Research

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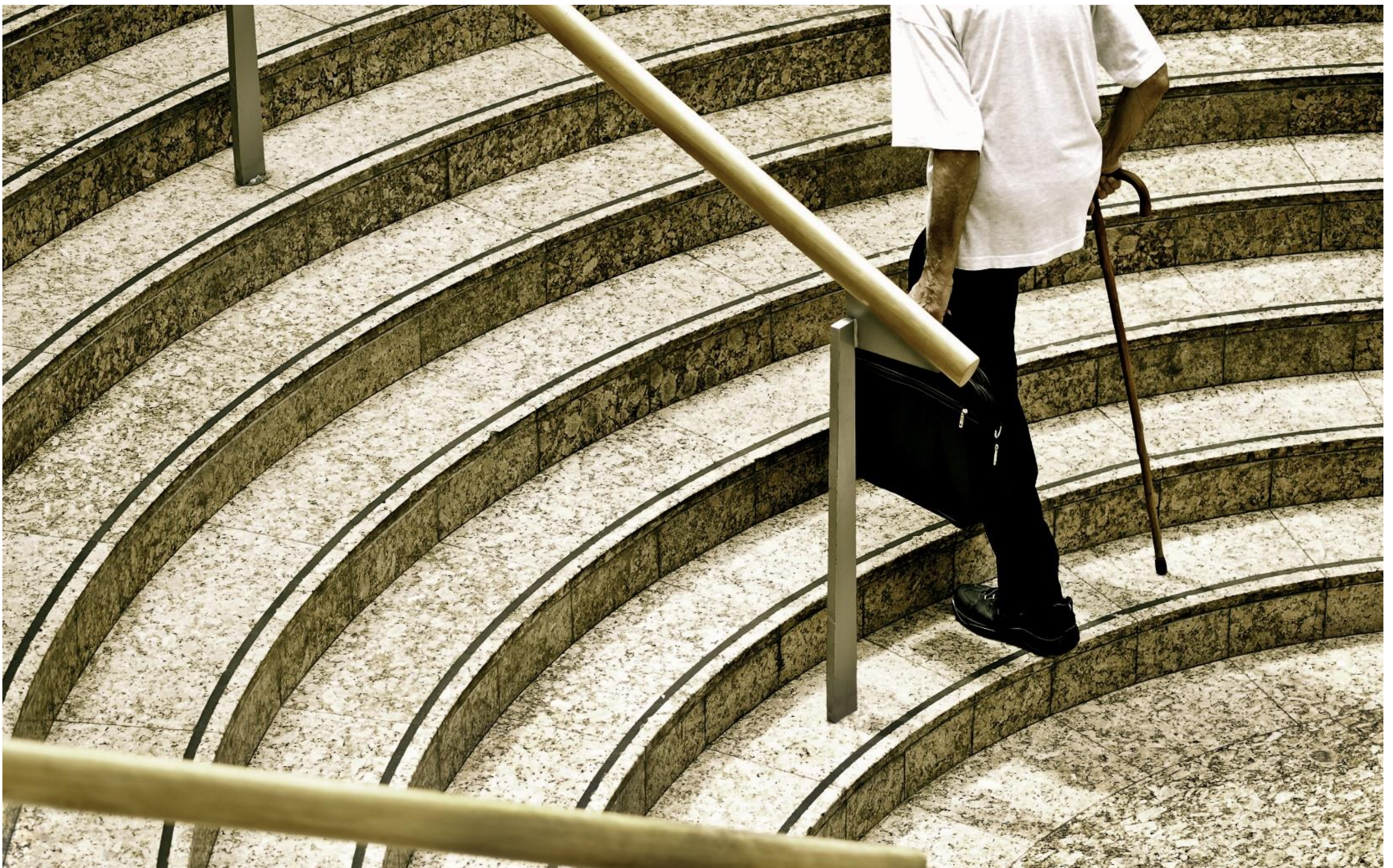
Financial security for India's elderly

The imperatives

April 2017



pfrda

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Demographically, India will transition slowly from a 'young' to a 'greying' country, where persons above the age of 60 would increase from ~8.9% of the population now to ~19.4% by 2050. And those above 80 are likely to increase from ~0.9% to ~2.8%. Continuously declining inter-generational support within families makes it imperative to have a well-developed, self-sustaining pension system in the country.

The promotion and development of a pension system is also vital to the growth of the Indian economy as it serves the twin objectives of providing income security to a vast multitude of our ageing population, including in the informal/unorganised sector, and garnering long-term funds for critical, growth-driving sectors of the economy as also the capital market. A developed pension sector not only reduces the fiscal burden on the exchequer, it also has a stabilising effect on the economy by promoting long-term savings combined with long-term investments.

The pursuit of affordable, adequate, efficient and sustainable pension system will involve a great deal of inter-ministerial, inter-state, inter-regional and inter-institutional decisions and co-ordination.

PFRDA, which has the mandate to develop and regulate the pension sector, looks forward to engaging with all stakeholders with the larger objective of improving and expanding the adequacy and scope of pension coverage both in the organised and unorganised sectors, and creating a level playing field for all financial products.

Pension literacy and awareness is one of the key components of the objective of universal pension coverage.

Given our endeavour, it gives me great pleasure to present the report on *'Financial security for India's elderly'* in association with CRISIL. The report brings to the fore some of the key issues and concerns relating to demographic transition, a perspective on the existing pension provisions, the need to expand the voluntary pension coverage, the imperative of pension planning awareness, and various other current concerns of the pension industry such as developing annuity markets and alternatives.

I am sure the report shall be of interest to both the financial/pension industry practitioners and academicians.

I would like to take this opportunity to thank CRISIL Research for providing excellent research and assimilating the material and to consolidate the report. In particular, I would like to thank Jiju Vidyadharan, Dharmakirti Joshi, Piyush Gupta, Richa Dhariwal and Prahlad Salian of CRISIL for their excellent contribution towards this report. I would also like to place on record my appreciation of the contribution made by the PFRDA team consisting of Alpana Vats and Mohit Yadav under the guidance of Badri S Bhandari, Member, PFRDA, in bringing out this report.

Amish Mehta
Chief Financial Officer
CRISIL Ltd

Ensuring the elderly have sustenance is indeed a matter of judicious, proactive governance. It is also the unstated fiduciary mandate of the social contract. True, India enjoys a demographic dividend today, but that advantage would diminish over the next three decades as the young get older. The fiscal cost of providing a basic pension to those without such a cover would, at that point, be staggering if the window of opportunity now available is not grabbed.

As things stand, the cushion traditionally afforded to the elderly in India through financial and non-financial family support has been falling apart because of increasing urbanisation and nuclearisation.

The government, on its part, has a larger role to play. Given the onerous cost of the earlier defined benefits (DB) pension regime, government employees joining from January 2004 have been moved to a defined contribution (DC) regime.

The mandatory DC system applies to the organised private sector, too, though asset allocation here can improve manifold, with the bulk of the money invested in fixed-income assets, which reduces the efficacy of investments.

That, however, leaves out a huge chunk of the economy – the unorganised sector, which needs a pension cover the most. The non-contributory social pension framework financed by the government under the Indira Gandhi National Old Age Pension Scheme, or IGNOAPS, won't be enough to provide basic protection in old age.

At the other end of the spectrum, the voluntary pension plans on offer – including the National Pension System (NPS), the Atal Pension Yojana, mutual fund retirement plans, pension plans from insurance companies and Public Provident Fund (PPF) – haven't quite seen the desired offtake. This, when the NPS, for instance, offers a wide set of design options to subscribers, including active or passive investment management, choice parameters for selecting investments and investment managers, and options for the withdrawal phase.

Development of the underpenetrated pension market, therefore, becomes an urgent imperative. The focus needs to be on both expanding coverage and improving the adequacy of returns. In addition, a sharper focus needs to be on spreading pension awareness. Providing sufficient incentives to intermediation for penetration and ensuring consistency across pension products in terms of accounting valuation, taxation and disclosures could also aid growth of the industry.

This report looks at all these issues – mapping the situation on the World Bank's five-pillar framework, as it were – and proffers possible solutions at every step.

I am sure this will provide a platform for the next steps.

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Executive summary

India is a young country in terms of demography, but ageing gradually. By 2050, every fifth Indian will be a sexagenarian compared with every twelfth now, putting the country in a position similar to today's developed world in terms of the share of the elderly in population. Hence, it is important that the development of the underpenetrated pension market in India be initiated now, when the situation is ripe.

This comes at a time when informal family support – Pillar IV of the five-pillar framework identified by the World Bank to benchmark pension system in a country – is reducing.

Of the remaining pillars, it is important that the government focusses on Pillar III – voluntary pension – targeting the gargantuan unorganised sector. Plans in this pillar face problems of low coverage, low contributions and persistency. To address these, the government can look at providing a) flexible payment and withdrawal options, b) monetary incentives for the lower income strata, c) exclusive pension schemes for women, and d) improved financial literacy and intermediation.

Meanwhile, Pillar II, which targets the organised sector, needs to improve its asset allocation. The pension system under this pillar is skewed towards debt, compared with global peers, which are strongly invested in equity. The debt skew is despite the demographic advantage the country has and is expected to enjoy over a long term. The young population has a long-term investment horizon, which calls for greater allocation to a long-term asset class such as equity for wealth creation, to meet the needs in sunset years. Additionally, there is a section of workforce which is not covered under any form of retirement products. The government can look at auto enrolment of people who are part of the 'employee–employer' set up but are not covered due to various reasons.

For the elderly below poverty line, which gets covered under Pillar Zero, the current pension structure under IGNOAPS is sparing and varied across states. The government can thus evaluate a targeted pension scheme for the indigent poor.

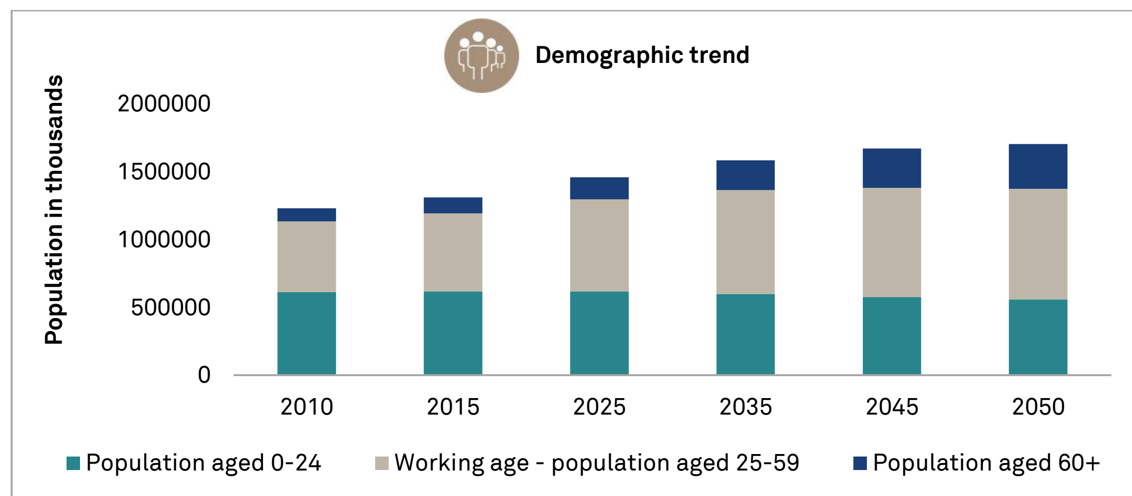
In addition, the government should focus on the financial awareness of pension products in the country. Having personal finance and retirement planning a part of the formal education curriculum can aid in achieving the overall objective of financial literacy. Sufficient incentivisation of intermediaries can help in increasing penetration. Ensuring consistency across pension products in terms of accounting valuation, taxation and disclosures, etc, could also aid growth of the industry.

Demography
ripe for pension planning

Ageing India

India's rich demographic dividend makes it a young country. Most of the population is under the age of 25 years, and is expected to remain so for the next couple of decades. Almost 90% of the population was below the age of 60 years and the working age population proportion stood at 44% in 2015.

