Are Our Contributory Pension Schemes Failing the Poor?

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The issue of old age income security in India assumes significance in view of the expected rise in the incidence of 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, National Pension System Lite and Atal Pension Yojana, 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, we argue that the design features of these schemes are such that they fail to take the specific characteristics of unorganised worker households into account. We also discuss how the current design of contributory social security schemes can be improved to meet the pension requirements of unorganised workers.

The authors thank Robert Palacios and M R Narayana for their comments on the paper.

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Publicly-funded old-age pension schemes have been implemented in India for the elderly poor in the last three decades. Although the issues[1] of poor coverage, insufficiency of pension amounts, poor governance in the selection and disbursal of pension amounts have been raised from time to time, the same have been hailed[2] as successful in helping the elderly poor. Central government schemes that aim to promote contributions from the poor for their old age security have only been promoted since 2010.[3] In this paper, we argue that though the contributory pension schemes for the poor such as National Pension System (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 fail to take the specific income and savings characteristics of unorganised worker households into account.

The paper is presented in five sections. After a 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, we highlight that illiteracy, poverty and vulnerability are key characteristics of unorganised workers in India. In the fourth section, we compare and contrast the design features of India's two contributory pension schemes, NPS Lite and APY, and discuss their strengths and limitations in addressing the needs of low-income workers with the help of available data and studies. In the final section, we discuss how the current design of contributory social security schemes can be improved to meet the pension requirements of unorganised workers.

Importance of Old Age Income Security

The issue of old age income security[4] in India assumes significance in view of the expected rise in the incidence of elderly population in the years to come, problems of poverty and vulnerability among the elderly people and the limited coverage of the existing old age pension schemes for the elderly population.

As per the Census of 2011, the proportion of elderly population (aged 60 years and above) in India was 8%, male population was 7.7% and female 8.4%. As far as rural–urban distribution is concerned, the proportion of the elderly was marginally higher in rural areas (8.1%) as compared to urban areas (7.9%).

Population projections show that the proportion of the elderly is expected to rise to 12.4% by 2026 (GoI 2011), to 20% by 2050 (Bloom et al 2010) and to around 37% by 2100 (Narayana 2015). 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 more than 60 years will be 105 in 2026 (Subaiya and Bansod 2011: 6). On the other hand, the sex ratio in the age group of more than 80 years is projected to be very high at 136, thus implying greater vulnerability among women belonging to 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 the 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% of the elderly population are economically dependent on others; this situation was the worst among elderly females in both rural (86%) and urban (83%) as compared to their male counterparts in rural (49%) and urban (44%) areas (GoI 2011: 11–12). Over 5% of persons aged 60 years were found to reside alone, while 12% reside only with their spouses and about 4% stay with either other relatives or non-relative members (GoI 2011). Old persons living on their own are poor, vulnerable, and less likely to receive household support (Dutta et al 2010: 66). There is no clarity on whether the remaining large proportion of elders staying with their spouses and other family members or those staying with their children were being well taken care of by their families.

Studies have also been showing that the dependence of the elderly in India has been increasing. The old age dependency ratio (persons aged 60 years and above to working age population), which increased since 1961, is likely to rise from 12% to 20% 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).

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.

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 the elderly. The low incidence of poverty in households with the 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.[5] Because of this, dependency ratios tend to be lower for households having aged members (Pal and Palacios 2006: 7–8).

Poverty and Size of Households

Srivastava and Mohanty (2012: 512) estimate about 18 million elderly persons were living below the poverty line in India. They find a positive association between the incidence of poverty and size of the household (that is, higher incidence of poverty among larger households and vice versa). But they did not find evidence in support of 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 is no significant difference between households consisting of elderly and non-elderly insofar 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 the National Sample Survey Office (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 India (Pandey 2009: 20). The author calls for strengthening the social security safety nets to improve the economic conditions of the elderly and better healthcare facilities to reduce the risk of disability among them (Pandey 2009: 20).

The elderly persons have been spending considerable amount for their living. GoI (2011: 13) notes that the monthly per capita expenditure of about 50% 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 and with less than primary 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: 222–23).

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, only limited elderly persons (about 16%) are covered in old age pension schemes (Narayana 2015); Kaushal (2014) suggests that the poor are left out. 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 the unorganised workers, allegedly heeding the advice of advocates of neo-liberalism.

> 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 insurance companies to play an important role and for 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 suits the conditions of unorganised workers in India, for whom these two schemes are primarily meant.

