Research

CRISIL
An S&P Global Company

Security for seniors

Opportunities and challenges in creating an inclusive and sustainable pension system in India

February 2018

pfrda

Analytical contacts

CRISIL

Nagarajan Narasimhan
Senior Director, CRISIL Research
nagarajan.narasimhan@crisil.com

Jiju Vidyadharan
Senior Director, Funds & Fixed Income Research
jiju.vidyadharan@crisil.com

Dharmakirti Joshi
Chief Economist, CRISIL Ltd
dharmakirti.joshi@crisil.com

Piyush Gupta
Associate Director, Funds & Fixed Income Research
piyush.gupta1@crisil.com

Richa Dhariwal
Associate Director, Funds & Fixed Income Research
richa.dhariwal@crisil.com

Dipti Deshpande
Senior Economist, CRISIL Ltd.
dipti.deshpande@crisil.com

Prahlad Salian
Manager, Funds & Fixed Income Research
prahlad.salian@crisil.com

Sukrati Trivedi
Analyst, Funds & Fixed Income Research
sukrati.trivedi@crisil.com

PFRDA

Dr Badri Singh Bhandari
Whole Time Member (Economics)
badris.bhandari@pfrda.org.in

Ms Sumeet Kaur Kapoor
Chief General Manager
sumeet.kapoor@pfrda.org.in

Dr Alpana Vats
Deputy General Manager
alpana.vats@pfrda.org.in

Ms Manju Bhalla
Deputy General Manager
manju.bhalla@pfrda.org.in

Mr Mohit Yadav
Deputy Manager
mohit.yadav@pfrda.org.in

Ms Tanya N Sangma
Assistant Manager
tanya.sangma@pfrda.org.in

Editorial

Raj Nambisan, Director
Subrat Mohapatra, Associate Director
Nisha Prabhakaran, Lead Editor

Design

Harshal Bhavsar, Rajesh Gawade, Kedarnath Khandalkar

Foreword

I am happy that CRISIL, along with PFRDA, is publishing this report.

It comes at a time when traditional family-based care for the elderly is declining gradually in India because of increasing nuclearisation driven by occupational imperatives and urbanisation. Therefore, it is necessary that adequate, formal mechanisms are in place for old-age income security.

In India, there are large gaps in pension coverage among both informal and formal sector workers. This problem is compounded by demographic pressures, which strains the ability of governments to finance retirement or offer old-age benefits. To be sure, the central government and many states have striven to do so for the poor through various schemes.

International experience shows that there is no uniform model for pension reform. Each country has to find a solution suiting its culture, political system, economy, and labour force structure.

The World Bank's five-pillar model of pensions, however, can help policymakers, regulators and pension providers and sponsors address the needs of diverse populations to manage the risks in old age in a fiscally sustainable manner.

This report aims to bring some of the key issues and concerns of demographic transition of different states, fiscal space, pension penetration, different pillars of pension provisions, pension planning awareness, information repository, and payout design for further discussion.

It provides rich insights and relevant knowledge to stakeholders for future deliberations and for promoting solutions to expand pension coverage in an inclusive and fiscally sustainable manner.

Hemant G Contractor
Chairman
PFRDA

Research

Message from CRISIL

Globally, pension planning is the bedrock of social security as it helps people in their sunset years to have steady income and access to the essentials, including healthcare services, in a way that promotes their rights and dignity.

India, however, comes up very short on this count, primarily because the majority of its workforce is in the unorganised sector. There is also wide variance in the pension penetration of states so different types of pension planning becomes necessary.

In this report, we have tried to identify the variations among states on pension penetration, socio-economic support, fiscal position and government policy focus, and identify similar clusters to make policy action simpler and effective.

For instance, sharper government focus and adoption of a targeted social pension scheme would be of more importance in some clusters where there is low penetration and state finances are also weak.

And in clusters where penetration is better, promotion of market-linked pension products and better design of annuities could be the way forward.

Further, leveraging of Pradhan Mantri Jan-Dhan Yojana, Atal Pension Yojana and the National Health Protection Scheme for efficient micro-insurance and micro-pension administration is an imperative. And for actionable efficiencies, and to remove information asymmetry, there is an urgent need to create a central repository of pension data.

This analysis also builds upon the CRISIL Inclusix report, which presents a separate section on NPS coverage in the country, in addition to its objective of measuring the progress of financial inclusion by three service providers (banks, microfinance institutions and life insurance companies) across four dimensions (branch, credit, deposit and insurance).

I am sure this report would aid in furthering the development of pension policy, and spur improvements in the pension planning process across states, and help develop holistic templates for tomorrow.

Ashu Suyash
Managing Director & CEO
CRISIL Ltd

Research

Contents

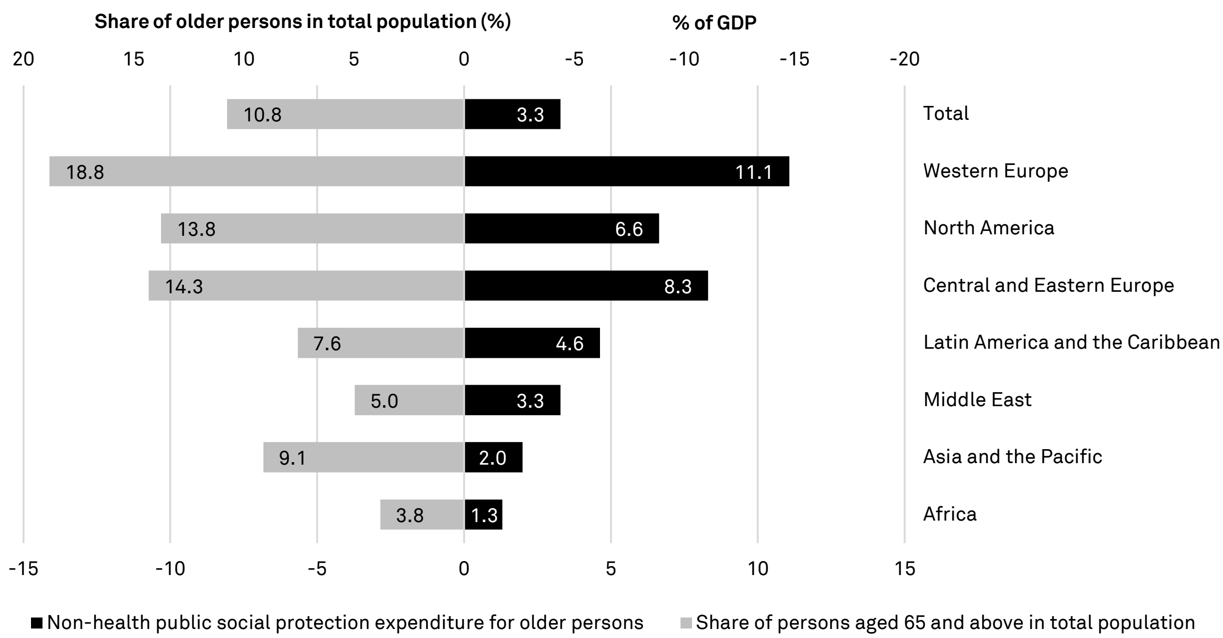

50

Pension, the bedrock of social security globally

Pension helps people get assured income in old age, allowing them access to essential services, including healthcare, for a life of dignity.

This is the reason pension planning has been at the heart of social security, globally. Public social security expenditure on pensions and other non-health benefits earmarked for older persons amounts on average to 3.3% of global gross domestic product (GDP).

Europe leads in public social protection expenditure on pensions and other benefits, excluding health

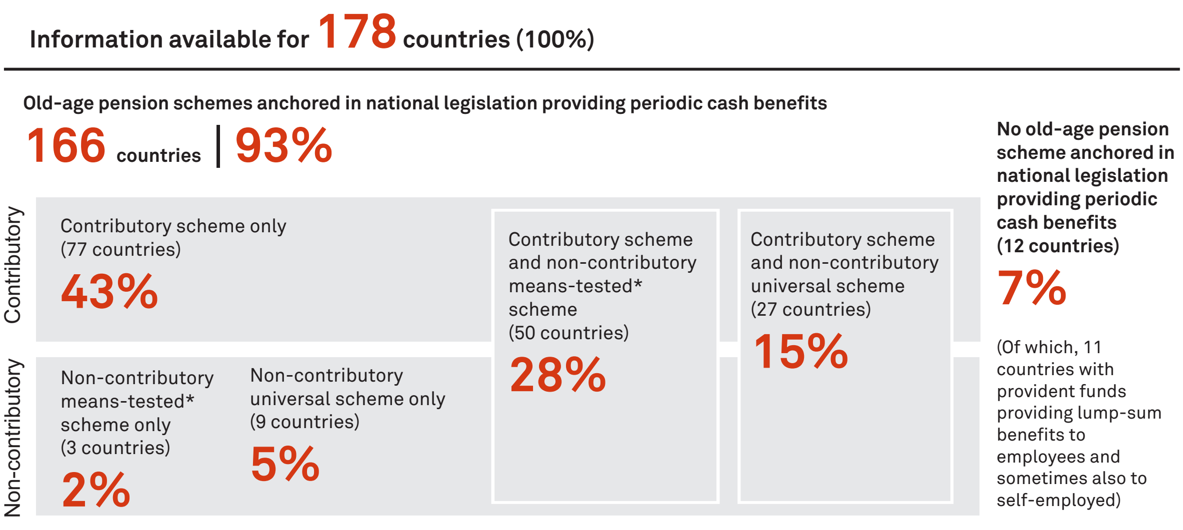


Source: ILO - World Social Protection Report 2014-15

Variations among regions are influenced by differences in the demographic structure of the population. For instance, spends are higher in ageing population areas such as Europe, compared with Asia and Africa, where the age mix is younger.

The break-up between public and private provisions for pension and social services also varies. For instance, while 166 out of 178 countries provide at least one pension scheme through a combination of contributory and non-contributory schemes, the remaining 12 provide only lump-sum benefits through provident funds or similar programmes.