India population trend



Source: UN population estimates

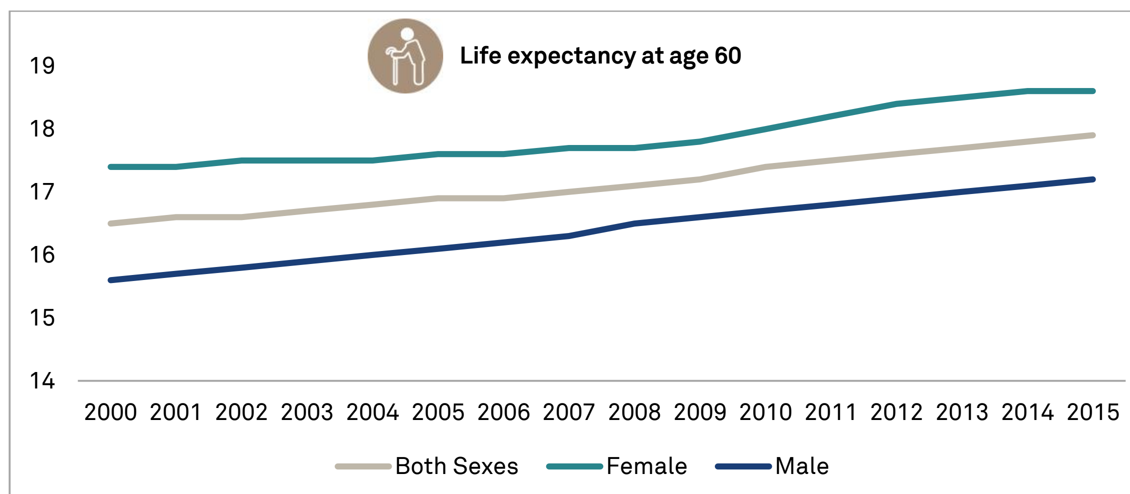
But the population is also ageing with each passing day. The share of the elderly in total Indian population has risen to 8.6% in 2011 from 5.6% in 1961. According to the 'Population Projections for India and States 2001 - 2026', this would increase further to 12.4% by 2026. Further, every fifth Indian will be a sexagenarian in 2050 compared with one in 12 now. Thus, by 2050, India would be in a similar position to today's developed world in terms of the share of the elderly in population.

Rise in life expectancy and decline in fertility rate

The situation that the developed world faces today on elderly social security is because of two main factors – an increase in life expectancy and a decline in total fertility rate (TFR).

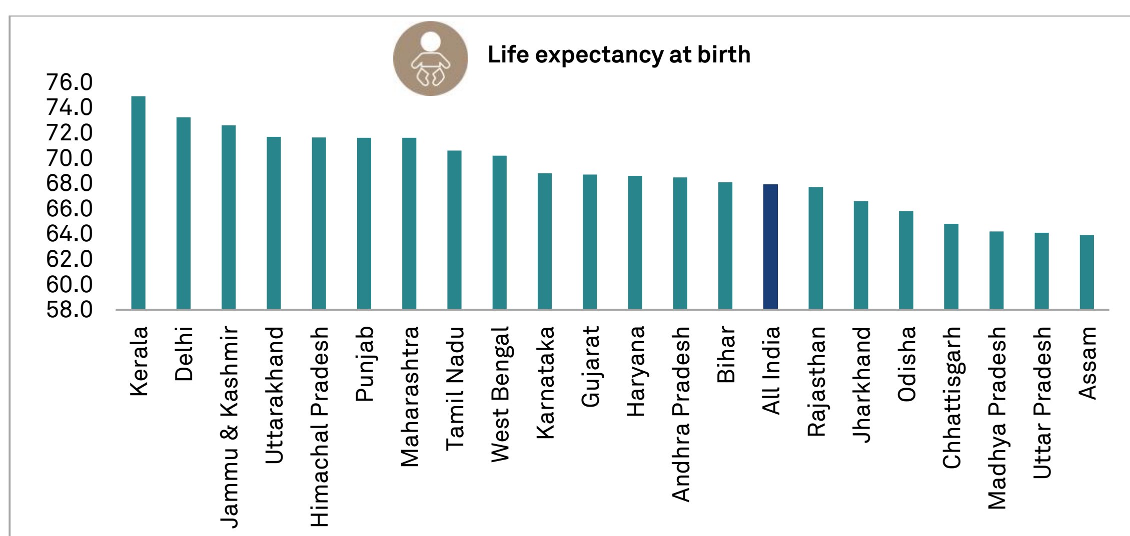
The World Health Organisation defines life expectancy as the "average number of years that a newborn is expected to live if current mortality rates continue to apply". Given advancements in medical sciences, average life expectancy at birth at the global level has improved to 71.4 for 2015. Japan has the highest life expectancy at 83.7 and India's life expectancy stood at 68.3 for 2015.

As per World Health Organisation, India's life expectancy has also been on the rise – going from 62.5 in 2000 to 68.3 in 2015. Also, the life expectancy at age 60 stands at 17.9 in 2015 vis-à-vis 16.5 in 2000. Significantly, there is a difference in life expectancy across gender, with female life expectancy being higher than male, both at birth and at age 60. For 2015, the life expectancy at birth and at age 60 stood at 69.9 and 18.6, respectively, for females, compared with 66.9 and 17.2 for males. From a pension perspective, an increase in life expectancy at age 60 impacts the fiscal spending that the government might need to entail. Since females have been mostly dependent on their counterparts, a longer life expectancy for females implies increased social support from the exchequer. The graph below shows the improvement in life expectancy at age 60 over the 15 years from 2000 to 2015.



Source: World Health Organisation

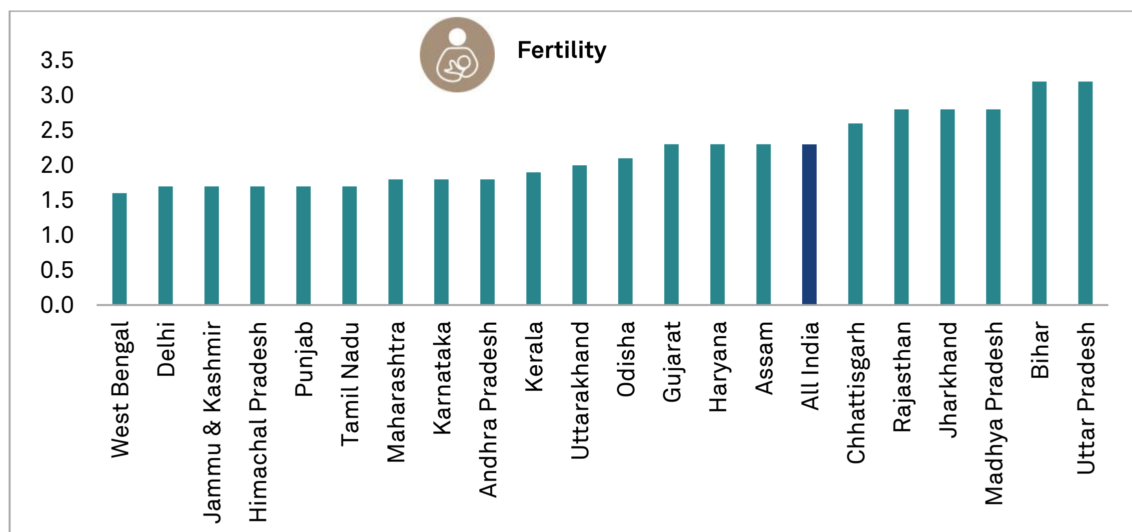
A state-wise analysis also reveals that life expectancy has been on the rise across all states, with Kerala having the highest life expectancy at birth, at 74.9.



Source: Sample registration system, Statistical Report (Registrar General, India) 2010-14

The country's total fertility rate (TFR), too, has decreased drastically over the years. According to the WHO, TFR refers to the number of children born or likely to be born to a woman in her life time if she were subject to the prevailing rate of age-specific fertility in the population.

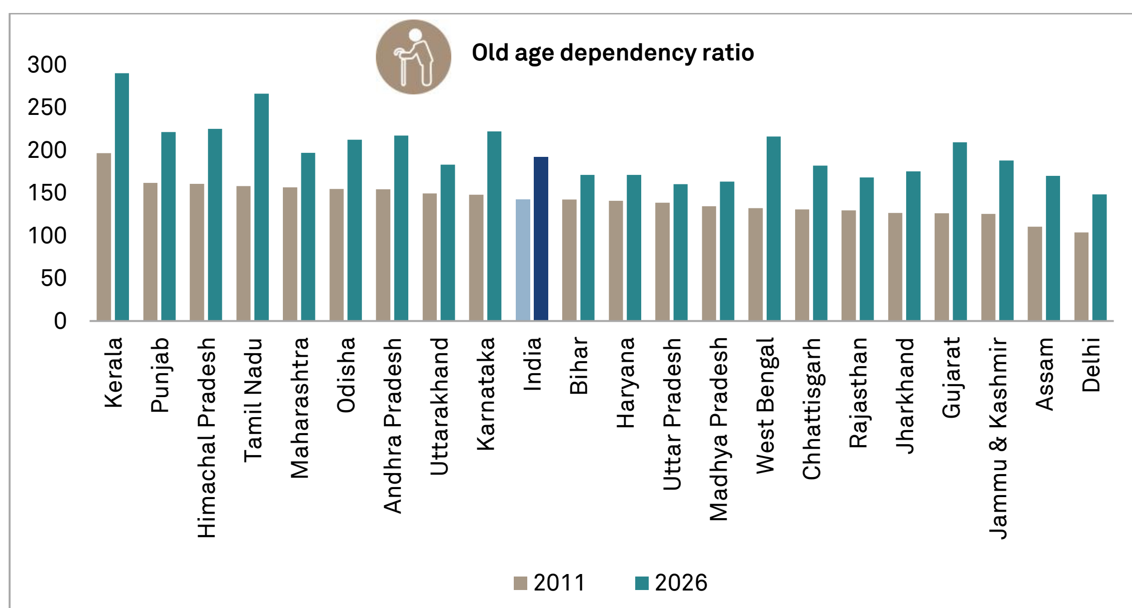
A term related to TFR and reckoned as a benchmark by demographic experts to view population stabilising is the "replacement level fertility rate". The UN Population Division considers a TFR of 2.1 children per woman as the replacement-level fertility. As per the latest UN projections, India is expected to reach this TFR level by 2025-30. Though India's national average of TFR and life expectancy for 2015 looks non-alarming at 2.4 and 68.3, respectively, there are quite a few states where TFR is below 2.1. Moreover, the average TFR for many states is as low as US, Canada, France, UK, and Denmark.



Source: Sample Registration System, Statistical Report (Registrar General, India) 2010-2014

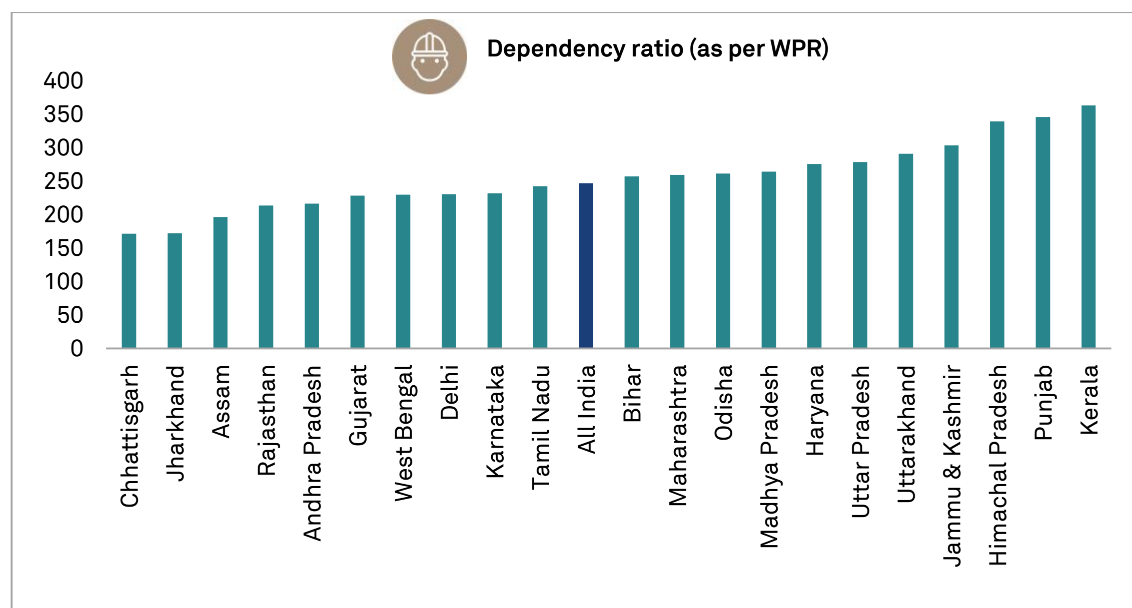
The combined effect of life expectancy and total fertility rates can be seen through the old age dependency ratio, or the total number of elderly aged 60 years and above to the total population aged 15-59 years (multiplied by 1,000). For India, the old age dependency ratio as per 2011 census data stood at 142, or a ratio of one older person for 7 people of working age. As per technical projections, the old age dependency ratio will rise to 192 by 2026. This implies that for each elder person, we would have only 5 people of working age. If we look at the state-wise distribution, we see that the old age dependency is the highest in Kerala, at 196, and the lowest in Delhi, at 126. Higher fertility rate and lower life expectancy reduces the old age dependency ratio in some states.