Conditions of Unorganised 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 2007: 3), unorganised sector comprises of "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 10 workers". The 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. (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% during this period. However, Table 1 reveals that the proportion of formal workers in the organised sector has in fact declined from 62.2% in 1999–2000 to 45.4% 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 organised private sector due to labour reforms and labour saving technological changes (Rao et al 2006: 1913).

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)
2004–05			
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)

Figures in brackets are percentages.
Source: (1) Figures for 1999–2000 and 2004–05 are computed by NCEUS (2007) from NSS 61st round 2004–05 and NSS 55th round, 1999–2000, Employment–Unemployment Survey. (2) figures for 2011–12 are obtained by Srija and Shirke (2014).

The share of informal workers in the organised sector has, however, gone up from 37.8% to 54.6% during the period 1999–2000 to 2011–12. Thus, whatever increase in the total number of formal workers that one observes from Table 1, is confined to mainly to the informal sector. The 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, that is, 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.

The 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 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).

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 and water supply	0.1	0.3
Construction	14.2	20.5
Trade, hotel and restaurant	32.6	29.7
Transportation, storage and communications	9.8	9.8
Real estate and 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)

Let us now try to understand in which sub-sectors of manufacturing, non-manufacturing and services, there was growth of informal workers during the period 2004–05 to 2011–12. As can be seen from Table 3, a steep increase in the number of informal workers took place in construction sub-sector, while the increase in the "real estate and other business activities," "Finance" has been marginal. One can, in fact, see a reduction in the proportion of informal workers in manufacturing, trade, hotel and restaurant, and education.

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).

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 rikshaw 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. Rao et al (2006) show unorganised workers face several deprivations. Further, they are scattered, do not have their own organisations 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, the NCEUS (2007) has therefore attempted, as a first approximation, to measure this category by dividing 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 (that is, 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 (that is, ₹14.6 pcpd); and the fourth called "Vulnerable" have per capita consumer expenditure of only two times the poverty line (that is, ₹20.3 pcpd). If we combine the poor and vulnerable, they would together constitute 77% of the population. This group, totalling 836 million people with an income roughly below $2 in Public–Private Partnership terms, can be called as the poor and vulnerable segment of the Indian population.

It can be seen from Table 4 that 79% 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 1990s. (NCEUS 2007: 8)

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 2011). The agricultural labourers, facing the problem of uncertain employment and irregular incomes, live in poverty and vulnerability.

Table 4: Percentage Distribution of Expenditure Classes by Social Identity, Informal Work Status and Education, 2004–05

Sl No	Economic Status	Social Categories (Percentage Share in Own Total)				Percentage of Unorganised Workers	Education*	
		STs/SCs	All OBCs Except Muslims	All Muslim Except STs/SCs	Others (without STs/SCs, OBCs and 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 and 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

* Refers to persons aged 15 and above.
Source: Computed by NCEUS (2007) from NSS 61st Round 2004–05, 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 the Scheduled Castes/Scheduled Tribes (SC/ST) community. There is also congruence between illiteracy and unorganised workers. Over 86% of the poor and vulnerable are illiterate.

The high congruence between informal work status and poverty/vulnerability becomes almost complete in the case of casual workers; 90% of them belong to the group of poor and vulnerable (Table 5). As noted earlier, this group includes the overwhelming population of the Dalits and Adivasis, Other Backward Classes (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 2004–05, Employment-Unemployment Survey.

Social Security for the Unorganised Workers

The NCEUS has suggested legislations to expand the coverage of social security among unorganised workers and to improve the working conditions of the unorganised workers. The commission is of the view that social security problems of unorganised 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 recognised. (NCEUS 2006: 98)

According to the 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, healthcare services, drinking water and sanitation, technical training, etc, that 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 prerequisite 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. 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 programmes have come to stay in the country like the Integrated Child Development Services (ICDS), public distribution system (PDS), mid-day meal programme, Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) scheme, etc.

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.

The NCEUS (2006) restricted its recommendations only to protective social security and proposed to cover hospitalisation, maternity, life insurance and old age security. The commission also proposed defined contributions as premiums for insurance to cover (i) hospitalisation, (ii) maternity, life insurance and (iii) 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 unorganised workers in the country.

Subsequently, the Unorganised Workers' Social Security Bill, 2008 proposed a minimum social security cover consisting of life insurance, old age pensions 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 in 10 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, the Indian government began to implement contributory pension schemes and these are discussed in the next section.