Contributory schemes dominate pension plans around the world



* Explanation of 'means-tested' scheme has been described in Annexure - I

Source: ILO - World Social Protection Report 2014-15

International standards of old-age pension[1]

Ageing societies are facing an important social policy challenge, that is to secure an adequate level of income for all people in old age without overstretching the capacities of younger generations. In view of the financing and sustainability challenges faced by social security systems in the context of demographic change, the State has a vital role to play in forecasting the long-term balance between resources and expenditure in order to guarantee that institutions will meet their obligations towards older persons.

The Universal Declaration of Human Rights (UDHR), 1948, and (in more general terms) the International Covenant on Economic, Social and Cultural Rights (ICESCR), 1966[2] lay down the rights of older persons to social security, and to an adequate standard of living to support their health and well-being, including medical care and necessary social services. The content of these rights is further specified in the normative body of standards developed by the International Labour Organization (ILO), which provides concrete guidance to countries for giving effect to the right of older persons to social security, from basic levels to full realisation[3].

The Social Security (Minimum Standards) Convention, 1952 (No 102), the Old-Age, Invalidity and Survivors' Benefits Convention, 1967 (No 128), and its accompanying Recommendation No 131, and the Social Protection Floors Recommendation, 2012 (No 202) provide an international reference framework setting out the range and levels of social security benefits that are necessary and adequate for ensuring income maintenance and income security, as well as access to healthcare in old age. The extension of coverage to all older persons is an underlying objective of these standards, aimed at achieving universality of protection.

Convention no. 102 and 128 envisage the provision of income security to people who have reached pensionable age through earnings-related contributory pensions (guaranteeing minimum benefit levels, or replacement rates, corresponding to a prescribed proportion of an individual's past earnings – in particular to those with lower earnings) and/or by flat-rate non-contributory pensions, which can be either universal or means-tested.

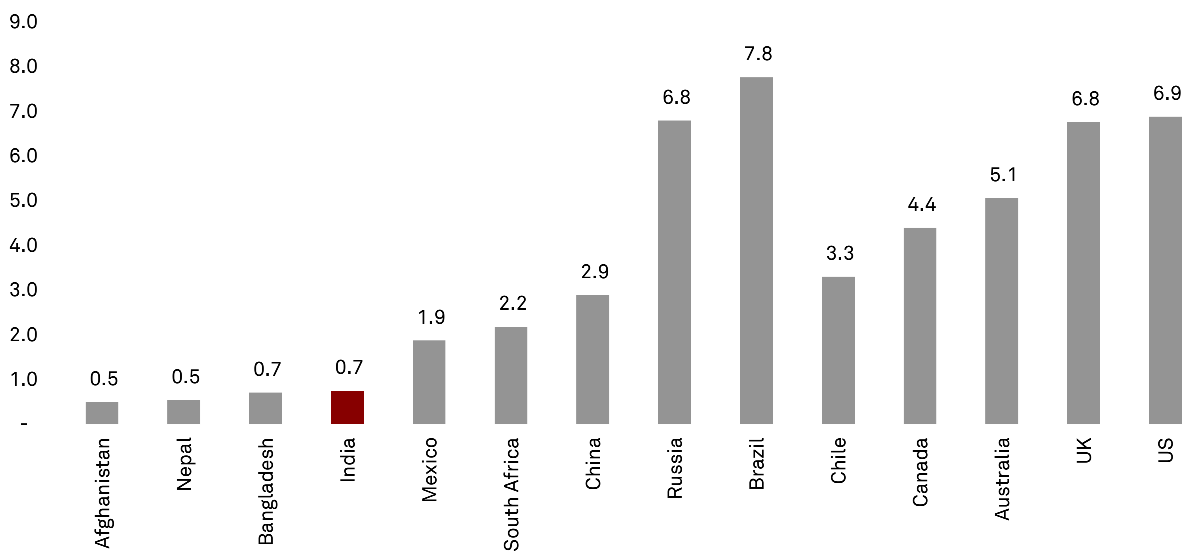
Meanwhile, recommendation No 202 calls for the guarantee of basic income security to all persons in old age, prioritising those in need and those not covered by existing arrangements. Such a guarantee would act as a safeguard against poverty, vulnerability and social exclusion in old age for people not covered by contributory pension schemes. It is also of high relevance to pensioners whose benefits are affected by the financial losses suffered by pension funds, whose pensions are not regularly adjusted to changes in the cost of living, or whose pensions are simply inadequate to secure effective access to necessary goods and services and allow life of dignity.

ILO social security standards thus provide a comprehensive set of references and a framework for the establishment, development and maintenance of old-age pension systems at the national level.

[1] ILO - Social protection for older persons: Key policy trends and statistics, 2017-19
[2] UDHR, Arts 22 and 25(1), and ICESCR, Art. 9.
[3] See UN, 2008, 201

India, however, comes up very short on public spending on pension, as can be seen from its expenditure compared with select middle-income, low-income and high-income countries.

India's public spending on pensions and other benefits, excluding health, stands low (% of GDP, 2010-11)



Source: World Social Protection Report 2014-15

A big problem for India lies in the fact that the majority of its workforce is in the unorganised sector (over 80%)[4]. While the Centre and the state governments do have plans that cover the unorganised sector, these are fragmented and inadequate. Additionally, there is wide variance among the states in terms of pension penetration, thus making it important to have multiple versions of pension planning to successfully meet people's needs in their sunset years.

In our report last year, we compared India's status on pension planning based on the World Bank's five-pillar framework (detailed in Annexure-I).

This year, we turn the gaze inward, at the state-wise landscape (for non-special category states)[5]. Erstwhile Andhra Pradesh has been considered for analysis wherever data for Telangana was not available.

We look at the variation between the states on penetration, socio-economic support, fiscal position and government policy focus, and group them in clusters. **A technical note detailing the construction of clusters for the above four parameters has been attached in Annexure-II.**

This report also builds upon the CRISIL Inclusix report, which presents a separate section on NPS coverage in the country, in addition to its objective of measuring the progress of financial inclusion in the country by three service providers (banks, microfinance institutions and life insurance companies) across four dimensions (branch, credit, deposit and insurance).

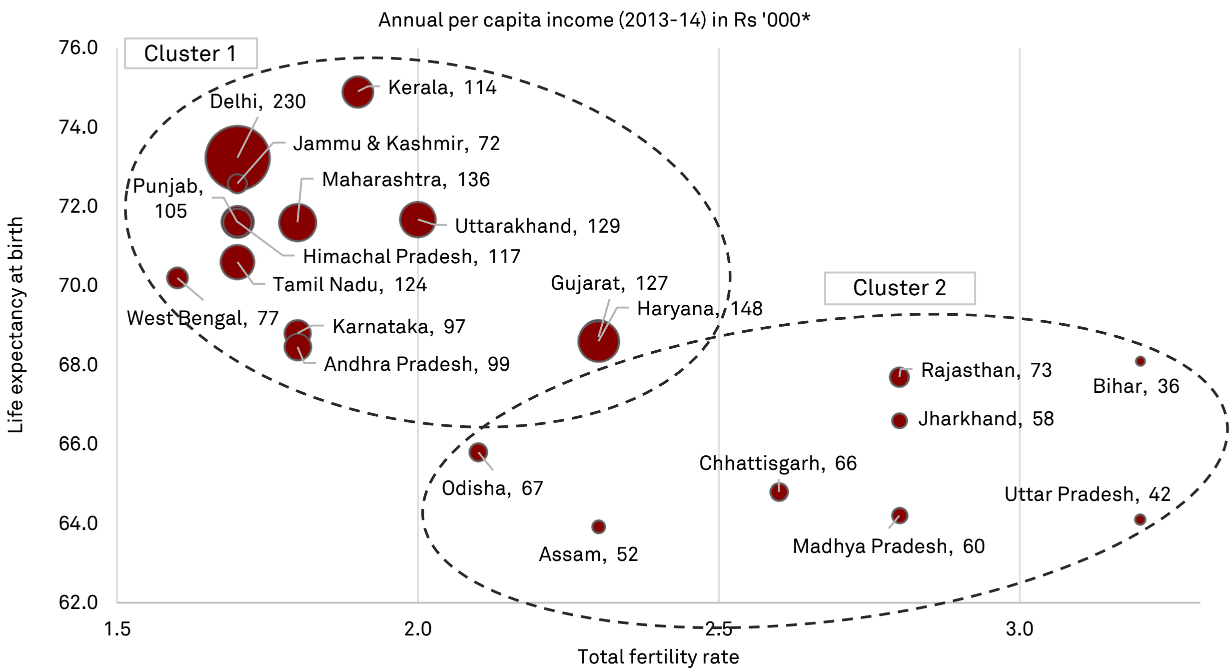
[4] Labour force survey on employment and unemployment, NSSO 2011-12

[5] Coverage on special category states has been discussed in Annexure III

Socio-economic support varies across states

In India, family support, or 'Pillar IV' of the World Bank's five-pillar framework of pension planning, has been the default option for individuals for their sunset years. But increasing nuclearisation of families has meant this is a receding source. In our report last year, we had identified two clusters among the states, based on demography and per capita income.