The graph below shows the old age dependency across states and their projections at 2026.



Source: 2011 Census data

Old age dependency measures the burden of the elderly on the younger generation. However, given that we have a large population that is still out of the workforce, old age dependency ratio by worker population ratio (WPR) seems a more appropriate measure to evaluate the dependencies. Dependency ratio by WPR is defined as the total number of people aged 60 years and above to the total worker population aged 15-59 years (multiplied by 1,000).

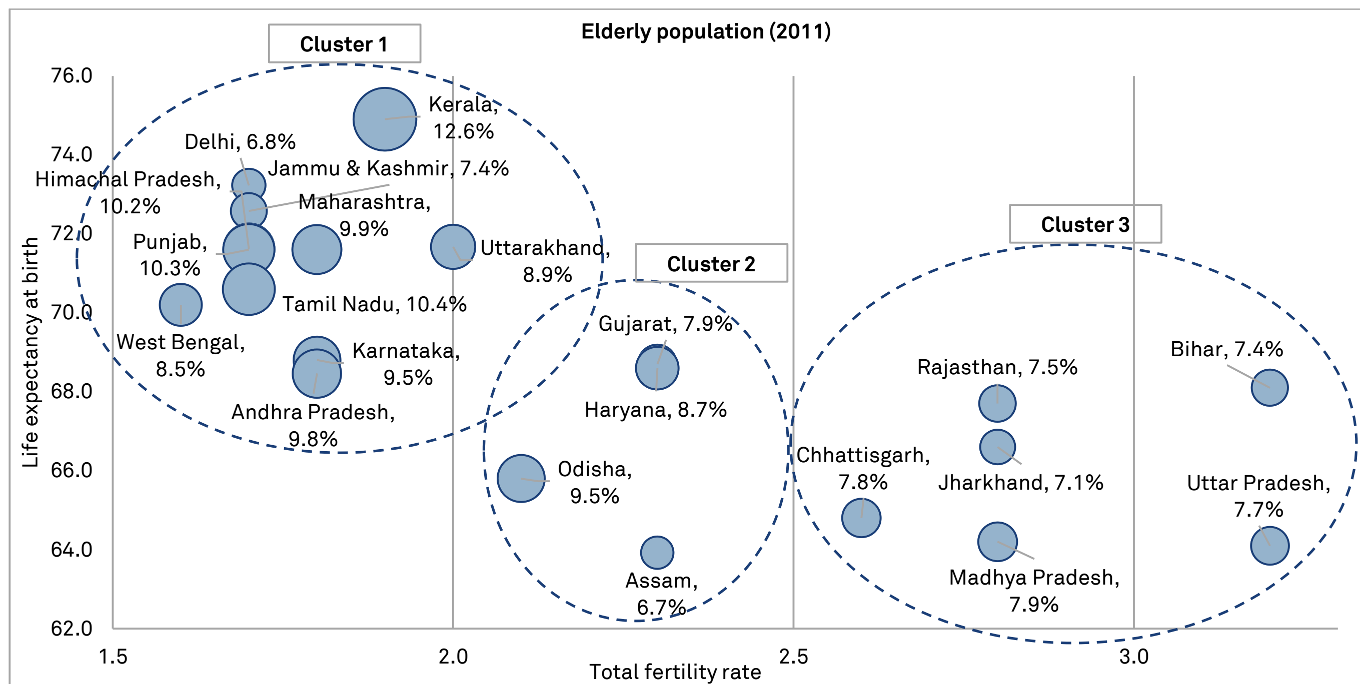


Source: 2011 Census data, Report on fifth annual Employment-Unemployment Survey (2015-16)

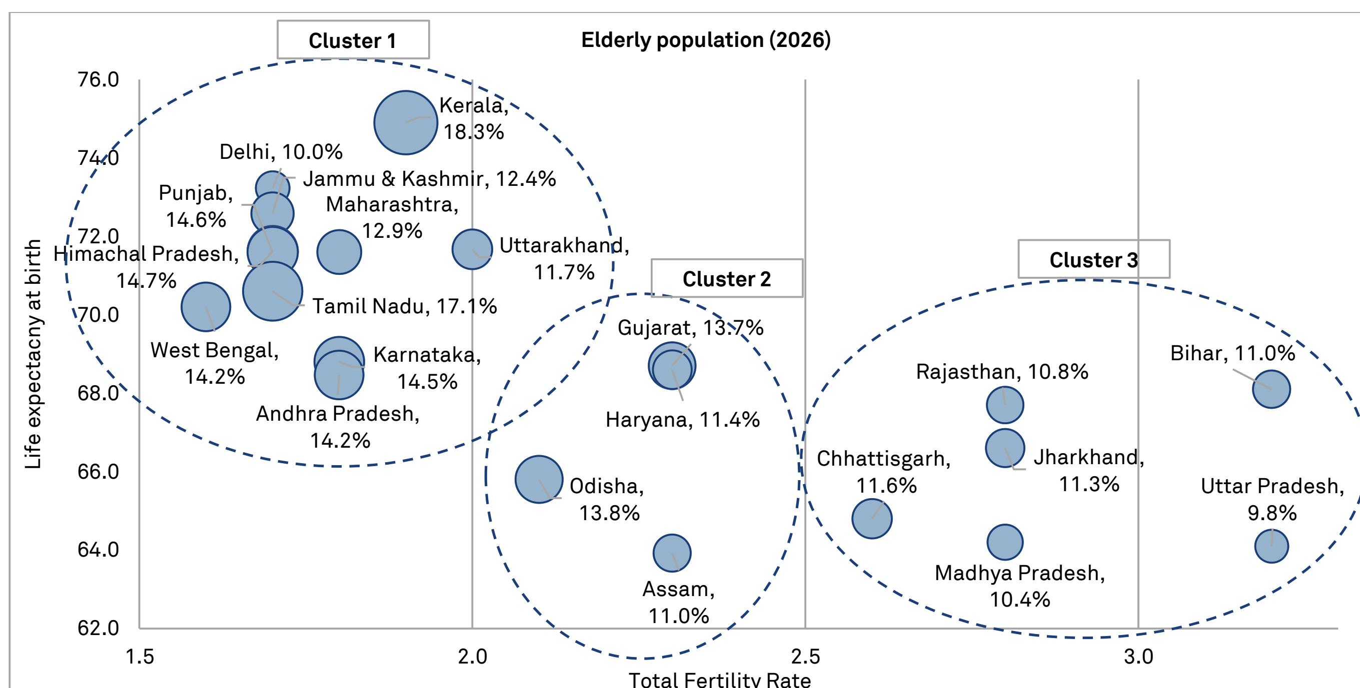
We find that the old age dependency by WPR is higher for some states due to low labour force participation. This statistics, when analysed along with our previous analysis, brings out some interesting results for states like Uttar Pradesh, Madhya Pradesh and Bihar. Though these states have a sizeable population of young people, given the low WPR, the actual old age dependency is almost 250 elderly per 1,000 workers, implying one elderly for four people. In Punjab, Kerala and Himachal Pradesh, the ratio works out to one elderly dependent on 3 workers.

Since pension today is governed by both central and state governments, a high old age dependency ratio for a state implies a higher burden on the state's young population to enhance productivity to meet the expenses of the elderly.

Further, there is an inverse relation that exists between life expectancy and TFR in India. Most of the states that have high life expectancy rank lower in terms of TFR, implying that these states would slowly have a major population in the elderly age brackets. The graph below depicts the inverse relationship between life expectancy and fertility rates. The size of the bubble represents the elderly as a percentage of total population as per 2011 census.



Source: 2011 Census data



Source: Population Projections for India and States 2001 - 2026

As we can see, there are three clusters that emerge out of the analysis. The first cluster, which comprises 'high age - low fertility' states, accounts for almost 50% of the elderly population. The weighted average TFR of this cluster is 1.75 and weighted average life expectancy 70.68. In this cluster, on average 9.7% of the population is elderly, compared with India's average of 8.6%. Kerala has the highest elderly population in this cluster at 12.6%, whereas Delhi has the lowest at 6.8%. In terms of TFR, this segment can be compared to high-income countries such as the USA, the UK, the Netherlands and Sweden.

The second cluster, with weighted average fertility of 2.25 and weighted average life expectancy of 66.98, represents India's national average. The elderly in this segment are 8.2% of the total population. There are four states that form this cluster, viz. Assam, Gujarat, Haryana and Assam. These states exhibit TFR closer to a replacement fertility level of 2.1.

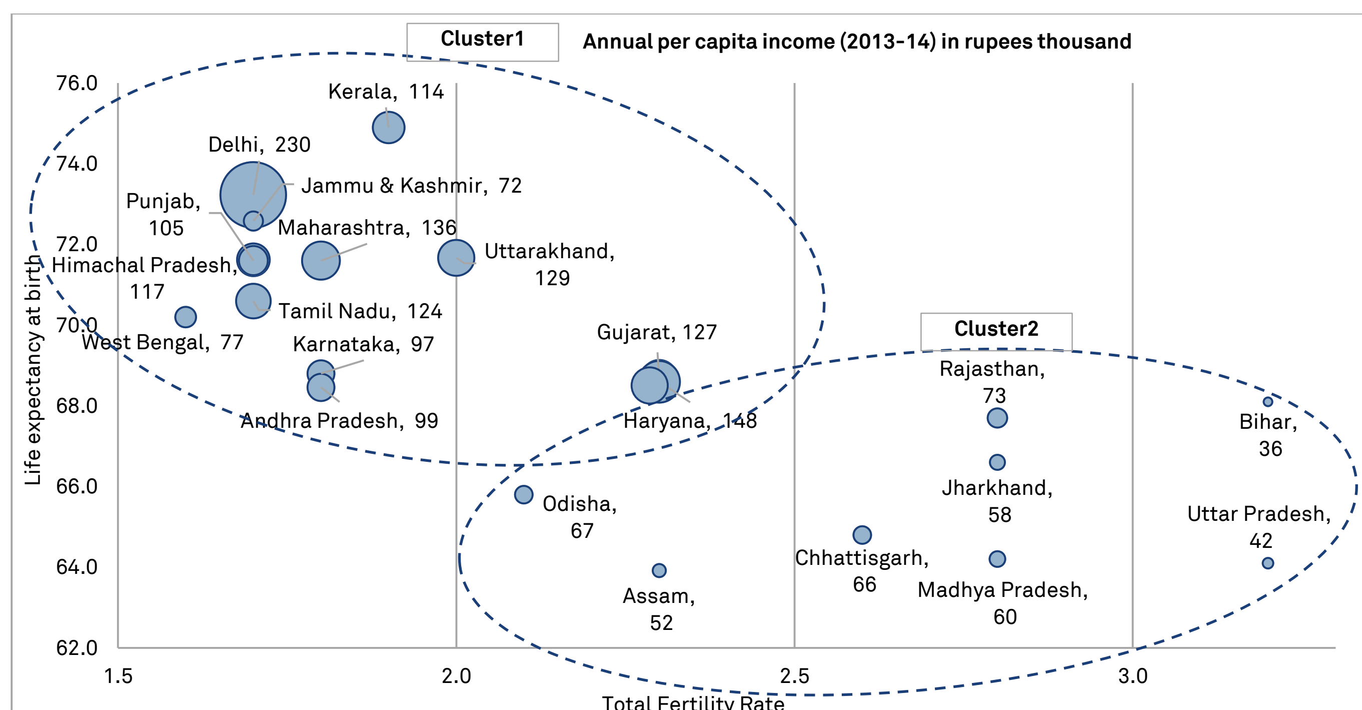
The third cluster, comprising 37% of the elderly population, has weighted average fertility rate of 3.03 and weighted average life expectancy of 65.63. The elderly population in this segment, which consists of 6 major states, is at 7.6%. In terms of TFR, this segment is comparable to 'lower middle income countries' such as Namibia and Jordan. This segment is younger, too, given high TFR and low life expectancy. However, these states have been at the bottom of the pyramid in terms of per capita income. So, though the young population should be able to support the elderly population, the problem is that the bulk of the population in these states is below the poverty line. If the young are not able to meet their own expenses, it is difficult for them to support the older generations. Also, even though India has the youngest working population, it is greying much faster than the rate developed countries had greyed at and that too at a low level of per capita income. The overall clustering remains the same even in the 2026 projections.

Younger states have lower per capita income

We further extend our above analysis to evaluate the affordability and standard of living patterns in the various states through per capita income. The per capita income of various states has been taken as gross state domestic product per capita. Combining the aging demographics and the per capita income, there are two distinct clusters that emerge:

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

The graph below depicts the per capita income across states. As we see most of the states in cluster 1 have relatively high per capita income compared to the states in Cluster 2.



