents delivering the pensions (Rajasekhar *et al* 2009).
- ⁱⁱ See Dutta *et al* (2010), Kaushal (2014) and Narayana (2015).
- ⁱⁱⁱ Note, however, that some state government schemes for mobilizing small contributions from unorganized workers such as Kerala Construction Workers' Welfare Funds and West Bengal Provident Fund for Unorganized Workers existed even before 2010 (Rajasekhar and Suchitra 2006).
- ^{iv} Bloom *et al* (2010: 63) note that the nature of old age insecurity is determined by factors pertaining to working period (total number of years of working, quantum of earnings and so on) as well as the retired life (length of life post-retirement, income volatility, health status, etc.).
- ^v Three sources of population projections are currently available; i) United Nations projections up to 2100, ii) Census of India 2001 up to 2026 and iii) US Census Bureau up to 2050. Although the three sources are official, we prefer to use the UN- projected population figures because of availability up to 2100 and their global comparability. For details of its methodology, please see United Nations (2013).
- ^{vi} GoI (2011c) reports that life expectancy in years, which was 63.8 for males and 66.1 for females during 2001-2005, has gone up to 67.3 for males and 69.6 for females during 2011-2015. It is projected that life expectancy will go up to 69.8 for males and 72.3 for females by 2021-25. Such an increase is attributed to better nutrition, treatment of infectious diseases and so on.
- ^{vii} As per the census of 2011, death rate declined from 13.8 per cent during 1971-81 to 6.4 per cent during 2001-2011.
- ^{viii} Data also support this; nearly 42 per cent of the 104 million elderly in India, and 60 per cent of those from rural areas were engaged in work (GoI 2016) because of lack of social security, breakdown of family support system and so on.
- ^{ix} "NPS Lite – the low cost model for Groups," Published by PFRDA, New Delhi.
- ^x AUM refers to total market value of investment that is managed by PFRDA.
- ^{xi} Atal Pension Yojana. Gazette Notification issued by Ministry of Finance on October 16, 2015
- ^{xii} <http://www.ifmr.co.in/blog/2015/03/09/an-initial-analysis-of-the-atal-pension-yojana/>, Vishnu Prasad & Anand Sahasranaman, *IFMR Finance Foundation*
- ^{xiii} An 18-year old unorganized worker contributing ₹ 42 per month for 42 years will get ₹ 1,000 as pension at the retirement age; but, the value of ₹ 1,000 will only be ₹ 129 in the year of retirement.
- ^{xiv} In the higher end pension benefit brand as well, the shortfall is very high. For instance, an 18-year old unorganised worker contributing ₹ 210 per month for 42 years will get ₹ 5,000 in the year of retirement; however, the value of this will only be ₹ 644 in the year of retirement!
- ^{xv} In collaboration with the University of Bristol, the authors are undertaking a research study on how to improve enrolment and savings in APY. As a part of this, an experiment is planned in 200 villages in a Karnataka district to examine the impact of private co-contribution, mobile money payments and nudges on improvement of enrolment and savings in the APY through randomized control trial.

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