- Cluster 1: Higher elderly population and higher per capita income (ageing cluster)
- Cluster 2: Lower elderly population and lower per capita income (young cluster)



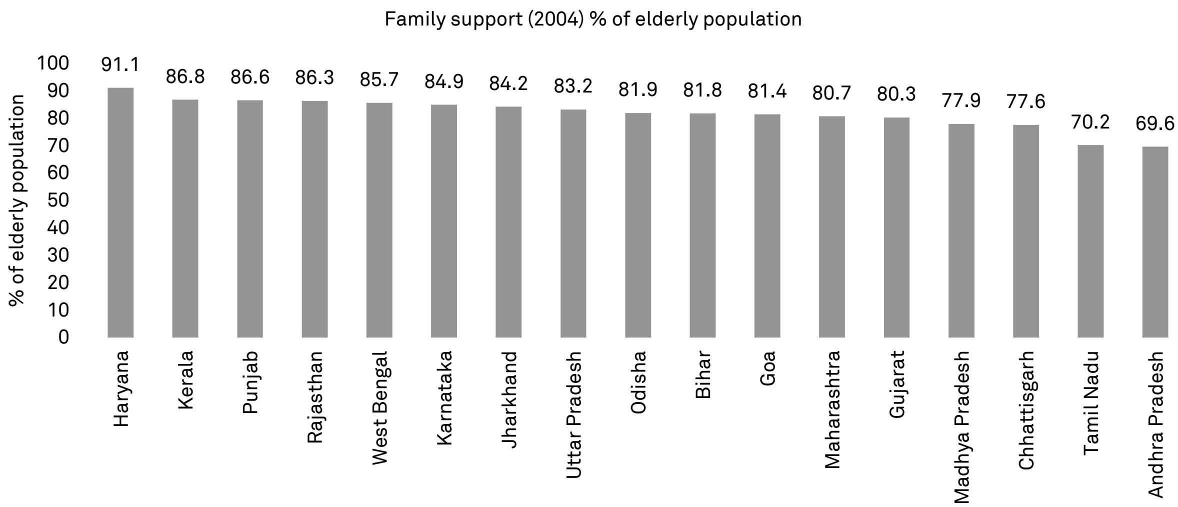
* Size of the bubble represents the per capita income of states
Source: Ministry of Statistics and Programme Implementation, Central Statistics Office, and Census 2011 data

This year, we deep-dive and analyse the states based on the socio-economic support provided to the elderly. We also see deviations within states on socio-economic support. For socio-economic support, we have looked at three parameters:

- Family support
- Elderly working population
- Elderly below poverty line (Elderly BPL)

Family support: This is the traditional base of pension planning in India and the measure excludes the elderly who live alone or only with their spouse. While India would be better off compared with most advanced economies in this aspect, there has been a progressive decline in family support, with variations among states. This variation is also reflected in the migration between states, as seen in the Economic Survey 2016-17. The migration between states was 9 million people, which was higher than the previous stated numbers in the Census. Further, the report indicates that the net-out migration is much higher in young and poor states such as Bihar, Uttar Pradesh, whereas the net-in migration was higher for ageing states such as Goa, Karnataka, Maharashtra, Gujarat, Tamil Nadu and Kerala. Additionally, the average size of Indian households decreased from 4.67 members per family in 2001 to 4.45 in 2011, as per Census.

Huge variations in family support for the elderly



Source: Situation of the Elderly - 2016, by MOSPI, GoI, National Sample Survey Organisation (NSSO) 60th Round 2004

Andhra Pradesh includes data for the newly formed state of Telangana

As seen in the chart, Haryana, Kerala, Punjab, and Rajasthan are high on family support, while the likes of Andhra Pradesh, Tamil Nadu, Chhattisgarh and Madhya Pradesh are low. Among those low on family support, Tamil Nadu and Andhra Pradesh are ageing states, though these are economically strong, with remittances as an important indirect medium to support the elderly. However, Madhya Pradesh and Chhattisgarh are economically weaker and are expected to also see a surge in their elderly population in years to come – this could pose a higher burden on the exchequer of the two states unless pension penetration improves through schemes such as Atal Pension Yojana (APY).

Elderly working population: This is another important parameter to check whether the elderly are well taken care of. This parameter includes main and marginal workers as per Census 2011. Main workers are those who have worked for a major part of the reference period, i.e. six months or more, while marginal workers are those who have not worked for a major part of the reference period. As mentioned in the previous report, the United Nations Population Fund (UNFPA) 2011 report on the Status of Elderly in Select States of India states that more than 71% of the working elderly work out of necessity or some compulsion, and not by choice.

Most working elderly have no other recourse

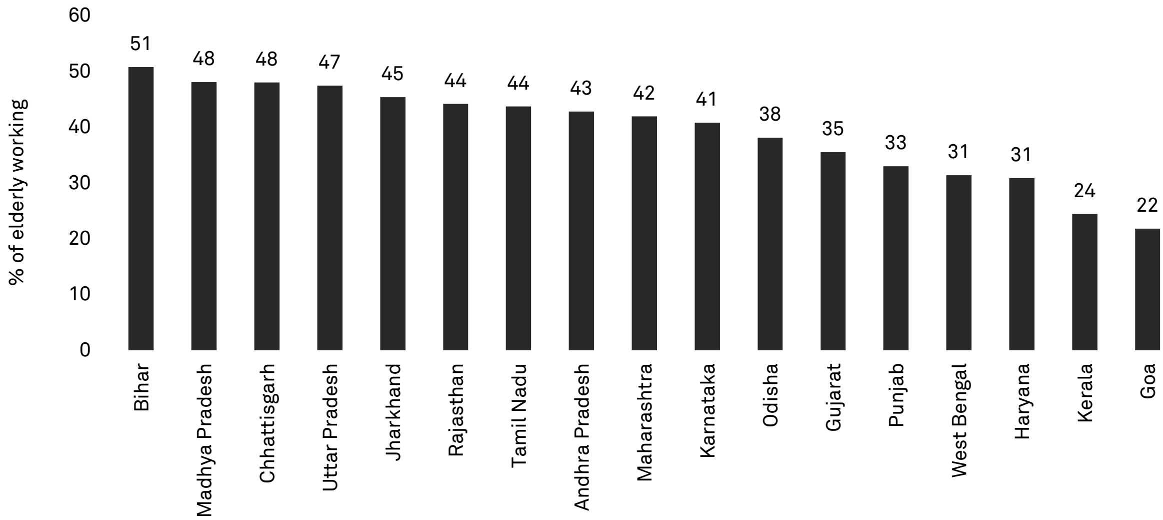
(% distribution, 2011)

Motivation for work	Total		
	Men	Women	Total
By choice	32	17.6	28.6
Economic/ other compulsion	67.9	82.2	71.3
No answer	0.1	0.2	0.1
Total	100	100	100
Number of elderly	1,716	549	2,265

The above data is based on a sample survey across seven states
Source: Status of Elderly in Select States of India, a UNFPA report, 2011

Low-income states such as Bihar, Madhya Pradesh, Chhattisgarh, Uttar Pradesh and Jharkhand also have a considerable share of their elderly population working for livelihood. However, states with high income and/or family support are better off in terms of elderly working population.

In several states, nearly half of the elderly work for a living

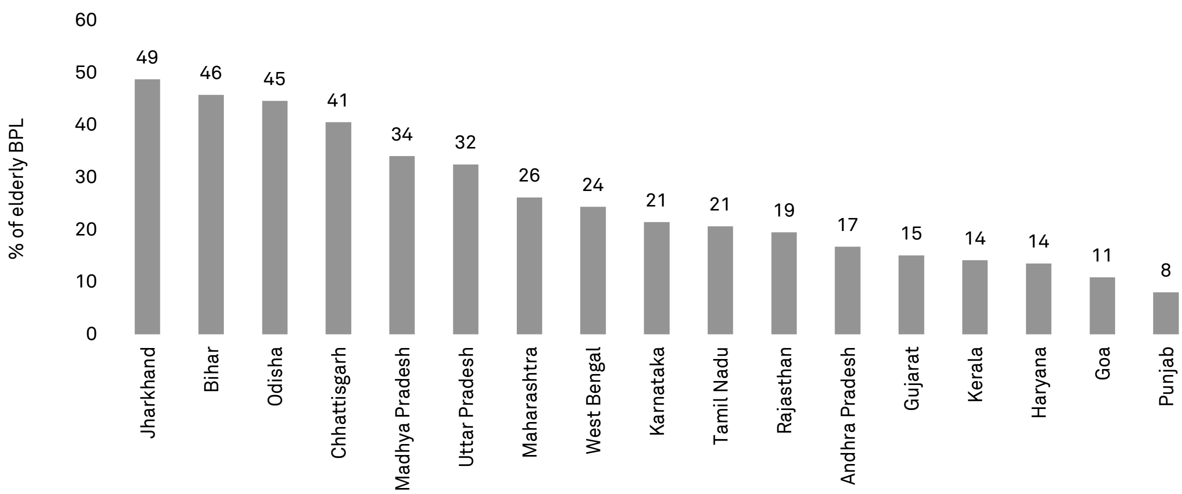


Source: Census 2011

Andhra Pradesh includes data for the newly formed state of Telangana

Elderly BPL: This is also an important parameter to understand pension coverage and adequacy in the unorganised sections across states. In this, we have taken the maximum of old age beneficiaries reported and beneficiaries covered in IGNOAPS from NSAP Action Taken Report, 2011-12. As can be seen clearly, low-income states have a large section of their elderly under BPL compared with high-income states.

Proportion of the elderly BPL people higher in low-income states



Source: NSAP Action Taken Report, 2011-12

Andhra Pradesh includes data for the newly formed state of Telangana

Based on the three parameters analysed, we have created a grid that clubs the states analysed into good, average, weak and minimal socio-economic support.