Source: Ministry of Statistics and Programme Implementation, Central Statistics Office and 2011 Census data

Key recommendations

Given that both fertility and life expectancy are factors that determine future population demographics, the analysis implies is that there needs to be a differential approach in which the pension industry should focus on the country as a whole in terms of achieving pension coverage and adequacy for the future elderly populations. We provide the following recommendations:

Cluster1: Since a significant population is expected to age in the coming years for this cluster, it is very important to develop focused pension strategy for the working age population. Most of the states in this cluster have high per capita income implying that their standard of living would be higher as compared to Cluster 2 states. This segment would require products that could provide them higher returns on their investments, so as to maintain similar living standards post retirement. Given that this cluster consists of states where investors can afford to contribute for pension, the strategy should be focused on promoting market linked pension products for the working age population.

Cluster2: As discussed, cluster 2 primarily is the lower per capita income states. Though the aging of elderly population is still not at an alarming high rate but this segment consists of large states with Uttar Pradesh alone accounting for 15% of total India's elderly population. Due to low per capita income, there is problem of both affordability as well as adequacy of retirement savings among the masses. The focus for the pension industry should be to provide today's working age population with pension products that could take care of their basic needs. The focus here should be to increase the awareness among the working age population about the pension schemes that are offered by the government for lower income groups such as Atal Pension Yojana. Given that affordability is a big concern area in these states, the government might look at the targeted pension scheme for elderly poor or co-contribution model under Atal Pension Yojana so as to incentivise the population at a lower income strata.

Benchmarking with the five-pillar pension framework

The World Bank's five-pillar framework is one of the fundamental benchmarks for comparing the pension industry in any country globally. The current five-pillar 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): The first is termed as Pillar Zero and 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.

In India, this is provided by the Central government under the Indira Gandhi National Old Age Pension Scheme (IGNOAPS) through a pension that touched over 2.3 crore people in the year 2014-15, but the payouts provided are meagre at Rs 200 per month and varying contribution by states. Other allied state government sponsored plans have varied coverage/ payouts.

Pillar I (mandatory – pay as you go): The second pillar, termed Pillar I, is a pay-as-you-go/ defined benefit (DB) pension framework, which is primarily tax / expense funded, respectively, and seeks to replace some portion of pre-superannuation income. The aim of this pillar is to replace some portion of lifetime pre-retirement income and address risks such as individual myopia, low earnings, and inappropriate planning horizons due to the uncertainty of life expectancies, and the lack or 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 DB to defined contribution (DC) pension for all employees joining from January 2004 (excluding defence services). Government employees who entered service pre-2004 would continue to get the DB benefit, but the fiscal cost would drastically reduce in another half a century.

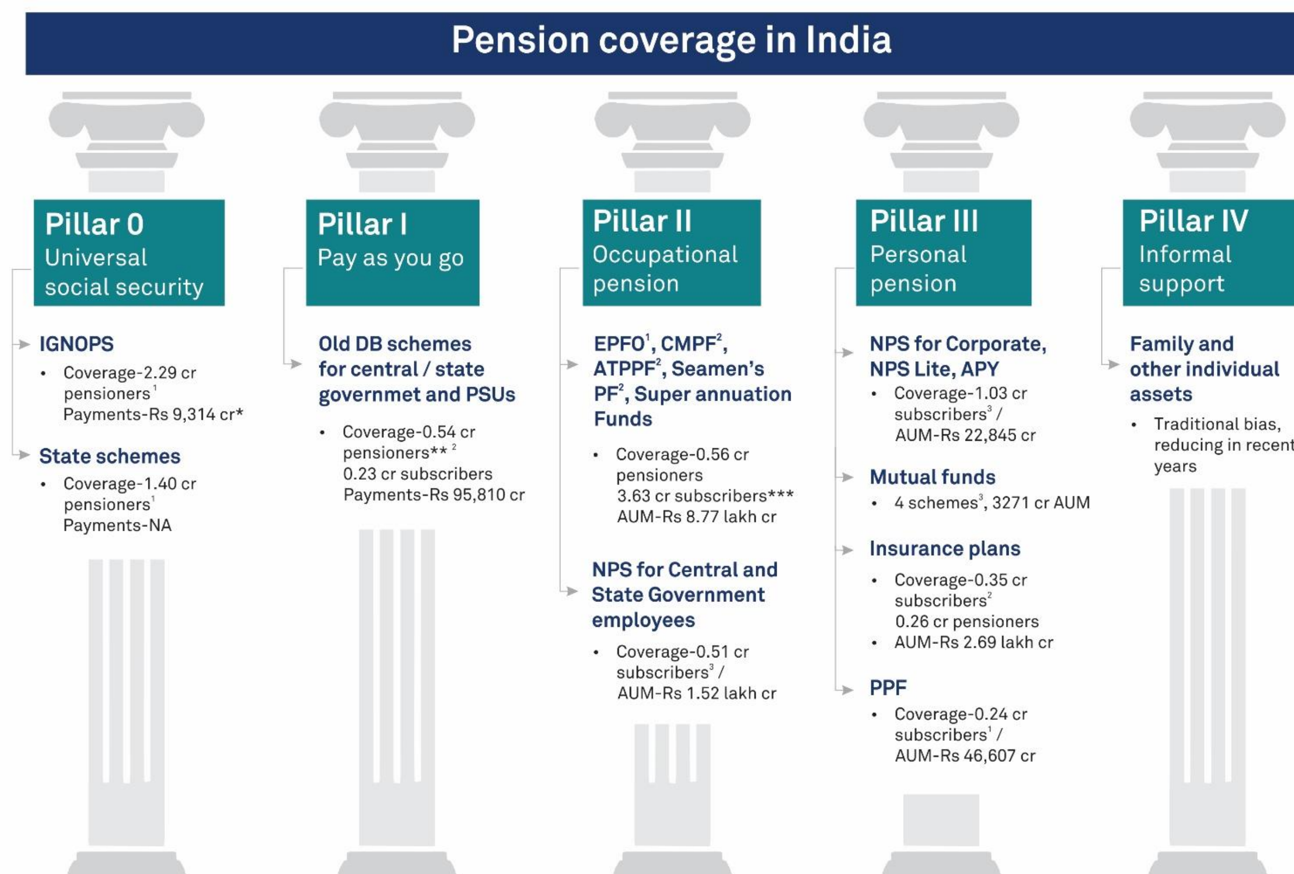
Pillar II (mandatory – organised section): The third pillar (Pillar II) is also mandatory, but in the form of DC pension system from the subscriber. Mostly, it targets the organised section of the economy with a wide set of design options, including active or passive investment management, choice parameters 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 (EPF) but lacks depth because of the low share of the organised sector in the country's economy. Further, most of the money is invested in fixed income assets, thus reducing the efficacy of investments.

Pillar III (voluntary): This pillar is voluntarily opted for by subscribers. Plans such as the voluntary segment of the National Pension System (NPS), the Atal Pension Yojana, mutual fund retirement plans, pension plans from insurance companies and Public Provident Fund (PPF) 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 nuclearization of families.

Five pillar framework in India



Source: PFRDA, AMFI, NSAP, IRDA, Crisil Research, Annual Report 2014-15 of NSI

**Payments made under NSAP*

*** Data does not include Old DB scheme for State Government Employees, PSU employees*

****Includes 3.49 crore active subscribers of EPFO*

 # Includes state schemes across 19 states

[1.] *Data for March 2015*

[2.] *Data for March 2016*

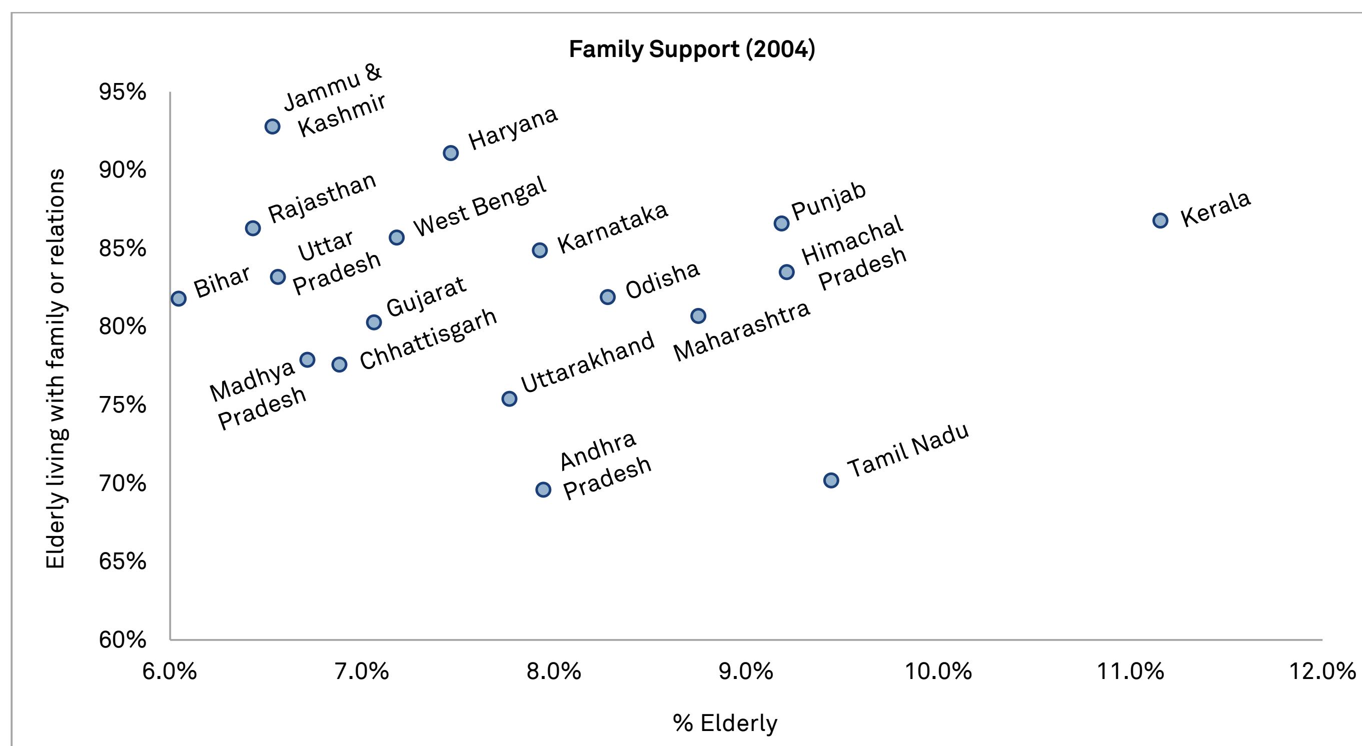
[3.] *Data for March 2017*

NA-Not Available

Pillar IV
Traditional family support declining

Lower family support for elderly states

Historically, the joint family system has acted as a social security net for the elderly in India. This is also a reason for the low formal pension coverage in the country. Lately, however, this bastion has started falling apart due to urbanisation and nuclearisation of families. Additionally, the average size of Indian households from 4.67 members per family in 2001 to 4.45 in 2011.



Source: "Situation of Elderly -2016" BY MOSPI, GOI., National Sample Survey Organisation (NSSO) 60th Round 2004

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.

Percentage distribution of currently working elderly by the need to work at old age, according to place of residence and sex, 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

Source: Report on the Status of Elderly in Select States of India, a UNFPA report 2011

Any other form of savings to support retirement years is also nominal. Overall, 74% of elderly men and about 41% of elderly women report receiving some personal income. However, the majority fall in the low-income category. The distribution shows that 43% of all elderly receive no income, 22% receive less than Rs 12,000, 21% receive between Rs 12,000 and Rs 50,000 and around 14% receive more than Rs 50,000 per annum. Significant gender differentials in personal income are evident with more men than women having some personal income.

Income (in rupees)	Total		
	Men	Women	Total
No income	26	58.7	43.3
←12,000	16.7	25.9	21.5
12,001–24,000	12.3	5.4	8.7
24,001–50,000	19.9	5.2	12.2
50000 +	24.2	4.3	13.7
Don't know / No answer	0.8	0.4	0.6
Total	100	100	100
Mean	43,548	8,353	24,974
Number	4,672	5,180	9,852

Source: Report on the Status of Elderly in Select States of India, a United Nations Population Fund (UNFPA) report 2011

Meanwhile, another form of retirement income, viz. reverse mortgage on the owned house, has failed to take off in India despite its launch almost a decade back. Interestingly, reverse mortgage hasn't quite taken off even in the developed world – in the US, where the system has been around for more than half-a-century, the penetration was at an abysmal 1.5% as of 2015[1].