Pension Schemes for Unorganised Workers in India

In 2010, a new pension scheme called the NPS Lite was launched by the central government for all the unorganised workers in the age group of 18–60 years and implemented through the Department of Labour. More recently, within five years of NPS Lite, a new pension scheme called the APY 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: The NPS is India's largest contributory pension programme for all Indian citizens, which is regulated by the Pensions Fund Regulatory Development Authority (PFRDA).

In 2010, the PFRDA instituted a new variant of NPS called NPS Lite[6] to extend the benefits of old age security to unorganised 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/her contributions and retirement corpus. The National Securities Depository Limited (NSDL) serves as the central record-keeping 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" that 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 enrols 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 ₹1,000 per annum to all NPS Lite account holders who saved a minimum of ₹1,000 every year.

Progress: In spite of its many attractive features, the NPS Lite succeeded in attracting only 44.63 lakh registered subscribers over the last six years with a cumulative corpus of ₹1,982 crore as on 30 January 2016 (PFRDA 2016). While NPS Lite accounts for 38.8% of subscribers registered under all NPS sectors today, it has mobilised only 1.8% of the total assets under management (AUM)[7] by PFRDA. When the figure on subscribers is compared with the number of unorganised workers, only about 1% of informal workers were found to be enrolled. After the new government coming into power at the centre, the scheme was discontinued with effect from 1 April 2015 and replaced by a new guaranteed pension scheme called APY.

Limitations: The failure of NPS Lite in promoting retirement savings among low-income workers is widely attributed to the following:
(i) In 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 ₹1,000 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 unorganised workers, who otherwise would have made small contributions to obtain the membership in NPS Lite. This is evident in a study by Palacios and Sane (2013) who show that higher income households and more educated people 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 ₹1,000 as pension deposit from a client in order to minimise their field collection costs and to lower commission risks through missed instalments. This dissuaded workers with lower disposable incomes from joining the programme, since the scheme did not have the flexibility for them to make multiple small contributions over the year. This calls for realignment 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, annuitisation requirements, premature withdrawal clauses, etc. Since the old age pension provided was contingent on the quantum of savings realised over the subscription period, it was difficult for the agency to guarantee a fixed pension amount to the subscriber at 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. This was essential given that the poor in India, generally, give preference to current consumption rather than future consumption; hence 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: In June 2015, the Government of India launched a new guaranteed pension scheme called APY. The scheme, though open to all citizens of India, is specifically targeted to workers in the unorganised sector who are encouraged to make regular small savings in their APY accounts during their working years to avail pension benefits in old age.[8] The scheme promises a minimum fixed monthly pension between ₹1,000 and ₹5,000 to any APY subscriber on reaching retirement age (60 years) provided he/she contributes a certain prescribed amount for at least 20 years. Unorganised 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 five years.

As in the case of the NPS Lite, the APY also operates within the NPS architecture and is regulated by the PFRDA. The 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 PRAN is also assigned to all APY subscribers. However, APY differs from NPS Lite in a few important respects as shown in Table 6 (p 83).

Progress: As per the official statistics, the APY has enrolled 19.77 lakh subscribers as on 30 January 2016 with ₹328 crore of AUM and 359 banks registered under it (PFRDA 2016). It has been registering the highest month-on-month subscriber

Table 6: 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: ₹1,000/2,000/13,000/4,000/5,000
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	₹1,000 per year for contributions between ₹1,000 and ₹12,000 per year	50% of contribution up to ₹1,000 per annum
Co-contribution period	Till 2016–17	Till 2019–20, provided before 31 March 2016
Agency incentive	₹120 for new enrolments and ₹100 for persistent subscribers who contribute at least ₹1,000 per year	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% as lump sum, 80% as annuity After 60%–40% minimum annuity	Before 60 years—100% lump sum withdrawal After 60%–100% monthly pension

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

growth (9.1% in January 2016) and asset growth (25% in January 2016) among all the NPS sectors.

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

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

(i) *Stringent default penalties:* As can be seen in Table 6, the APY has introduced severe penalties for discontinuities in making pension contributions. Thus, if an APY subscriber misses up to six consecutive contributions, his/her account is frozen, after 12 months their account is deactivated and beyond 24 months their account is permanently closed. Considering that the APY has been designed for unorganised 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 the APY has extended the co-contribution period till 2019–20, it is currently extending these benefits only to those subscribers who enrol in the scheme before 31 March 2016. Since less than 1% of the total unorganised workforce in the country is currently participating in the 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 the NPS Lite which appointed aggregator entities (NGOs, MFIs, NBFCs) with strong field networks and rural presence to promote the pension scheme, the APY relies on banks to serve as nodal points for administering the scheme. The objective is to utilise government schemes such as the APY for seeding new bank accounts opened under the PMJDY and further expand financial inclusion among the economically excluded. However, as a result, the success of the 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 networks in these areas. Moreover, agent incentives are considerably lower than in the case of the NPS Lite since incentives from the PFRDA have to be mutually negotiated and shared between the bank and the business correspondents.