Signals amber in over half the states

Top 25 percentile | 25-75 percentile | Bottom 25 percentile

States	Family support (% of elderly)*	Elderly working (% of elderly)#	Elderly BPL (% of elderly)$	Socio-economic support
Haryana	91.1	30.9%	13.5%	Good
Kerala	86.8	24.4%	14.1%	
Goa	81.4	21.8%	10.9%	
Punjab	86.6	33.0%	8.0%	
West Bengal	85.7	31.4%	24.3%	Average
Gujarat	80.3	35.5%	15.1%	
Rajasthan	86.3	44.2%	19.5%	
Karnataka	84.9	40.8%	21.4%	
Maharashtra	80.7	41.9%	26.1%	Weak
Uttar Pradesh	83.2	47.4%	32.5%	
Odisha	81.9	38.1%	44.6%	
Andhra Pradesh	69.6	42.8%	16.7%	
Jharkhand	84.2	45.4%	48.7%	
Tamil Nadu	70.2	43.7%	20.6%	
Madhya Pradesh	77.9	48.1%	34.0%	
Bihar	81.8	50.7%	45.7%	Minimal
Chhattisgarh	77.6	48.0%	40.5%	

Erstwhile Andhra Pradesh has been considered for analysis

Source:

* Situation of the Elderly - 2016 , by MOSPI, GoI, National Sample Survey Organisation (NSSO) 60th Round 2004

Census 2011

$ NSAP Action Taken Report 2011-12 (For details refer Annexure II)

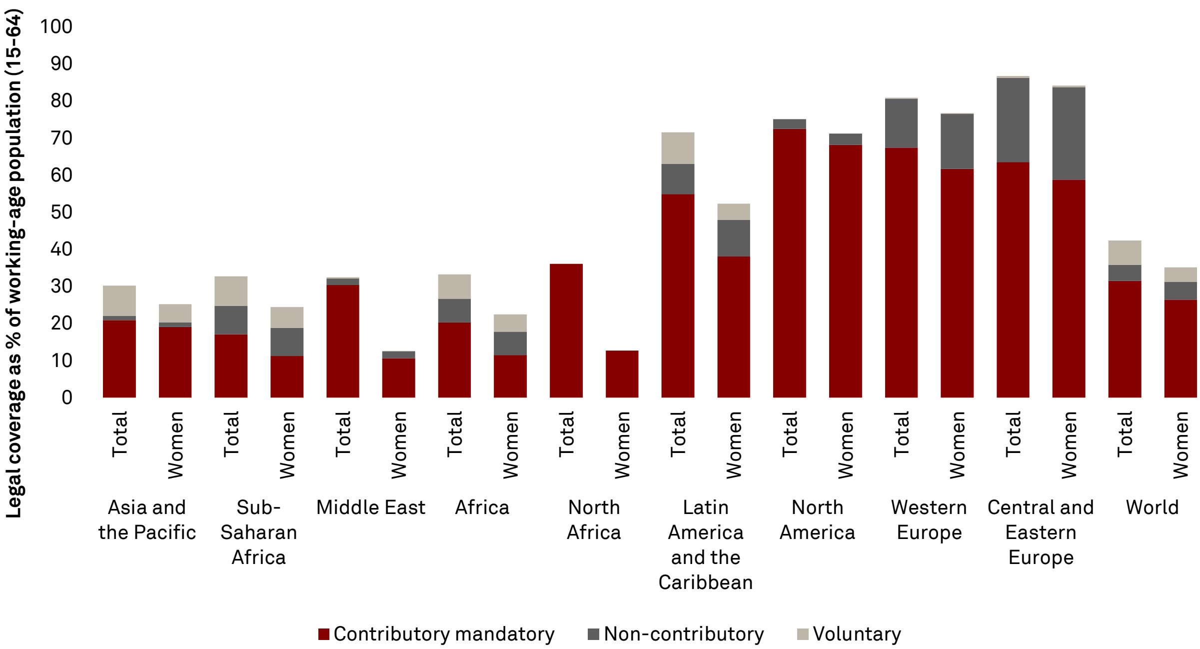
The analysis shows that Haryana, Kerala, Goa and Punjab stand high on socio-economic support, which can be attributed to the higher per-capita income in these states. Meanwhile, migrant and tribal states such as Bihar and Chhattisgarh, respectively, fall low on this parameter. These states have low per capita income and their family support is also declining, which implies that the elderly will need assistance from the government on a much larger scale in these states.


लक्ष्य सेवा संस्थान

Pension coverage

The coverage of pension varies across the globe – higher in developed countries compared with developing economies. Further, voluntary contribution forms a meagre portion of the coverage, compared with mandatory forms (non-contributory and contributory) of pension coverage. The contributory mandatory form works most in the developed regions as these tend to have a large share of their population in the organised sector.

Europe and Americas lead in extent of coverage[6]

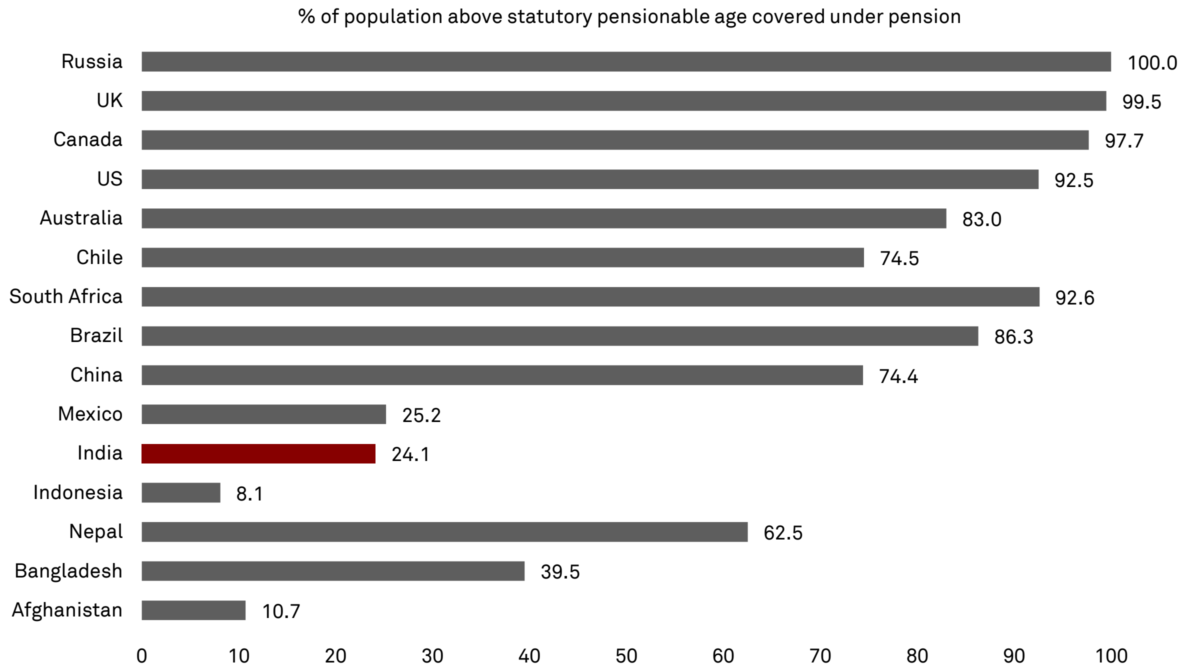


Source: ILO - World Social Protection Report 2014-15

If we compare India's pension coverage with select developed and developing economies, the country falls short compared with most others.

[6] The coverage defines the extent of legal coverage for old age as the proportion of the working-age population (or alternatively the labour force) covered by law with schemes providing periodic cash benefits once statutory pensionable age or other eligible age is reached. The population covered is estimated by using the available demographic, employment and other statistics to quantify the size of the groups covered as specified in the national legislation. Actual effective coverage, is often significantly lower than legal coverage where laws are not implemented fully or enforced.

Pension coverage for elderly 'low' in India



Source: World Social Protection Report 2014-15

The pension coverage varies considerably among the states. For this analysis, we have considered the number of pensioners[7] (those who are drawing pension after retirement), subscribers of the Employee Provident Fund Organisation (EPFO) and National Pension System (NPS) as of December 2017. These subscribers have provisions to get pension from the respective organisation, and, hence are termed as covered under pension planning in this report. The subscribers covered under the erstwhile defined benefit scheme, mutual fund pension schemes and insurance pension schemes have not been considered for the analysis, owing to non-availability of data at a state level.

[7] As per Census, pensioners are those who are drawing pension after retirement and are not engaged in any economic activity.

Pension coverage among states moderate at best

Top 25 percentile | 25-75 percentile | Bottom 25 percentile

States	Pensioners/elderly population[#$]	EPFO subscribers/total working population[$]	NPS subscribers/total working population*	Penetration
Haryana	26.9%	12.9%	2.1%	Moderate
Karnataka	9.6%	12.6%	3.3%	
Andhra Pradesh	17.9%	6.8%	2.3%	
Tamil Nadu	10.1%	10.7%	1.7%	
Maharashtra	9.0%	11.3%	1.6%	
Punjab	14.1%	6.0%	1.9%	
Odisha	16.5%	3.1%	1.7%	Low
Chhattisgarh	14.8%	2.5%	3.3%	
Kerala	11.7%	5.3%	2.6%	
West Bengal	11.8%	4.6%	1.0%	Very low
Gujarat	5.6%	7.1%	1.7%	
Jharkhand	11.2%	2.3%	1.6%	
Madhya Pradesh	10.2%	2.2%	1.8%	
Rajasthan	7.1%	2.3%	1.7%	Minimal
Uttar Pradesh	6.0%	1.6%	1.2%	
Bihar	5.2%	0.6%	1.4%	

[#] Total number of pensioners for Goa is 27,520 as per Census 2011 | Due to lack of data, Goa has been excluded from analysis

[$] Andhra Pradesh includes data for the newly formed state of Telangana

* Total number of subscribers in Telangana for NPS is 537,288 | The subscribers in Telangana have been added to the total number of subscribers in Andhra Pradesh

Source:

* NPS subscriber data for 2017 has been taken from PFRDA

[#] Census 2011

[$] EPFO subscriber data for 2017 has been taken from EPFO website, https://unifiedportal-epfo.epfindia.gov.in/publicPortal/no-auth/misReport/home/dashboard

As per Census, pensioners are those who are drawing pension after retirement and are not engaged in any economic activity.

As can be seen, Haryana, Karnataka, Andhra Pradesh, Tamil Nadu, Maharashtra and Punjab are in the moderate penetration cluster while Bihar, Uttar Pradesh and Rajasthan lack in terms of pension coverage. With low socio-economic support and low coverage states such as Bihar and Madhya Pradesh need to promote pension schemes for its working class population to avert a high fiscal burden on the social pension security front in years to come.