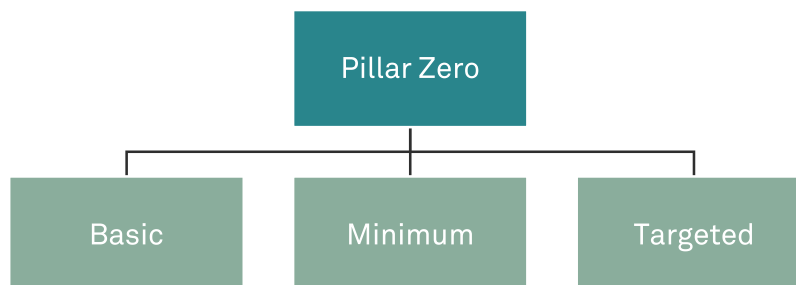
The reasons range from emotional attachment to a property, to lack of awareness and understanding of the product. Often, the elderly prefer to sell their bigger house and move into a smaller one, with the differential proceeds as additional security.

It is thus imperative that sharper focus be laid on the remaining pillars of pension to ensure sufficient protection for the elderly during their sunset years. Development of the reverse mortgage market in the country could also aid in enhancing informal support to them.

[1] Retire on the House: The Use of Reverse Mortgages to Enhance Retirement Security

Pillar Zero
Fiscal support
a must for
BPL elderly

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 Help Age International company, has classified universal pension into three categories:

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. Countries such as 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.

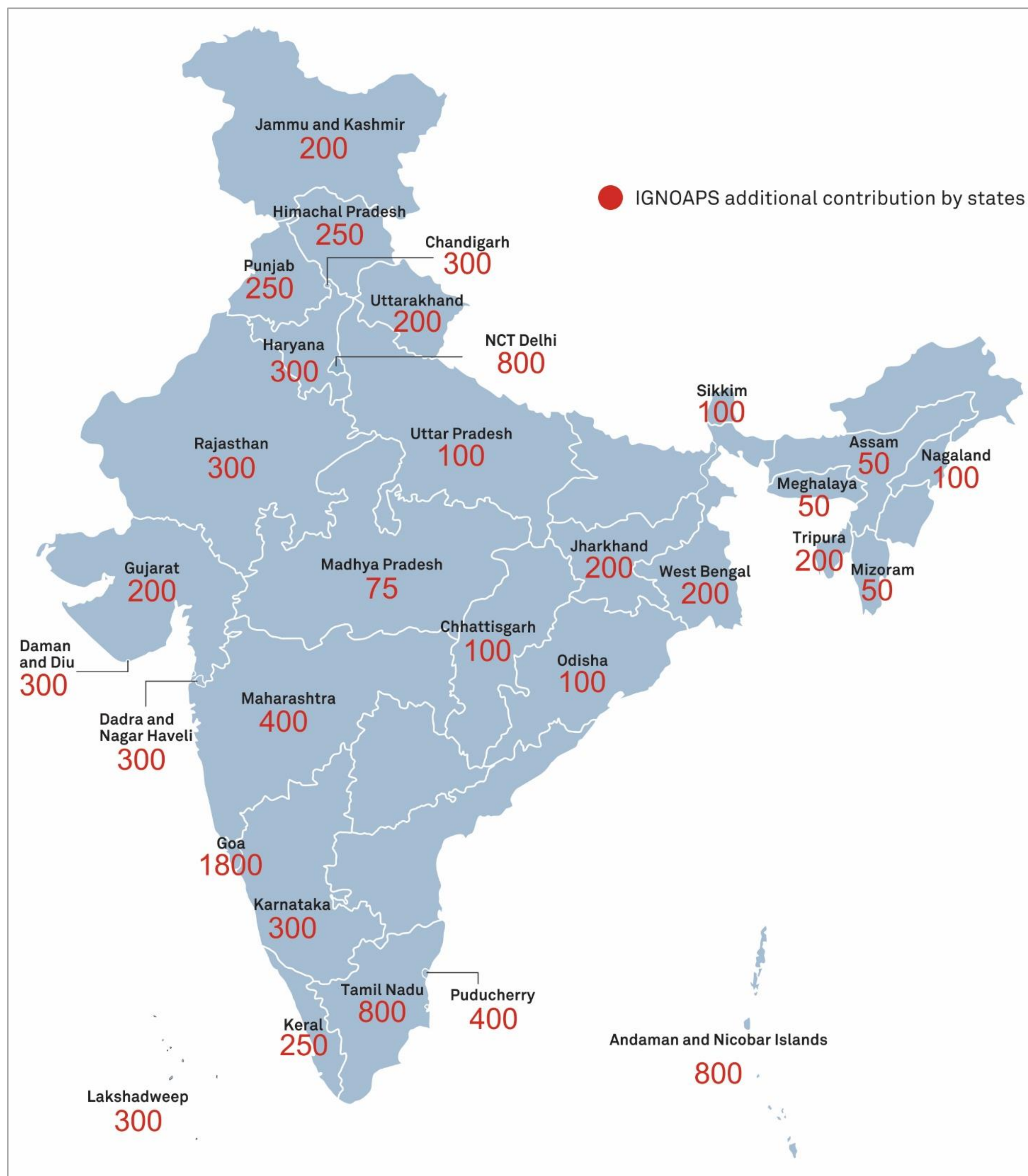
Universal minimum pension: This scheme provides pension to all individuals over a certain age. However, it excludes individuals who have some other form of pension (often incrementally). Countries such as Armenia, Kazakhstan, Thailand, Finland and our neighbour Nepal have such systems in place. While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

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

India's Pillar Zero sparing and varied

Pillar Zero is a developed concept globally, especially in advanced economies, with the replacement income far higher than the global poverty line limit of $1.90 per day (in PPP term). In India, however, the current structure is sparing, under IGNOAPS. The payouts are Rs 200 per month for those aged 60-79 years and Rs 500 for those aged 80 years and above. While state governments are urged to contribute, it is not mandatory. Further, the contribution varies across states.

Select state government contribution to IGNOAPS in rupees/month for those aged 60-79 years



Source: Annual Report 2013-14, Ministry of Rural Development, GOI

Further, there are state schemes such as Laxmi Bai Social Security Pension Scheme (Bihar), Madhu Babu Pension Scheme (Odisha), and Sanjay Gandhi Niradhar Anudan Yojana (Maharashtra) that also cover around 10% of elderly in various states. The payouts are, however, varied.

Targeted pension plan may be explored

In addition to being sparing and varied in nature, the dissemination of pension to the end receiver (below poverty line or BPL population) has its own operational challenges.

A study conducted by Tata Institute of Social Sciences and Pension Parishad over 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.

The government can thus evaluate a targeted pension scheme (TPS) for the indigent poor. The illustration below shows the estimated fiscal cost to the government if it is to provide pension to bottom 30% of the elderly poor..

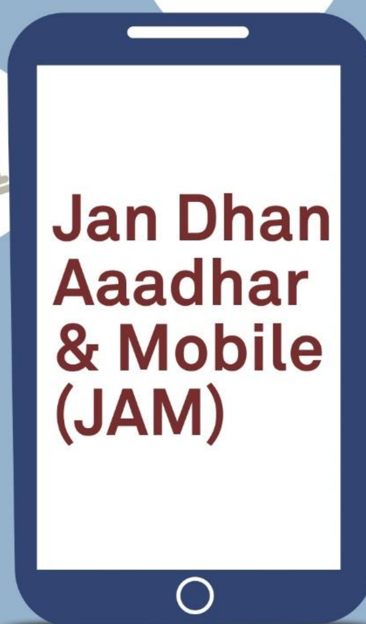
Illustration of fiscal cost for providing TPS to indigent poor

	2015	2030	2050
No. of old (30% of total) – million	34	54	89
Pension payment on TPS of Rs. 1000 - % of GDP		0.6%	0.9%
Pension payment on TPS of Rs. 2000 - % of GDP		1.1%	1.9%

Source: United Nations Population Division, 6th Pay Commission Report, Ministry of Finance for payment of pension and retirement benefits, Ministry of Rural Development for estimates on payment under Indira Gandhi National Old Age Pension Scheme, World Bank data on defence employment, Estimates made by Bhardwaj and Dave (2006), CRISIL Research

Note - An increase in pension of 12% per year, per person, up to 2030, and 10% from 2030 to 2050 is assumed to cover for inflation (which is estimated to be lower than in the past), and an improvement in living standards.

Further, to streamline the delivery, the government should use the aegis of Jan-Dhan, Aadhaar and Mobile (the 'JAM trinity', a term by chief economic advisor Arvind Subramanian). The plan involves opening targeted bank accounts (Pradhan Mantri Jan-Dhan Yojana) linked to unique individual identity numbers (Aadhaar), and facilitating cashless transactions and transfer of benefits to them using mobile phones and point-of-sale devices operated by a new class of intermediaries called banking correspondents.



Source: TRAI, Press Information Bureau

Pillar I

Concept waning globally; **Indian government** employees have already transitioned

Pillar I is a pay-as-you-go/ defined benefit (DB) pension framework that is tax/expense funded, respectively. It is, however, a waning concept globally, with most countries migrating their new workers to defined contribution (DC) plans.

DB versus DC globally

Selected OECD countries (2015)			Selected non-OECD countries (2015)		
Country	Defined benefit / Hybrid-mixed	Defined contribution	Country	Defined benefit / Hybrid-mixed	Defined contribution
Chile	0.0	100.0	Germany	100.0	0.0
Czech Republic	0.0	100.0	Switzerland	100.0	0.0
Estonia	0.0	100.0	Albania	0.0	100.0
France	0.0	100.0	Armenia	0.0	100.0
Greece	0.0	100.0	Bulgaria	0.0	100.0
Hungary	0.0	100.0	Colombia	0.0	100.0
Latvia	0.0	100.0	Croatia	0.0	100.0
Poland	0.0	100.0	FYR of Macedonia	0.0	100.0
Slovak Republic	0.0	100.0	Ghana	0.0	100.0
Slovenia	0.0	100.0	Kosovo	0.0	100.0
Italy	5.7	94.3	Lithuania	0.0	100.0
Denmark	6.7	93.3	Maldives	0.0	100.0
Mexico	9.6	90.4	Peru	0.0	100.0
Australia (1)	9.9	90.1	Romania	0.0	100.0
New Zealand (2)	17.6	82.4	Serbia	0.0	100.0
Iceland	23.9	76.1	Thailand	0.0	100.0
Spain	24.9	75.1	Malawi	3.7	96.3
Turkey	52.2	47.8	Liechtenstein	12.0	88.0
United States (3)	56.0	44.0	Hong Kong, China	12.4	87.6
Ireland	62.0	38.0	Costa Rica	12.9	87.1
Israel	67.7	32.3	Dominican Republic (2)	16.5	83.5
Korea	68.6	31.4	Zambia (6)	17.1	82.9
Portugal	82.4	17.6	Kenya (2)	33.5	66.5
Belgium (2,4)	83.3	16.7	Jamaica (2)	64.0	36.0
Luxembourg (5)	85.6	14.4	Indonesia (7)	65.3	34.7
Canada (3)	97.5	2.5	Namibia (2)	76.0	24.0
Finland	100.0	0.0	Brazil	87.6	12.4
			Guyana	88.4	11.6

Notes: This Figure only shows the breakdown of DB and DC plans provided by pension funds. It does not take into account other plans provided by other entities such as insurance companies.

(1) Data refer to 2013. (2) Data refer to 2014. (3) Data refer to occupational pension plans only. (4) Source: Financial Services and Markets Authority. (5) Data refer to pension funds under the supervision of Luxembourg Financial Supervisory Authority (CSSF) only. (6) Data only refer to private occupational pension schemes, and do not include individual pension plans or public occupational pension schemes. (7) Data only refer to the voluntary funded pension system, and do not include funds managing mandatory plans.

Source: OECD Global Pension Statistics.

There are many reasons for the decline of DB plans, including increased volatility in the financial markets, which has made it more difficult for employers to predict costs, and low interest rates, which have inflated the value of plan liabilities, boosting required contributions. Change in workforce composition due to ageing/ automation also adds to the risk of costs for the employer. A classic case is General Motors of the US, which had 141,000 workers on the payroll and 453,000 retirees receiving a benefit as of 2014.

India did away with Pillar 1 for government employees in 2004

India moved on to the defined contribution (DC) based pension system on the recommendations of two committees – the High Level Expert Group and the Old Age Social and Income Security or OASIS project. The New Pension Scheme, now renamed as National Pension System (NPS), which has its origin in the two reports, is a DC pension system administered and regulated by the Pension Fund Regulatory and Development Authority (PFRDA), which was initiated with all government employees joining from January 1, 2004. The scheme was initially made compulsory for government employees, and then, in 2009, opened on voluntary basis to the general public.