(iv) *Lower flexibility in exit and withdrawal*: The NPS Lite permitted premature withdrawals before retirement age (before 60 years) whereby up to 20% of the accumulated corpus could be claimed as a lump sum amount to meet a worker's emergency household needs and the remaining 80% retained for an annuity. The 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 the IFMR[9] shows that, in the absence of inflation indexation, there is a real risk of significant shortfalls in monthly income for all age-groups. They show that shortfalls occur irrespective of whether they are at the lower end (₹1,000[10]) or at the higher end (₹5,000[11]) of the prescribed benefit band. In these calculations, a 5% discount rate has been used to estimate the real pension benefit received by an APY subscriber after retirement. This discount rate is 1 percentage point higher than the long-term inflation target set by Reserve Bank of India (RBI). However, historical inflation rate in India is 8%. If the historical inflation rate is applied, the monthly expenditure coverage is likely to be worse if the historical inflation rate of 8% is assumed.

Conclusions and Recommendations

An important improvement of the APY over the NPS Lite is that the end benefits are clearly spelled out in the former. However, some of the features of the APY are rigid and not in alignment with the characteristic features 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 expected impact in enhancing old age security among unorganised workers in the country.

(i) *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% of the accumulated corpus can be converted into an annuity and the rest can be offered as a lump sum to the subscriber.

(ii) *Mobilise private co-contributions*: In the current scheme, GOI co-contributions for new APY enrolments are expected to lapse by 31 March 2016. Government should actively explore private co-contributions such as through internet crowdfunding to supplement government matching of pension contributions by the working poor. As per a report published by the World Bank (2013), households in the developing world can potentially deploy up to $96 billion a year through crowdfunding 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 making regular savings.

(iii) *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 the PMJDY has increased account density among underserved communities, account usage continues to be a challenge. Nearly 35% 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.

(iv) *Ease of pre-mature exits and withdrawals*: The 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 five or 10 years. For example, the Public Provident Fund (PPF) schemes that have a 15-year lock-in period prior to full withdrawal allow 50% withdrawal after the end of the sixth year. Similar level of flexibility should be designed in APY as well since the targeted beneficiaries are low-income workers who are highly susceptible to negative financial shocks due to the nature of their livelihoods.

(v) *Enhance behavioural interventions*: In recent years, behavioural interventions or "nudges"[12] have attracted significant attention as low-cost policy tools to elicit desired savings behaviour among households (Thaler and Sunstein 2009). Randomised experiments from around the world have shown that various behavioural design elements such as peer comparisons, commitment devices, goal-setting calendars and personalisation are effective in overcoming self-control issues and at prompting regular, habitual micro-savings by poor households (Fiorillo et al 2014). Although the APY incorporates SMS reminders and auto-debit facility, there is greater scope for embedding behavioural insights into the design.

NOTES

1 Notable issues are 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), unauthorised payment to the agents delivering the pensions (Rajasekhar et al 2009).

2 See Dutta et al (2010), Kaushal (2014) and Narayana (2015).

3 Note, however, that some state government schemes mobilising small contributions from unorganised workers such as Kerala Construction Workers' Welfare Funds and West Bengal Provident Fund for Unorganised Workers existed before 2010 (Rajasekhar and Suchitra 2006).

4 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).

5 Data also support this; nearly 42% of 104 million elderly in India, and 60% of those from rural areas were working (GoI 2016) because of lack of social security, breakdown of family support system and so on.

6 "NPS Lite–the Low Cost Model for Groups," published by PFRDA, New Delhi.

7 AUM refers to total market value of investment that is managed by PFRDA.

8 Atal Pension Yojana. Gazette Notification issued by Ministry of Finance on 16 October 2015.

9 http://www.ifmr.co.in/blog/2015/03/09/an-initial-analysis-of-the-atal-pension-yojana/, Vishnu Prasad and Anand Sahasranaman, IFMR Finance Foundation.

10 An 18-year-old unorganised 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.

11 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!

12 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 randomised control trial.

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