Fiscal position of states

As mentioned earlier, India spends a meagre portion of its revenue on pension compared with major developed and developing countries.

While the country has successfully transitioned from the defined benefit, or DB, pension plan to a defined contribution, or DC, system for government employees after 2004, the picture is not uniform among states.

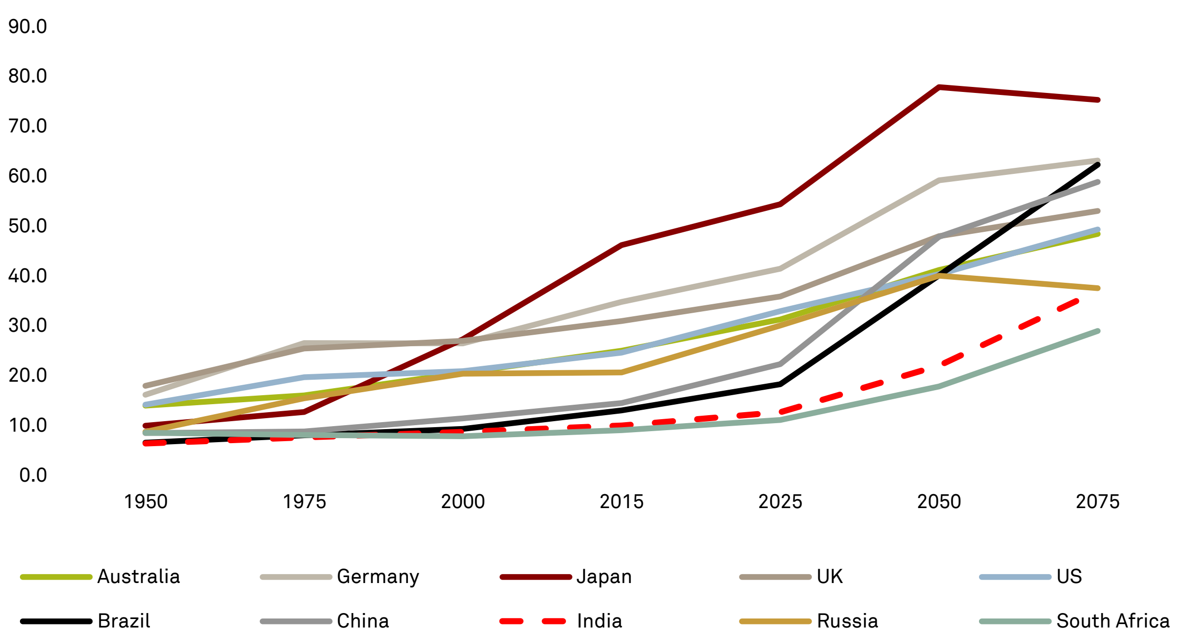
While some states moved to the DC method of the NPS early, others moved later or didn't move at all, thus postponing the de-risking of state finances.

This can be a risky proposition as seen in ageing economies such as Japan, which is under duress to meet the pension needs of its elderly at a time when its debt to GDP ratio is staggeringly high.

As per UN world population projection, 2017, Japan has the highest old-age dependency ratio – or the number of persons aged 65 and above per 100 persons in the working age of 20-64 years.

Old-age dependency ratio in India low, but rising

Historical and projected values, 1950-2075



Source: United Nations, World Population Prospects – 2017 Revision

Therefore, it is imperative that states look at getting their finances in order, both in terms of spending money on the elderly, and having the room to spend more, if required, as the number of senior citizens increases.

To assess this, we have analysed two aspects to cluster states.

The first is the current spends towards pension as a proportion of the gross state domestic product (GSDP). The expenditure is made towards the state-run employee pensioners, and gives an idea of how much the state is spending on its retired employees.

Secondly, we have looked at the indebtedness of the states. Higher the debt to GSDP ratio, lower is the opportunity for the state to manoeuvre its pension spending if the liability increases drastically in future.

Higher debt/GSDP leaves less 'fiscal room' for pension

Top 25 percentile | 25-75 percentile | Bottom 25 percentile

State	Pension/GSDP*	Debt/GSDP*	Fiscal position
Maharashtra	0.8%	17.6%	Comfortable
Karnataka	1.1%	17.3%	
Chhattisgarh	1.3%	14.5%	
Gujarat	1.0%	21.4%	
Telangana	1.4%	17.3%	
Tamil Nadu	1.6%	19.2%	Manageable
Haryana	1.1%	24.9%	
Odisha	1.9%	17.5%	
Madhya Pradesh	1.4%	23.3%	
Goa	1.7%	24.4%	Weak
Andhra Pradesh	1.8%	23.0%	
Jharkhand	1.4%	32.5%	
Rajasthan	1.6%	31.1%	
West Bengal	1.5%	35.4%	
Uttar Pradesh	2.3%	28.8%	Stretched
Punjab	2.2%	31.2%	
Kerala	2.0%	33.1%	
Bihar	3.1%	30.6%	

* Pension and debt data for FY16 has been taken from the Comptroller and Auditor General of India, Government of India
Revised estimates for West Bengal and Goa for FY16 have been taken from the RBI

Constant gross state domestic product (GSDP) for FY16 has been taken from the RBI

As can be seen from the analysis, Cluster 1, which falls in the comfortable quadrant, is good with all the numbers analysed – pension to GSDP and debt to GSDP ratios – thus giving the states enough wiggle room to meet the pension needs of its elderly.

Meanwhile, states in the stretched and weak zones would need to think out-of-the-box to manage their pension liabilities in the near-to-medium term, especially those that could see fast growth in the numbers of elderly.

Initiatives by states

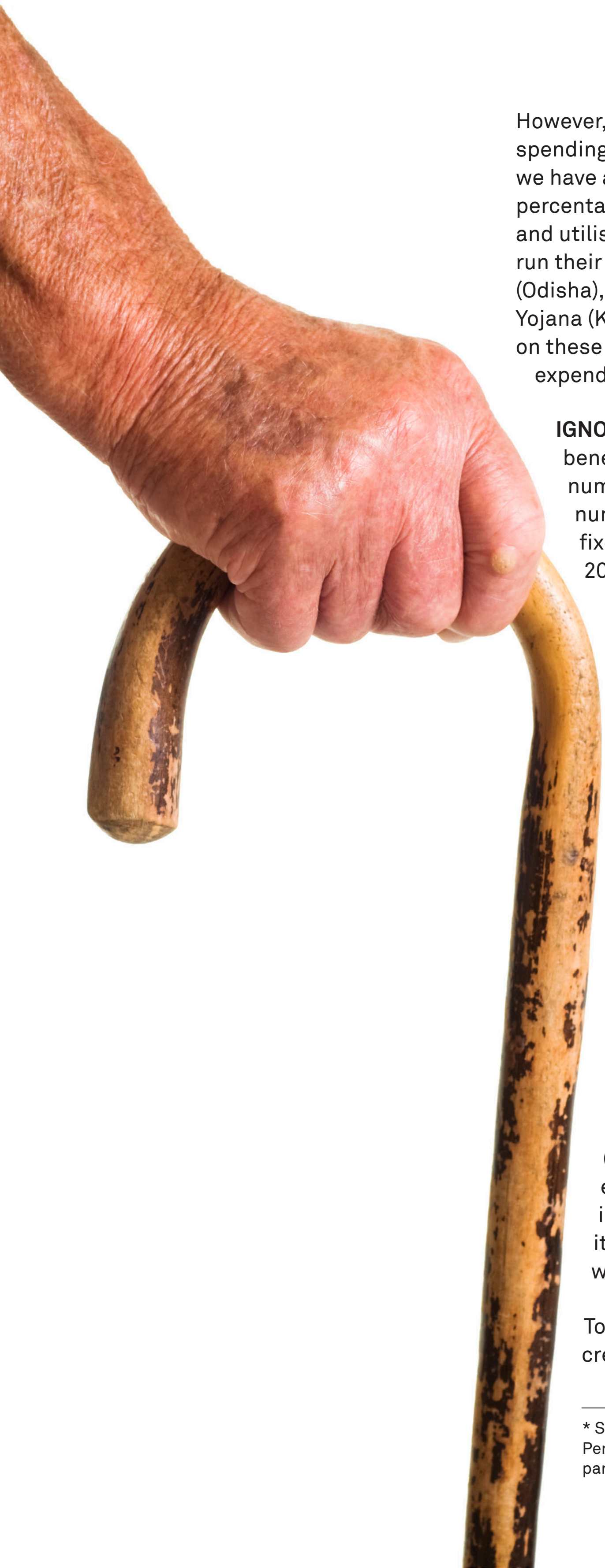
We had mentioned earlier how the Universal Declaration of Human Rights (UDHR), 1948, and (in more general terms) the International Covenant on Economic, Social and Cultural Rights (ICESCR), 1966, have laid down the rights of older persons to social security and to an adequate standard of living to support their health and well-being, including medical care and necessary social services.

India, too, has laid down rules and policies as part of the National Policy for Senior Citizens (earlier called as National Policy on Older Persons, 1999) to improve the living standards of senior citizens in the country.