This has considerably reduced the fiscal cost for the government, even though it will sustain for another 40-50 years, till all the pre-2004 employees retire and get their pension benefits.

A CRISIL analysis shows that pension and retirement benefits to government employees would be as follows:

	2015	2030	2050
Pension and retirement benefits to government employees (*% of GDP*)	2.2	2.2	0.7

Assumptions on fiscal cost computation (Pillar Zero and Pillar I)

- Data on pension and retirement benefits paid by central and state governments are from Indian Public Finance Statistics, Ministry of Finance. The latest data available is till fiscal 2016.
- Number of pensioners for fiscal 2015 is taken from the Seventh Pay Commission Report and average pension is estimated. This number is extrapolated in future using the following assumptions;
  - Central civil pensioners (railways, telecom, posts and other civil departments) are estimated to fall 1.6% per year, based on estimates by Bhardwaj and Dave (2006)[2], between 2011 and 2031. The decline in civil pensioners is due to adoption of NPS, and the fact that between fiscal 1996 and fiscal 2008, there has been significant downsizing in public sector employment through attrition.
  - Growth in defence pensioners at 1.3% per year is based on the growth rate in armed forces' employment between 2001 and 2012. While the burden on account of central civil pensioners declines rapidly post 2030 and becomes 'nil' by 2050, pension burden on account of armed forces' pensioners continues.

[2]Bhardwaj G. and Dave S. 2006, 'Towards estimating India's implicit pension debt on account of civil service employees'

  - State government pensioners are estimated to fall 0.5% per year, again based on estimates by Bhardwaj and Dave.
  - Pension for quasi and local bodies has not been accounted due to lack of adequate information to derive per pension payments to pensioners.
- Per-person pension is assumed to increase at 12% a year till 2030 for central and state government pensioners, and by 10% from 2030 to 2050 for defence alone. This is assumed to cover inflation (lower than in the past) and an improvement in living standards. Nominal GDP is assumed to grow at the same rate.
- Pension payment on IGNOAPS is derived based on the number of beneficiaries taken from Ministry of Rural Development Annual Report, while pension payment is an average paid under the scheme across states and taken from the Press Information Bureau release.

Pillar II
In need of **better asset** allocation

The World Bank defines Pillar II as a kind of "individual savings account (i.e. defined contribution plan) 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." It primarily caters to the organised masses of any country.

The beginnings of Pillar II in India can be traced to 1952, when the Employees' Provident Fund Organisation (EPFO) was formed for the organised sector. EPFO covered all the establishments in the public and private sectors, with limited or equal contribution by the employee and employer. In 2004, the government launched the National Pension System to move government employees to the defined contribution format with market-linked returns. The scheme was opened to the general public in 2009.

The biggest difference between global and Indian Pillar II pension system is the asset allocation pattern being followed.

An analysis of the top 15 private pension funds based on investments in OECD countries shows that despite having an ageing economy, they continue to remain strongly invested in long-term asset classes such as equity. A similar analysis of non-OECD countries shows they are putting their demographic advantage to better use by investing in equities.

Asset allocation of top 15 private pension funds' investments: OECD countries

Country	Investments ($ billion)	Asset allocation (%)				Demographic profile (%)		
	December 31, 2015	Equities	Bills and bonds	Cash and deposits	Other *	0-24 years	25-59 years	60 & above
United States	23,855	44.2	37.0	1.0	17.9	33%	47%	21%
United Kingdom	2,690	20.2	34.4	2.4	43.0	30%	47%	23%
Canada	2,249	28.3	34.8	4.1	32.8	29%	49%	22%
Australia	1,512	50.6	9.1	4.3	36.1	32%	48%	20%
Japan	1,327	10.8	32.8	7.2	49.1	22%	45%	33%
Netherlands	1,318	38.2	46.5	2.8	12.5	28%	47%	25%
Switzerland	793	29.8	32.9	5.3	32.0	26%	50%	24%
Denmark	599	17.8	63.1	0.3	18.7	30%	45%	25%
Sweden	374	18.3	66.7	2.2	12.8	30%	45%	26%
Korea	343	0.0	9.2	52.6	38.3	27%	54%	19%
Germany	218	5.0	53.5	3.8	37.8	23%	49%	28%
Mexico	176	21.5	77.4	1.0	0.1	46%	44%	10%
Spain	168	11.4	62.4	16.7	9.4	24%	51%	24%
Israel	165	7.6	70.4	6.3	15.7	43%	42%	16%
Italy	155	19.5	49.7	4.1	26.7	23%	48%	29%

** "Other" category includes loans, land and buildings, unallocated insurance contracts, hedge funds, private equity funds, structured products, other mutual funds (i.e. not invested in cash, bills and bonds, or equities) and other investments.*

Source: OECD Global Pension Statistics, United Nation Population Estimates 2015

Asset allocation of top 15 private pension funds' investments: non-OECD countries

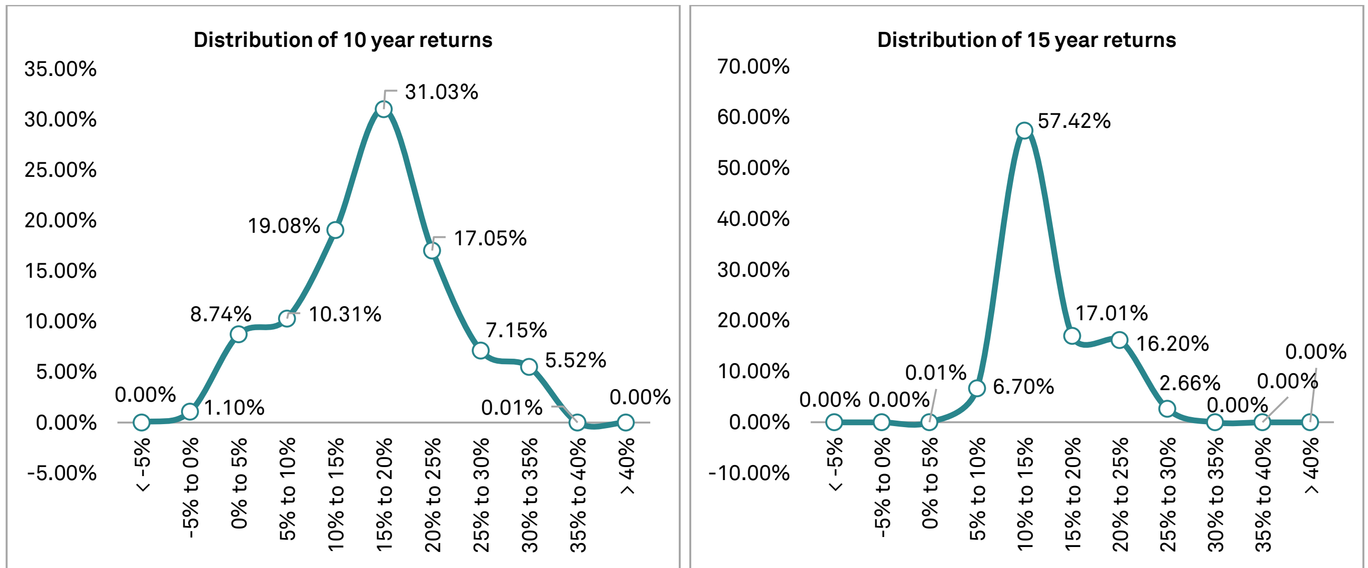
Country	Investments (billion $) December 31, 2015	Asset allocation (%)				Demographic profile		
		Equities	Bills and bonds	Cash and deposits	Other *	0-24 years	25-59 years	60 & above
Brazil	412	17.5	61.5	7.9	13.1	39%	49%	12%
South Africa	318	25.2	10.6	4.2	60.0	49%	44%	8%
Hong Kong, China	115	60.6	22.4	12.6	4.4	23%	55%	22%
Russia	66	9.9	65.7	20.1	4.3	27%	53%	20%
Colombia	52	25.4	46.8	3.9	23.9	41%	48%	11%
Peru	36	39.6	43.2	11.7	5.5	46%	44%	10%
Nigeria	27	11.1	73.3	10.7	4.8	63%	33%	4%
Thailand	25	16.3	57.8	25.3	0.6	31%	53%	16%
Indonesia	15	14.7	43.1	32.7	9.4	45%	47%	8%
Croatia	11	23.7	73.2	2.8	0.4	26%	48%	26%
Namibia	10	68.9	20.9	6.7	3.6	58%	37%	5%
Costa Rica	9	3.7	91.2	3.8	1.3	39%	48%	13%
Kenya	8	26.6	32.5	5.5	35.3	61%	34%	5%
Dominican Republic	7	0.0	78.2	0.0	21.8	48%	42%	10%
Romania	6	22.1	73.1	4.8	0.0	0.26	0.5	0.24

Source: OECD Global Pension Statistics, United Nation Population Estimates 2015

** "Other" category includes loans, land and buildings, unallocated insurance contracts, hedge funds, private equity funds, structured products, other mutual funds (i.e. not invested in cash, bills and bonds, or equities) and other investments.*

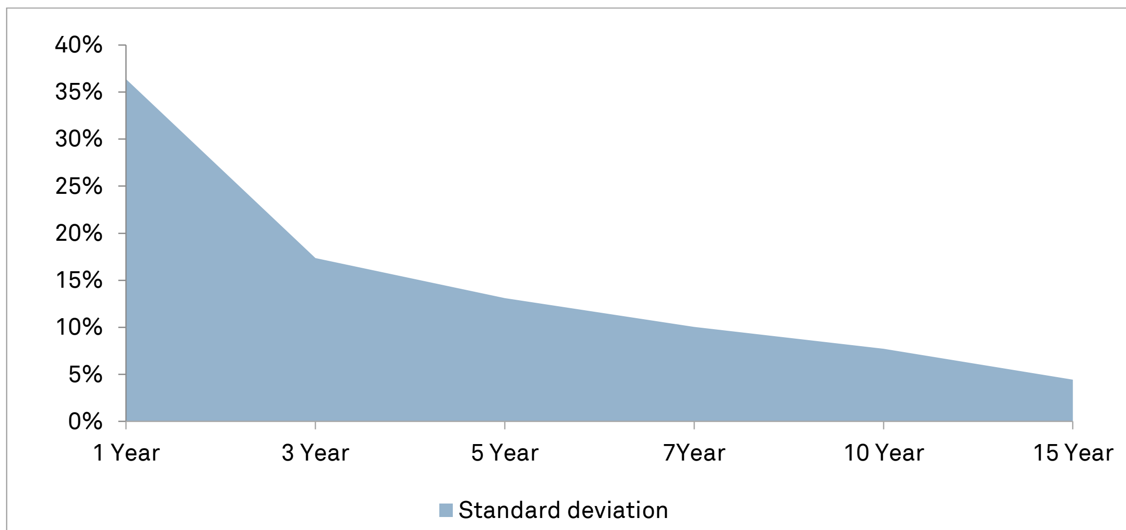
In India, however, pension assets are predominantly invested in debt. This is despite the demographic advantage the country has and is expected to enjoy over a long term. The young population has a long-term investment horizon, which calls for greater allocation to long-term asset class (such as equity) for wealth creation to meet the needs in sunset years.

Potential of positive returns increases over long term



Source: BSE India (returns distribution of S&P BSE Sensex)

Volatility too reduces



Source: BSE; daily annualised rolling returns since inception of S&P BSE Sensex considered across various periods

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 93% of the times given returns more than 10%. In the 10-year investment horizon, 80% of the times returns have been more than 10%. To be sure, as the investment horizon increases, the volatility in equity returns decreases significantly.

Thus, increasing the equity exposure in the pillar 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 the private employees allows investors to take exposure up to 75% into equity at a young age, while reducing its exposure near vesting age.

Additionally, there is a section of workforce which do not get covered under any form of retirement product. For example, organisations having less than 20 person employed are not covered under the aegis of EPFO. The government can look at auto enrollment of people who are part of the 'employee – employer' set up but are not covered due to various reasons. Example of countries which have a similar auto enrollment facility include Italy, New Zealand, UK, USA and Chile.

Various groups that can be covered through auto enrollment are:

- Micro Industries and Enterprises
- Small Scale Industries
- Accredited Social Health Activist (Asha)
- Anganwadi
- Construction sector
- Gram Panchayat and other such local organizations
- Enterprises which could be sole proprietorship, partnership etc. with less than 20 employees

Pillar III
Incentives required to penetrate pension in the country

The World Bank describes Pillar III as one which takes “many forms (e.g. individual savings for retirement, disability or death; employer sponsored; defined benefit or defined contribution) but is essentially flexible and discretionary in nature. The pillar compensates for rigidities in the design of other systems but includes similar risks as the second pillar”.