The plans that form part of this policy are as follows:

No.	Scheme	Nodal ministry	Brief details of the scheme
1	Integrated Programme for Older Persons (IPOP)	Ministry of Social Justice and Empowerment	The scheme is being implemented since 1992 and was revised w.e.f April 1, 2008. Financial assistance is provided to state governments/ Panchayati Raj institutions/ urban local bodies and non-governmental organisations for running and maintenance of projects like: • Old age homes • Day care centres • Mobile medicare units • Day care centre for Alzheimer's disease/ dementia patients • Physiotherapy clinic for older persons • Helplines and counselling centres for older persons • Sensitising programmes for children, particularly in schools and colleges • Regional resource and training centres, etc.
2	Indira Gandhi National Old Age Pension Scheme (IGNOAPS)	Ministry of Rural Development	Under the scheme, central assistance of Rs 200 per month is given towards pension to persons above 60 years, and Rs 500 per month is given to persons above 80 years belonging to a household below poverty line, which is expected to be supplemented by contribution from the states.
3	National Programme for the Health Care of the Elderly (NPHCE)	Ministry of Health and Family Welfare	Major components of this programme, launched in fiscal 2011, are: • Community-based primary healthcare approach • Strengthening of health services for senior citizens at district hospitals/ CHC/ PHC/ sub-centres • Dedicated facilities at 100 district hospitals with 10-bed wards for the elderly • Strengthening of eight regional medical institutions to provide dedicated tertiary level medical care for the elderly, with 30-bed wards at New Delhi (AIIMS), Chennai, Mumbai, Srinagar, Vanarasi, Jodhpur, Thiruvananthapuram, and Guwahati • Introduction of PG courses in geriatric medicine in the above eight institutions and in-service training of health personnel at all levels

Source: Press Information Bureau, Government of India, Ministry of Social Justice & Empowerment



However, the implementation of these plans, in addition to specific spending, differs across states. For the Centre's scheme contribution, we have analysed three parameters: IGNOAPS coverage as a percentage of its numerical ceiling, state's contribution to IGNOAPS and utilisation of NPHCE funds allocation*. A lot of states do also run their own pension schemes such as Madhu Babu Pension Yojana (Odisha), Aasara Pension Scheme (Telangana), Sandhya Suraksha Yojana (Karnataka), etc. To assess the state's own expenditure on these schemes, we have looked at social security and health expenditure.

IGNOAPS coverage: In this, we have evaluated how many beneficiaries have been covered in IGNOAPS against the numerical ceiling identified by the central government. The numerical ceiling for each state and union territory has been fixed taking into account the population figures as per Census 2001 and the poverty ratio determined by the Planning Commission. The numerical ceiling is the number of beneficiaries under different schemes of the National Social Assistance Programme. However, if there are more deserving candidates, then a state can give them pension from its own treasury.

State contribution: We have considered the state's contribution in IGNOAPS over and above the contribution from the Centre. In case the state gives a different amount based on the age of the elderly, we have taken the average of the two amounts.

NPHCE: Under the National Programme for the Health Care of the Elderly, we have looked at the use of the funding provided and its allocation by states. Higher allocation indicates optimum utilisation of the resources allocated to the state.

Social security and health expenditure: For this parameter, we have analysed the social security and health expenditure (from the state budget) by comparing it with the total revenue expenditure (state budget). While this could include welfare in any form and not just pension or social pension schemes, it does give an indication of the state's desire to spend on welfare of the needy.

To get an idea of the policy focus of the states, an index was created for all parameters. The findings are as follows:

---

* Since the number of beneficiaries reported in Integrated Programme for Older Person (IPOP) at an all-India level is only 23,095 for FY16, we have not included this parameter at a state level

Top 25 percentile	25-75 percentile	Bottom 25 percentile

States	State expenditure		State contribution in centre scheme			Government policy focus
	Social security expenditure/ revenue expenditure*	Health expenditure/ revenue expenditure*	Monthly contribution in IGNOAPS by states (Rs)#	IGNOAPS coverage$	NPHCE^	
Goa	7.4%	6.9%	1800	12.6%	0.0%	High
Odisha	6.0%	5.1%	100	100.0%	71.3%	
Kerala	5.5%	5.2%	250	123.6%	92.6%	
West Bengal	7.6%	4.2%	200	109.4%	16.7%	
Tamil Nadu	6.7%	4.2%	800	135.8%	0.0%	Medium
Haryana&	6.9%	4.0%	400	76.9%	56.8%	
Jharkhand	4.3%	4.8%	200	91.9%	11.2%	
Madhya Pradesh	4.1%	4.9%	75	88.2%	50.3%	
Chhattisgarh	3.1%	5.1%	100	98.8%	27.7%	
Rajasthan@	3.7%	4.5%	425	83.1%	18.1%	Low
Punjab	2.8%	4.8%	250	66.7%	52.7%	
Bihar	5.2%	3.7%	0	160.4%	20.9%	
Karnataka	4.6%	3.7%	300	92.7%	30.1%	Very low
Maharashtra	2.1%	4.6%	400	52.4%	71.4%	
Uttar Pradesh	5.5%	3.2%	100	87.1%	10.1%	
Gujarat	0.8%	4.6%	200	93.0%	37.4%	
Andhra Pradesh	10.3%	3.7%	0	NA	0.1%	NA
Telangana	7.3%	4.1%	200	NA	0.0%	NA

Source:

* Social security, health and revenue expenditure for FY16 have been taken from the Comptroller and Auditor General of India, GoI | Revised estimates for West Bengal and Goa for FY16 have been taken from RBI

NSAP Annual Report 2013-14

$ NSAP Action Taken Report, 2011-12 | Coverage in excess of 100% represents those elderly BPL covered by the states apart from the reported beneficiaries in the numerical ceiling

^ Lok Sabha Unstarred Question No. 3380, dated on 01.08.2014, Lok Sabha Unstarred Question No. 877, dated on 27.02.2015, Lok Sabha Unstarred Question No. 905, dated on 24.07.2015, Lok Sabha Unstarred Question No. 1121, dated on 04.12.2015 & Lok Sabha Unstarred Question No. 2259, dated on 06.05.2016. (For details refer Annexure II)

States that have been clubbed in the high policy focus cluster are optimising their resources and plan to meet the pension and social security mandates of their populace.

& Haryana contributes Rs 300 to people aged 60-70 years and Rs 500 to people aged above 70 years

@ Rajasthan contributes Rs 300 to people aged 60-75 years and Rs 550 to elderly population aged above 75 years

Key findings

While there are variations across states, we have categorised states into four clusters by creating an index based on the parameters analysed. To achieve the objective of increasing pension coverage, the states with fiscal room can serve as ‘enablers’, while the states with limited fiscal room can serve as ‘incentivisers’.

The findings of this cluster approach, and the resultant recommendations are as follows:

Cluster 1
Ageing states having 'fiscal room'
(Maharashtra, Karnataka, Gujarat, Tamil Nadu and Haryana)

- Promote market-linked pension products for non-retirees
- Better annuities design
- Targeted social pension scheme for elderly

Cluster 2
Ageing states with limited 'fiscal room'
(West Bengal, Kerala and Punjab)

- Promote market-linked pension products for non-retirees
- Better annuities design

Cluster 3
Young states having 'fiscal room'
(Chhattisgarh, Odisha and Madhya Pradesh)

- Targeted social pension scheme for elderly
- To ensure post-retirement dignified living, enable participation in pension products through co-contribution

Cluster 4
Young states with limited 'fiscal room'
(Jharkhand, Rajasthan, Uttar Pradesh and Bihar)

- Focus on employment generation in formal sector
- Increase awareness about central government sponsored schemes for elderly
- Leverage Jan-Dhan and Aadhaar platform for effective implementation

Due to lack of data, Andhra Pradesh, Telangana and Goa have not been included in final cluster formation

Recommendations

Targeted social pension scheme for elderly

A study conducted by Tata Institute of Social Sciences and Pension Parishad in eight states (Gujarat, Rajasthan, Haryana, Assam, West Bengal, Andhra Pradesh, Telangana and Kerala) in 2014 revealed that not all individuals liable for BPL cards had one, thus getting excluded from the benefit. And even among the ones who had BPL cards, a notable proportion was getting excluded.

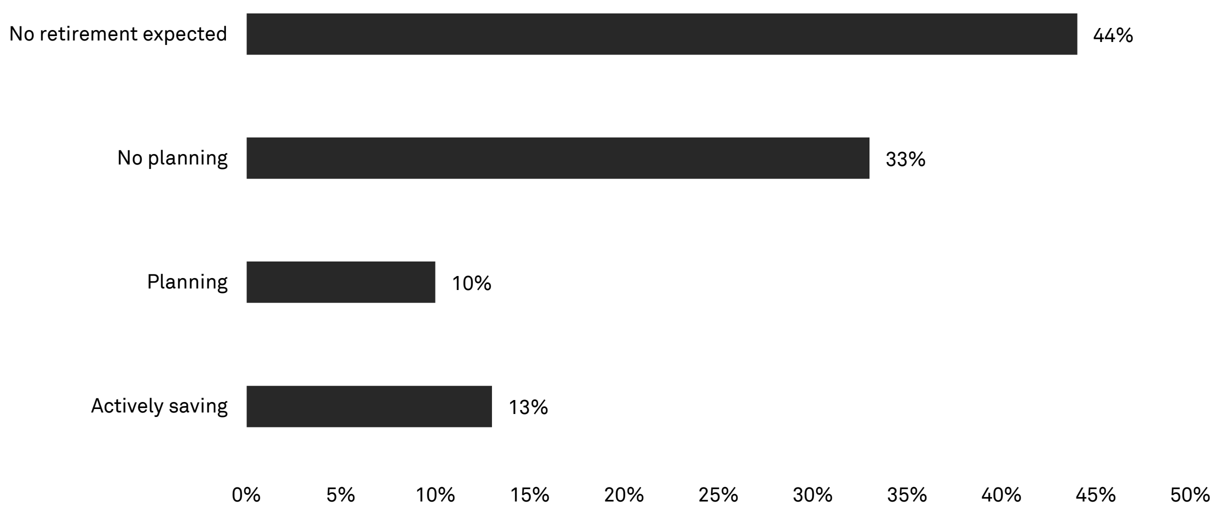
State clusters that have fiscal room to spend on their elderly would be better off contributing to a targeted social pension scheme for elderly such as IGNOAPS. This can be aimed at the indigent poor, which, by broad estimates, account for 30% of the country's elderly.

The current IGNOAPS pension of Rs 200 per month per elderly from the Centre can be increased to Rs 1,000 per month. This can be indexed to inflation to increase the payout, thus providing an improvement in living standards for the elderly.

Boost awareness on retirement planning and government schemes

As per RBI's Household Finance Committee report of 2018, 77% of Indian households either do not expect to retire, or have not actively planned for retirement.

Retirement planning behaviour by Indian households



Source: Report of the Household Finance Committee 2017, RBI

It is, thus, imperative that awareness of retirement and pension planning, including that of government products, is enhanced through focused investor education programmes. This format has also been approached globally, in countries such as Poland, Ireland, New Zealand, Sweden, Hungary and Mexico.

Leverage Jan-Dhan, APY and NHPS for efficient micro-insurance and pension administration

The Union Budget 2018-19 has proposed to expand coverage under Jan-Dhan by bringing all 60 crore basic accounts within its fold and undertaking measures to provide micro-insurance and micro-pension schemes to the unorganised sector through these accounts.

The structure of APY is best suited to provide micro-pension to the population. This, if bundled with the government's initiative to cover 10 crore families (50 crore individuals) with annual health insurance up to Rs 5 lakh under the flagship NHPS, could take care of the pension subscribers' health contingencies and encourage persistent pension contribution.

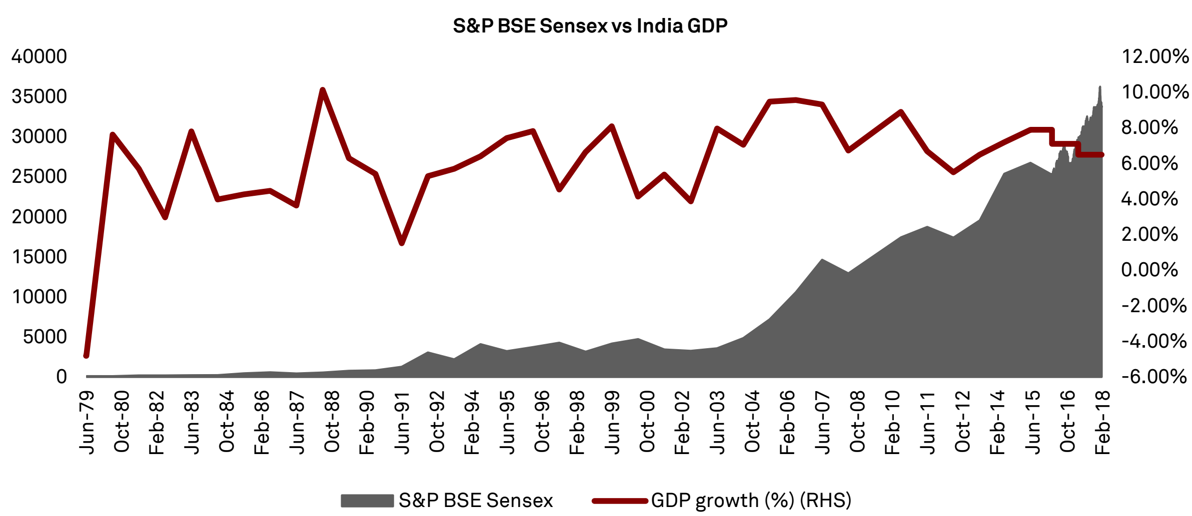
Better asset allocation through market-linked products

India has a demographic advantage compared with most other major economies, and this is expected to be retained over the long term. This young populace has a long-term investment horizon for retirement planning, but is mostly invested in traditional fixed-income products for retirement planning. Instead, there should be greater allocation to market-linked products such as equity for wealth creation to meet the needs in the sunset years.

Analysis shows that equity has the ability to generate stable positive returns over the long term. The S&P BSE Sensex has not given negative return in any 15-year period, and has 93% of the times given returns more than 10%. In the 10-year investment horizon, 82% of the times returns have been more than 10%. To be sure, as the investment horizon increases, the volatility in equity returns decreases significantly.

The graph below shows how the long-term trend of equity investment is positive despite market cycle, and how equity market performance maps to GDP growth. Being one of the fastest-developing economies, India certainly presents a positive case for market-linked product investments.

India GDP growth versus S&P BSE Sensex movement



Source: BSE, IMF and MOSPI

Data for FY18 are Government of India estimates

Within market-linked products, increasing equity exposure could aid the young population in garnering an adequate vesting corpus that can see them through retirement years. The lifecycle fund option available within NPS for private sector allows investors to take exposure up to 75% to equity at a young age, while reducing exposure near vesting age.

Monetary incentivisation by government

Most of the success stories around the globe have been of countries where voluntary pension coverage grew because of matching contributions from the government or due to tax benefits. Due to low affordability of pension products by the informal sector, an adequate pension is only possible with the government providing the push through monetary incentives. Otherwise, low affordability, persistency and adequacy might become areas of concern.

Better annuities design

For states that are able to transition from traditional pensions to defined contribution and hybrid plans, it places significant responsibility on retirees to successfully generate lifetime retirement income. While, investing in a pension scheme brings in the added benefit of annuities being blended into the design structure, the annuity structure should be designed to overcome the following risks.

Market risk	Longevity risk	Inflation risk
Risk that the assets invested in perform badly compared with the market	Risk that the annuity would not suffice the investor's retirement period, especially in light of increasing lifespan	Risk that the vesting annuity is inflation-adjusted, thus reducing its efficacy

The payout phase is as critical as the contribution/accumulation phase in ensuring old-age security for the elderly. Designing an effective payout system requires that all of the above options be made available to the individual, but with some checks and balances that will ensure that an individual is able to meet his/her basic needs during the retirement phase, as well as maintain a comfortable and healthy lifestyle. Developing an efficient payout system that ensures a stable and sufficient income to the retirees is necessary for the overall success of the system.

Central repository of data key to information symmetry

Apart from measures to increase penetration and adequacy of pension coverage, additional efforts at the national and state levels are necessary to strengthen the monitoring frameworks.

This entails regular collection, analysis and dissemination of data and key indicators, including data disaggregated by sex, age group and disability status, so that the data can provide useful guidance for policy-makers and other stakeholders.

As per ILO's World Social Protection Report of 2017-19, the lack of quality and up-to-date social protection data and statistics is a serious problem affecting most developing countries. It is a stumbling block to identifying and closing gaps in social protection.

Standardised information regarding policy characteristics of different social security programmes, such as the number of people covered, benefit levels and costs, financing sources, frequency and quality of the provision offered, is lacking in many countries.

Therefore, greater importance should be accorded to the generation of statistics and indicators, and more resources allocated for such efforts. Having a central repository of information for sharing, analysing and updating data as the need arises can aid in this process.

Further, ensuring consistency across products could help the sector over the long term. This would reduce the disparity between products, in terms of valuation, taxation and disclosures, among others. Investors can then form an unbiased opinion of the products, based purely on the investment performance and quality of service.

Annexure

Annexure I

The World Bank's five-pillar framework

The World Bank's five-pillar framework is one of the fundamental benchmarks for comparing the pension industry in any country. The framework is a transition from the three-pillar pension system suggested by the bank in 1994. The current framework has been refined to adapt these principles to widely varying conditions and better address the needs of diverse populations to manage the risks in old age.

Pillar Zero (non-contributory): Pillar Zero is a non-contributory social pension framework, typically financed by the government, which provides a minimal level of old-age income. This ensures that people with low lifetime incomes are provided with basic protection in old age, including those who only participate marginally in the formal economy.

Pillar Zero, also known as universal social pension or state pension scheme, is a pension system funded by the government from taxes to provide bare minimum support to the elderly, to avoid poverty.

Pension Watch, a HelpAge International company, has classified universal pension into three categories:

1 Universal age pension: Under this plan, the benefits are accrued primarily on the number of years of citizenship of the individual and his/her age. The Netherlands, New Zealand, Bolivia, Mexico and Brazil have such plans in place. The latter two, however, have a slight variation in the plans based on the geographical location of the individuals. For instance, Mexico has such pensions for residents of Mexico City, residents of Chiapas state and individuals living in rural areas, while Brazil's Previdencia Rural is a contributory universal age pension in rural areas.

2 Universal minimum pension: This scheme provides pension to all individuals over a certain age. However, it excludes individuals who have some other form of pension (often incrementally). Armenia, Kazakhstan, Thailand, Finland, and our neighbour Nepal have such systems in place. While Nepal has exclusions, given the lack of any other pension coverage, the current scheme works like universal age pension for individuals.

3 Means-tested/targeted: The targeted redistribution scheme under the first pillar refers to conditional provisions dependent on the needs of specific individuals. It depends on current means rather than contributory history. Australia, Bangladesh, South Africa, the United Kingdom and Chile have such systems.

In India, this is provided by the central government under IGNOAPS through a pension that reached over 2.3 crore people in fiscal 2015, but the payouts provided are meagre at Rs 200 per month plus varying contribution by states. Other allied state government-sponsored plans also have varied coverage/ payouts.

Pillar I (mandatory; pay-as-you-go): The second pillar, or Pillar I, is a pay-as-you-go/defined benefit pension framework, which is primarily tax/expense funded, respectively, and seeks to replace some portion of the pre-superannuation income. The aim of this pillar is to replace some portion of lifetime pre-retirement income and address risks such as myopia, low earnings, and inappropriate planning horizons due to the uncertainty of life expectancy, and the risks of financial markets. These plans are, however, subject to demographic risks (ageing population) and pose high stress on the fiscal system, so there are questions about their sustainability.

In India, this pillar was done away with for government employees in 2004, when the government transitioned from defined benefit to defined contribution pension for all employees joining from January 2004 (excluding defence services). Government employees who entered the service earlier would continue to enjoy defined benefit, but the fiscal cost would reduce drastically in the next 50 years.

Pillar II (mandatory; organised section): This pillar is also mandatory, but in the form of a defined contribution pension system from the subscriber. Mostly, it targets the organised sector with a wide set of design options, including active or passive investment management, choice parameters for selecting investments and investment managers, and options for the withdrawal phase.