The options available to this segment in India are in the form of voluntary pension plans offered by

- NPS (NPS and Atal Pension Yojana)
- Pension plans of mutual funds
- Pension plans of insurance companies
- Public Provident Fund

Increasing the penetration of pension products via voluntary pension schemes is the biggest hurdle the Indian pension industry faces today, especially given the gargantuan size of the unorganized sector in the country. As per the labour force survey on employment and unemployment conducted in 2011-12 by the National Sample Survey Office (NSSO), Ministry of Statistics and Programme Implementation, the estimated number of employed persons on usual status basis was 47.41 crore, of which 82.7% (39.14 crore) was in the unorganised sector.

The unorganised or informal sector today runs the risk of low coverage, low contributions and persistency. Atal Pension Yojana or APY, which is targeted to the lower income strata of the country, suffers from all the three aspects.

Case study – Atal Pension Yojana

Government of India has introduced the Atal Pension Yojana with an objective to provide subscribers with a fixed pension ranging from Rs 1,000 to Rs 5,000. The benefit is fixed in this case, whereas the contribution varies depending on the age and the amount of pension one opts for. The scheme is targeted at the low-income group individuals of the unorganised sector.

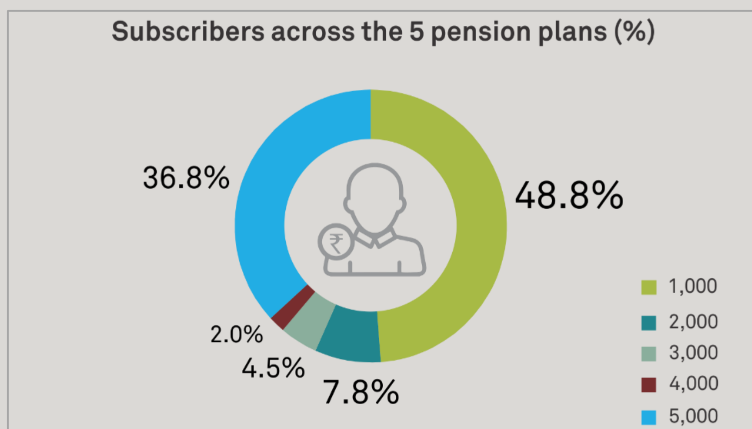
Contributions in Atal Pension Yojana					
Age	**1000**	**2000**	**3000**	**4000**	**5000**
18	42	84	126	168	210
20	50	100	150	198	248
25	76	151	226	301	376
30	116	231	347	462	577
35	181	362	543	722	902
40	291	582	873	1164	1454

The above table shows the contribution by age of subscriber and amount of pension required. The contribution rises as the pension required goes up, and also with age, since the investment horizon decreases with increasing age. The contribution amount ranges from as low as Rs 42 per month to Rs 1,454 per month.

Curiously, despite the low contributions involved, the scheme’s penetration remains low, possibly because of low affordability and lack of awareness.

As of February, 2017, APY had 44.7 lakh subscribers, which is less than 1% of the working age population. From the graph below, it can be seen that almost 49% have subscribed for Rs 1,000 pension, and about 37%

for Rs 5,000, leaving just 14% in the other pension buckets. This shows that subscribers who could afford have chosen the Rs 5,000 pension plan, while those who could not have chosen the least possible pension plan. Though the pension amounts seem low, it can be inferred that people are not able to afford even these contributions.



Source: PFRDA

Since the unorganised sector incomes are low and the segment is more vulnerable to changes in economic conditions, a mandatory contribution on a regular basis might be difficult. This is also evident from the low persistency levels (~70%) with low periodic contributions. Hence, co-contributions from the government would be required to increase the coverage and persistency rates for the lower income strata.

Clearly, the biggest challenge India faces is the inclusion of the unorganised or informal sector into the pension industry through voluntary pension schemes. This can be addressed through:

1. Flexible payment and withdrawal options – One of the main parameters that ensure success of any pension system is the affordability of the pension system. In India, the informal sector is vast and is employed in various activities, ranging from agriculture to mere household jobs. Some of these jobs have workers engaged throughout the year, whereas some of them are seasonal. There are also labourers who work on a daily basis and are unsure of whether they would be employed the next day. Also, agriculture sector employs the highest population in India and is highly dependent on monsoons. In a year of bad monsoons, the earnings of many farmers are very low even to suffice their basic needs, let alone put something aside for pension in later years. Given such irregularities in income, flexible contributions could be allowed. Similarly, in case of extreme events such as floods, drought or severe financial hardships, the subscriber could be allowed to make flexible withdrawals.
2. 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 government or due to tax benefits. Due to low affordability of pension products by the informal sector, an adequate pension is only possible with government providing the push through monetary incentives. Otherwise, as discussed earlier, with low affordability and low persistency, adequacy might become an area of concern in future success of these schemes.
3. Exclusive pension schemes for women – Women account for 70% of the non-workers in India and are financially dependent on their male counterparts. Since women outlive men, and this will increase in years to come, feminisation of the elderly is going to be more evident. In order to avoid huge fiscal burdens and also to ensure financial security for this segment, there is a need to look at designing a pension policy

exclusively for women. Similar to a Sukanya Samriddhi Scheme, where parents are incentivised to save for their young daughters, a scheme can be provided for the young ladies. The contributions could be from the women's families. Alternatively, the government could look at providing some tax relief to the savings held in the form of pension. This segment, if tapped properly, can ensure high coverage of the working age population (15-59 years).

4. Inclusion of Insurance - Pension is a long term engagement and given the income profiles of the targeted group for APY, bundling pension with insurance could act as an incentive for increasing the persistency. Existing schemes like Rashtriya Swastha Bima Yojana (RSBY) for health cover and Pradhan Mantri Suraksha Bima Yojana (PMSBY) for life insurance and insurance against disability can be bundled along with the auto enrolment in APY scheme.
5. Financial literacy and financial intermediation – The most important factor for success of voluntary pension schemes would be financial literacy of the informal sector. Financial intermediaries, too, could play a critical role in increasing the penetration of pension products in the country. We discuss these in detail in our section on 'Other key areas of focus'.

Case Study: New Zealand

KiwiSaver scheme is a voluntary work-based savings scheme. Organised sector employees would be automatically enrolled into this scheme at the beginning of their jobs. Self-employed and unorganised employees can join the scheme on a voluntary basis. Prior to introduction of KiwiSaver, the coverage in occupational savings schemes was as low as 15% of the workforce (18-64 years). Now, almost three-fourths of the workforce is covered under the KiwiSaver scheme.

Key success factors:

$1,000 kick-start: Government contributes an initial payment of NZD 1,000 to all the members, though this benefit has been pulled from 2015 budget to reduce the fiscal burden

Member tax credit: Provides flat subsidies and contributes via annual "member tax credit", similar to co-contribution from government. In this case, the government of New Zealand provides 50 cents for each dollar of subscribers' contribution with a cap of $521. This helps in pushing the subscribers to invest as much as a minimum amount of $1,042 to be eligible for the maximum member tax credit, even if the subscribers fall under lower income groups.

Compulsory employer contribution: If an employee contributes to KiwiSaver scheme from the salary, the employer should mandatorily contribute 3% of the pay, unless the employer invests in any other superannuation scheme for the employees.

Savings withdrawal for first home: KiwiSaver subscribers can withdraw their savings to purchase their first home after three years of contributions. The savings include member and employer contributions, returns on investments and the member tax credits. Prior to April 1, 2015, subscribers were not allowed to withdraw member tax credits.

Case study: Germany

Germany has two categories of personal voluntary pension schemes:

Riester pensions: Targeted at low-income groups, Riester life annuity plans comprise annuities, endowment assurance, investment fund savings plans and bank savings plans introduced in 2002. Anyone who is covered under the social insurance system and who is subject to full tax liability is eligible to purchase Riester products. Contribution levels are defined in the contracts with the pension providers and 70% of the corpus is to be mandatorily annuitised, while 30% can be received as lump sum.

Key success factors:

Minimum benefit guarantee: Pension funds must offer a minimum benefit guarantee.

Government subsidies: The level of government subsidies depends on the subscriber's income and number of children. Government subsidises 154 euros and an additional 300 euros per child. Maximum subsidy can be 2,100 euro per annum. This plan, therefore, suits low-income earners, who wish to benefit in long term.

Taxation: Riester schemes are taxed according to EET formula. Only pension benefits are taxed. Contribution and retirement corpus are tax-exempt.

Inheritable: Pension savings can be inherited. Also, subsidies need not be repaid if transferred to a spouse with a retirement pension.

Rurup pensions: This is of the form of a contract which provides for payment of a life-long pension. Anyone can purchase a Rurup pension, but it is mainly targeted at the self-employed.

Only annuity payments: Benefits are paid only as annuity. Lump sum payments and early withdrawals are not allowed.

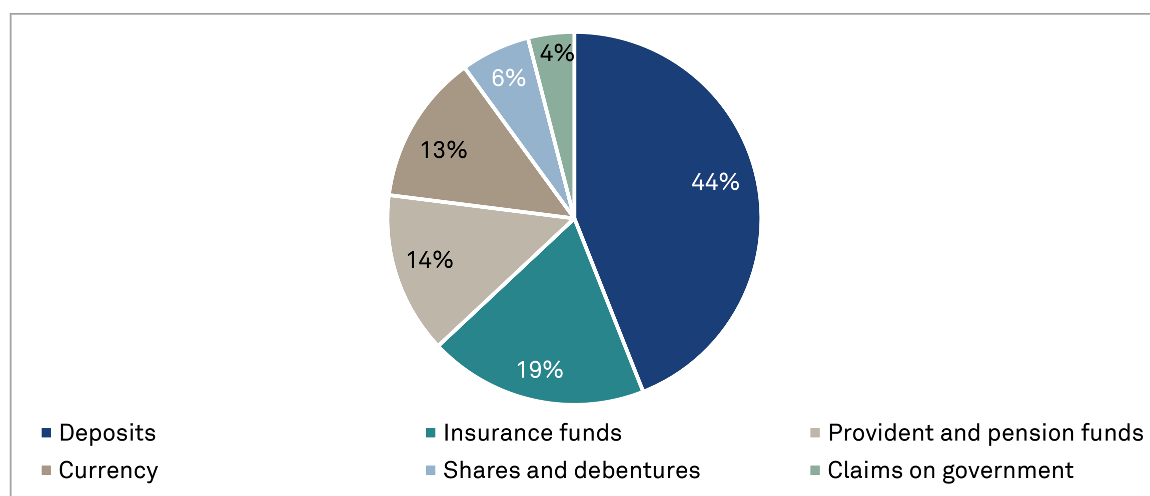
Taxation: Tax deductibility of contributions gradually increases till 2025. In 2015, 80% of the contributions to Rurup plans were tax-exempt.

Other key areas of focus

Pension planning – Need for awareness

India is a grossly underpenetrated financial market in terms of retail participation. The most that investors prefer investing in is bank fixed deposits (FDs), which account for more than 44% of the financial savings in the market. Provident and pension funds form just 14% of the savings and are primarily fed by the organised section of the society.

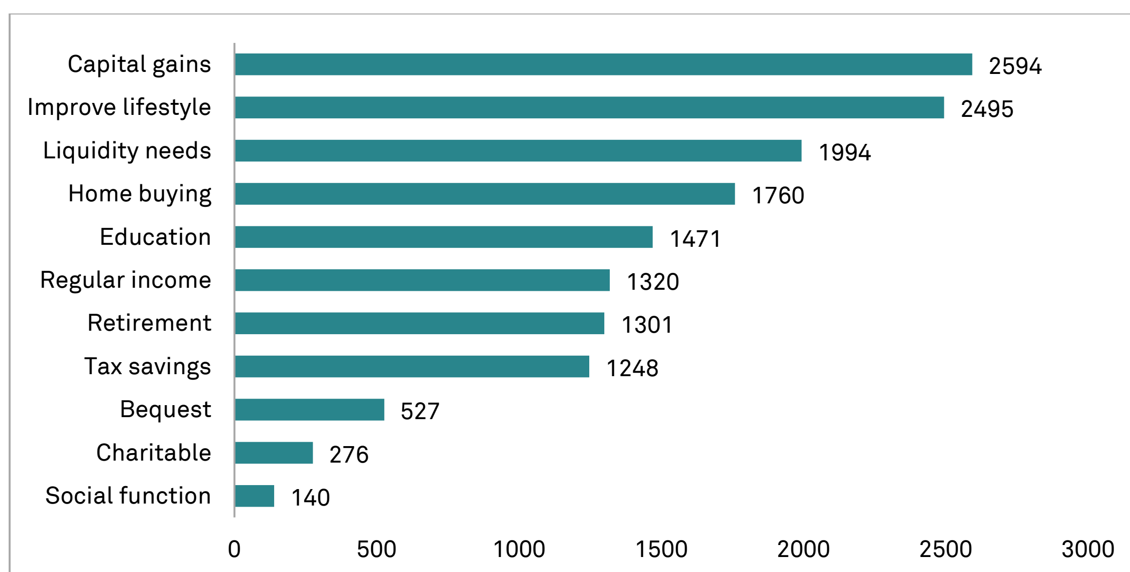
Household financial savings as of 2015-16



Source: RBI Annual Report 2015-16

Both retirement planning and investment towards pension plans fall quite low in the household investment plan. The SEBI Investor Awareness Survey of 2015 showed that retirement did not fall even in the top five investment reasons among households in the country, with just 8.1% of the respondents surveyed having invested in any form of pension plan.