In India, this pillar has a long history in the form of Employees' Provident Fund, but lacks depth because of the low share of the organised sector in the Indian economy. Further, most of the money is invested in fixed income assets, which reduces the efficacy of investments.

Pillar III (voluntary): This pillar is voluntarily opted for by subscribers. Plans such as the voluntary segment of the NPS, the Atal Pension Yojana, mutual fund retirement plans, pension plans from insurance companies and the Public Provident Fund come under this pillar. Affordability and persistency, particularly for the low-income segment, are some of the concerns in India, and thus, may result in inadequate payouts at vesting period.

Pillar IV (non-financial): The fifth pillar is family or other informal financial and non-financial support. This has been the traditional pension support in India. However, it has been failing in recent times with the onset of urbanisation and nuclearisation of families.

Annexure II

Annexure and methodology

Socio-economic support: Socio-economic support has been constructed using the following parameters:

1. Family support from Situation of Elderly in India, Ministry of Statistics and Programme Implementation 2016

2. Elderly working from Census 2011

3. Elderly below poverty line

For elderly below poverty line, we have taken maximum of beneficiaries reported and beneficiaries covered from NSAP Action taken report, 2011-12. Based on the above three parameters, an index for each state has been formed and finally an overall index has been derived by taking an average of all the three indices.

Andhra Pradesh includes data for the newly formed state of Telangana.

Penetration: In this, we have taken three parameters such as percentage distribution of pensioners [5]-to-elderly population [5], percentage distribution of EPFO subscribers [7] to total working population and ratio of NPS subscribers [8] to working population. Based on the parameters, an index has been formed for each parameter and an average of all the indices has been taken to derive at the final index based on which the states are segregated into four categories –moderate, low, very low and minimal penetration.

Working population for 2017 has been is based on 2011 data from the technical projection report by National Commission of India, May 2006.

Fiscal positioning: In this, percentage distribution of pension [1] and Debt [1] to GSDP [9] have been considered for index formation and analysis. Based on the index, each state has been divided into four categories – comfortable, manageable, weak and stretched fiscal position.

West Bengal and Goa's social security and health expenditure data along with revenue expenditure have been taken as revised estimates for fiscal 2016 from state finances, RBI.

Government policy focus: This parameter has been divided into two broad categories:

1. State expenditure

2. State contribution in centre schemes

State expenditure encompasses social security [1] and health expenditure [1] as a percentage of revenue expenditure [1] on the basis of which an index has been formed. Similarly, an index has been formed for the state contribution in centre schemes which consists of Government of India sponsored schemes like NPHCE [2], IGNOAPS coverage (IGNOAPS beneficiaries [3]/numerical ceiling of IGNOAPS [6]) and monthly contribution by each state in IGNOAPS [4]. Under NPHCE, we have considered the total Grant-in-Aid released by Government of India to each state and total expenditure reported by states from FY 2010-11 to FY 2015-16 basis of which an index was constructed. Finally an average of State expenditure index and state contribution in center scheme was used to form the final index. Based on the final index, states have been divided into four clusters – high, medium, low and very low.

West Bengal and Goa's social security and health expenditure data along with revenue expenditure from State Finances, RBI, have been considered as revised estimates for fiscal 2016.

Andhra Pradesh and Telangana have not been considered in final index formation due to lack of data for IGNOAPS coverage.

Cluster formation:

The following method has been used to form clusters:

1. Calculate the mean and standard deviation for each parameter on state to derive the Z value

2. Set the median value to 50

3. Evaluate the distance from the median, adjust the median value by 50*Z value, and consequently add/subtract the same to/from the median depending upon the parameter

4. Arrange the state into cluster after deriving the index value from the above method

Sources:

[1] State Accounts, Comptroller and Auditor General of India

[2] Lok Sabha Unstarred Question No. 3380, dated on 01.08.2014, Lok Sabha Unstarred Question No. 877, dated on 27.02.2015, Lok Sabha Unstarred Question No. 905, dated on 24.07.2015, Lok Sabha Unstarred Question No. 1121, dated on 04.12.2015 & Lok Sabha Unstarred Question No. 2259, dated on 06.05.2016.

[3] NSAP Annual Report 2016-17

[4] NSAP Annual Report 2013-14

[5] Census 2011

[6] Draft Revised Guidelines, NSAP Guidelines

[7] UAN Dashboard – Dec 2017, EPFO

[8] Pension Fund Regulatory and Development Authority (PFRDA)

[9] Database on Indian Economy, RBI

Annexure III

The state of special category states

We take a peek into the state of pension planning for special category states. The following states have been classified as special category states by the Reserve Bank of India.

These states have low receipt of revenue from their internal sources, and tend to get a lot of revenue supplement through grant-in-aid (GIA) from the central government.

State of GIA and revenue expenditure for special category states

Sr no	States	GIA (Rs lakh)	Revenue expenditure (RE; Rs lakh)	GIA/RE
1	Nagaland	5,77,011	8,78,421	65.69%
2	Manipur	1,99,660	7,38,257	27.04%
3	Meghalaya	1,59,103	6,34,773	25.06%
4	Uttarakhand	5,30,379	23,08,644	22.97%
5	Mizoram	1,22,823	5,57,086	22.05%
6	Assam	6,93,126	37,01,142	18.73%
7	Tripura	1,17,259	7,86,847	14.90%
8	Himachal Pradesh	2,61,227	22,30,281	11.71%
9	Arunachal Pradesh	96,478	8,36,274	11.54%
10	Sikkim	34,719	3,64,458	9.53%
11	Jammu and Kashmir	1,38,440	36,42,040	3.80%

Source: Comptroller and Auditor General of India, State Accounts 2015-16 (For Nagaland: Revised Estimates from RBI, State Finances 2015-16)

These states, too, vary in terms of coverage of pensioners from the elderly population and subscribers of non-retirees for retirement planning products. For this, we have analysed the pensioners-to-elderly population in the respective states, and the number of subscribers of NPS and EPFO as a percentage of the working population.

Number of subscribers versus working population

States	EPFO subscribers$	NPS subscribers*	Total subscribers/ working population#	Pensioners#/elderly population#
Himachal Pradesh	3,31,574	1,46,438	10.1%	22%
Uttarakhand	3,75,192	1,72,786	8.1%	23%
Assam	3,67,151	5,12,577	4.0%	12%
Sikkim	-	16,947	3.8%	11%
Meghalaya	39,602	25,350	3.0%	10%
Arunachal Pradesh	-	23,216	2.3%	5%
Manipur	-	47,349	2.3%	11%
Jammu and Kashmir	-	1,93,876	2.2%	14%
Nagaland	-	31,041	2.2%	13%
Tripura	-	55,081	2.1%	21%
Mizoram	-	9,130	1.2%	13%

Source:

* NPS subscriber data for 2017 has been taken from PFRDA

Census 2011 | Working population for 2017 is based on 2011 data from the technical projection report by National Commission of India, May 2006.

$ EPFO subscriber data for 2017 has been taken from EPFO website, https://unifiedportal-epfo.epfindia.gov.in/publicPortal/no-auth/misReport/home/dashboard

Clearly, the penetration level of EPFO and NPS in special category states as well as pensioners-to-elderly population are almost equal compared with the non-special category. Further, the NPS has a greater reach within these states compared with EPFO. The subscribers covered under the erstwhile defined benefit scheme, mutual fund pension schemes and insurance pension schemes have not been considered for the analysis, owing to non-availability of data at a state level.

About PFRDA

Pension Fund Regulatory and Development Authority (PFRDA) has been established under the PFRDA Act 2013 . PFRDA has been established to promote old age income security by establishing, developing and regulating pension funds, to protect the interests of subscribers to schemes of pension funds and for matters connected therewith or incidental thereto. PFRDA has framed 14 regulations related to functioning of its intermediaries, activities and consumer protection with a view to regulate and for orderly development of pension market.

About CRISIL Limited

CRISIL is an agile and innovative, global analytics company driven by its mission of making markets function better. We are India's foremost provider of ratings, data, research, analytics and solutions. A strong track record of growth, culture of innovation and global footprint sets us apart. We have delivered independent opinions, actionable insights, and efficient solutions to over 100,000 customers.

We are majority owned by S&P Global Inc., a leading provider of transparent and independent ratings, benchmarks, analytics and data to the capital and commodity markets worldwide.

About CRISIL Research

CRISIL Research is India's largest independent integrated research house. We provide insights, opinion and analysis on the Indian economy, industry, capital markets and companies. We also conduct training programs to financial sector professionals on a wide array of technical issues. We are India's most credible provider of economy and industry research. Our industry research covers 86 sectors and is known for its rich insights and perspectives. Our analysis is supported by inputs from our large network sources, including industry experts, industry associations and trade channels. We play a key role in India's fixed income markets. We are the largest provider of valuation of fixed income securities to the mutual fund, insurance and banking industries in the country. We are also the sole provider of debt and hybrid indices to India's mutual fund and life insurance industries. We pioneered independent equity research in India, and are today the country's largest independent equity research house. Our defining trait is the ability to convert information and data into expert judgments and forecasts with complete objectivity. We leverage our deep understanding of the macro-economy and our extensive sector coverage to provide unique insights on micro-macro and cross-sectoral linkages. Our talent pool comprises economists, sector experts, company analysts and information management specialists.

Pension Fund Regulatory and Development Authority
B-14/A, Chatrapati Shivaji Bhawan, Qutab Institutional Area, Katwaria Sarai, New Delhi-110 016
Phone : +91 11 26517501,+91 11 26517503,+91 11 26517097

Argentina | China | Hong Kong | **India** | Poland | Singapore | UK | USA
CRISIL Limited: CRISIL House, Central Avenue, Hiranandani Business Park, Powai, Mumbai – 400076. India
Phone: + 91 22 3342 3000 | Fax: + 91 22 3342 3001 | www.crisil.com
/company/crisil @CRISILLimited /CRISILLimited /user/CRISILLimited

pfrda

CRISIL
An S&P Global Company