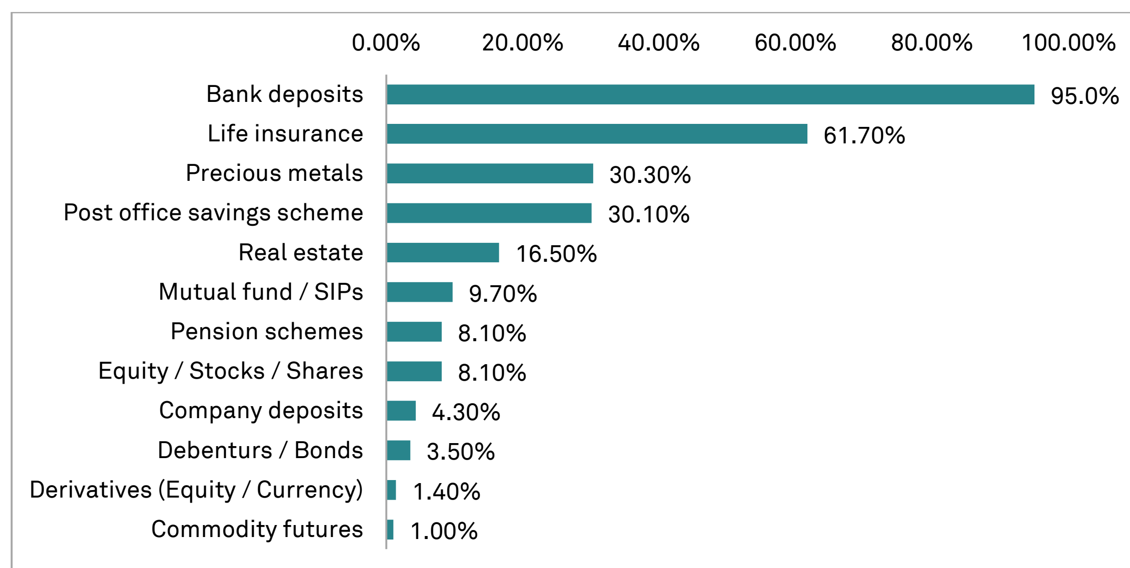
Why do households invest in India?



N = 5,356 (all urban investor, SIS 2015). Optional question answered by 5,313 investors. Respondents could check multiple options.

Source: SEBI Investor Awareness Survey 2015

Investment and savings vehicles used by survey respondents



N = 36,756 (all urban respondents, SIS 2015). Respondents could check multiple options.

Source: SEBI Investor Awareness Survey 2015

As can be seen from the survey, there is little awareness of the importance of retirement planning and pension products.

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

Further, the government should use the JAM trinity to streamline delivery. The plan could involve opening targeted bank accounts (Pradhan Mantri Jan-Dhan Yojana) linked to unique individual identity numbers (Aadhaar), facilitating cashless transactions, and transferring benefits using mobile phones and point-of-sale devices operated by a new class of intermediaries called banking correspondents.

Intensity of financial education according to nature of pension system

	High levels / individual choice	Limited/ no individual choice
Limited public pension	Most financial education required	Medium financial education required
Substantial public pension	Medium financial education required	Less financial education required

Source: OECD report on financial savings and saving for retirement

Case study - Ireland

In Ireland, the pension board conducts the National Pension Awareness Campaign to help increase pension coverage in the country. In addition to educating the public about retirement planning, the aim is to address the adequacy of pension investments.

Target groups

The primary targets are the population aged 25-39 years, including women, graduates and first time job seekers, farming/ rural community, while the secondary target includes migrants, young people/ graduates.

Strategy

The strategy includes intense advertising campaigns on TV, radio and internet to get the target groups into the retirement fold and harp on the adequacy aspect of retirement planning. They also encourage companies, and other agencies / industry bodies to promote the concept to improve the efficacy of the campaign.

Financial planning and education initiatives

The pension board has also taken initiatives to make financial planning education a part of the educational infrastructure covering schools and colleges. The curriculum includes financial planning and pension checklists, thus helping build awareness of retirement planning and the products available from a tender age.

In some countries, governments and regulators provide information and education on general issues, while financial institutions provide more specific product information, while in others, regulations exist on the types of information employers can provide. It is important to have some coordination on the provision of information because although information about pensions is widely available, people do not know which sources to trust, how to access it, or how the information relates to their circumstances. Making personal finance and retirement planning a part of the formal education curriculum can aid in achieving the overall objective of financial literacy.

Type of awareness programme	Countries*
Government awareness programmes	Australia, Italy, New Zealand, US
Pension regulators and securities market supervisors – information provision	Mexico, Spain, Italy, Poland
Social partners and others – instruction	Austria, Czech Republic, UK
Employers - Financial advice	Japan, US

**Countries overlap in various programmes due to multiple use of awareness programmes*

Source: OECD report on financial savings and saving for retirement

Importance of intermediation

A key spoke in the wheel for spread of awareness and penetration of pension plans in the country would, however, be the development of the distributor segment. In addition to the aspects of awareness and penetration, development of intermediation is required for effective supervision of pensions and ensure protection of consumers. This is especially important for Pillar III, viz., voluntary pension system, which in India's case forms the largest uncovered portion of subscribers.

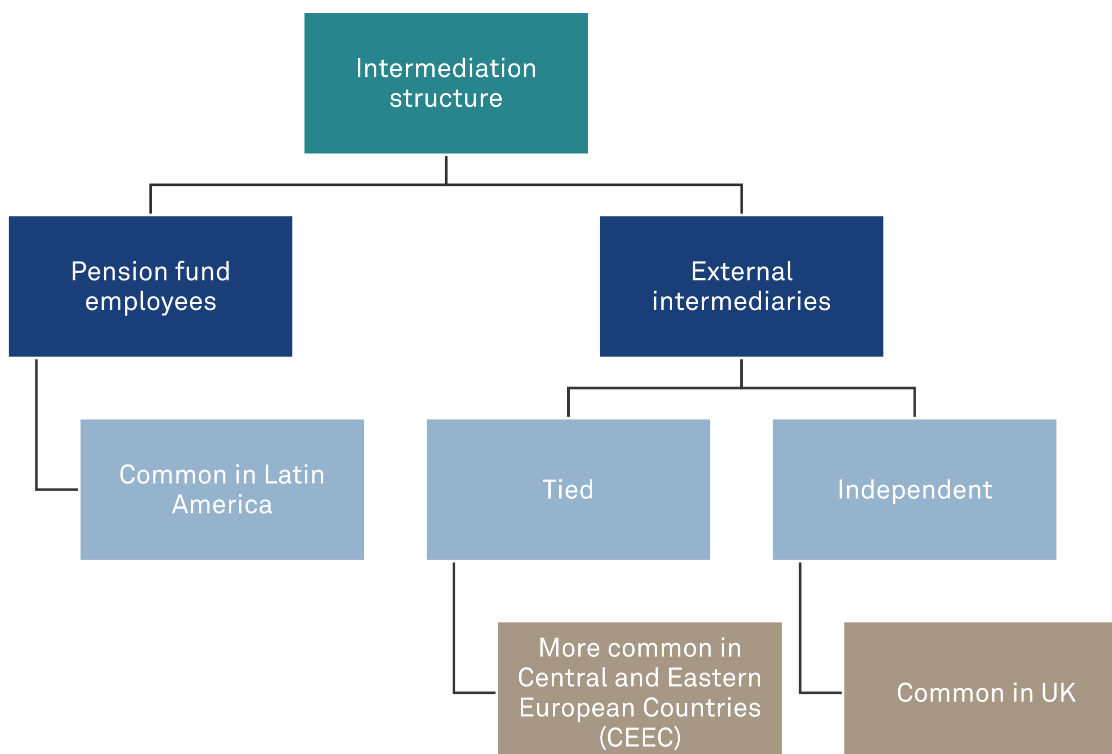
The reasons to focus include:

Awareness and education – In a country like India, where awareness of products other than the traditional ones is low, distributors are the ones that can make investors aware and educate them about the products available for retirement planning.

Persistency – As seen before, voluntary pension plans suffer from the problem of persistency from the subscribers. Distributors can play an important aspect in keeping investors glued to their pension plans, while giving regular update on the progress of their investments.

Handholding during decumulation – Pension planning does not end at the onset of retirement, in fact, that is just the start, and intermediation at this juncture can help investors identify various aspects related to purchase of annuities including taxation, choice of provider, etc.

Types of intermediation globally



Source: IOPS work on pension intermediaries (2012)

Country	Pension fund itself	Tied agents	Independent agents
Albania	X	X	
Australia	X	X	X
Austria	X		
Bulgaria	X	X	
Brazil	X		
Chile	X	X	X
Colombia	X		
Costa Rica	X	X	
Czech Republic	X	X	X
Hong Kong	X	X	X
India	X	X	X
Israel	X	X	X
Jamaica		X	
Korea			X
Lithuania			
Macedonia	X	X	
Pakistan	X	X	
Poland	X	X	X
Romania		X	X
South Africa	X	X	X
Spain	X	X	X
Tanzania	X		
Turkey	X		
Ukraine	X	X	

Source: IOPS work on pension intermediaries (2012)

It is also important to sufficiently incentivise the intermediary to sell the product. Reduction in incentive or move to an advisory model can impact sales of financial products. For instance, in 2013, the UK government undertook a Retail Distribution Review to address how much consumers pay for financial advice and what they pay for, and to introduce a minimum level of qualification for all investment advisors. This has resulted in the decline in advisor numbers in the country.

Impact of RDR on advisor numbers in the UK

	Financial advisors	Bank/ building/ society	Wealth manager/ stock broker	Discretionary investment manager	Other	Total
2011	25616	8658	4,044	0	2249	40,566
Mid 2012	23787	6655	1202	875	2,554	35073
31-12-2012	20,453	4,810	2,043	1,435	2,269	31,132
Mid 2013 (Post RDR)	21684	4604	2267	1,784	2221	32560
10-01-2014	21881	3556	1,906	1,787	2090	31,220
31-01-2014	21,496	3,182	1,906	1,698	2,871	31,153

Source: Indian Financial Distribution Industry at the cusp: Vision 2020, APFA

In India, while there is an open structure for selling pension schemes under the aegis of NPS, it has not been effective enough due to low incentives to the distributors, i.e. PoPs/ aggregators, etc.

Incentivising the sale of pension products could thus aid in the development of the pension market in the country. Further, introduction of independent retirement advisors could help in expanding the industry while opening up an additional employment opportunity.

Consistency across products

The retirement industry in India currently has various players, which includes superannuation funds, statutory provident funds, gratuity funds, mutual fund retirement plans, retirement plans offered by insurance companies and the NPS. There is, however, a lack of consistency across these products.

Various players for retirement in India

Regulator/ statute	IRDAI	SEBI	Provident fund	Payment of Gratuity Act, 1972	PFRDA
Products	• Superannuation funds • Retirement plans	• Mutual fund retirement plans	• EPFO • CMPF • Seamen's PF • ATPPF • Jammu and Kashmir EPF	• Gratuity	• NPS • APY

While the end goal of these products is same, they are different in nature from each other. For instance, the accounting or valuation policy differs between the products -- some holding investments till maturity, while others have a market-linked valuation approach. Further, other aspects such as disclosures, some monthly and some annually, also lead to confusion about product awareness. Additionally, tax differences between the products add to the confusion in the minds of investors.

Ensuring consistency across products could help the sector in the long term. This would reduce the disparity between the 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.

Also, this could aid in having a central repository of information, which can be used for sharing, analysing and updating data as need arises..

Payout design

Many countries that have implemented systemic pension reforms, i.e. shifting from DB to DC schemes and scrapping of pay-as-you-go pension systems have the challenge of designing an efficient payout phase for retiring workers. As India transitions from traditional pensions to defined contribution and hybrid plans, it places significant responsibility on retirees to successfully generate lifetime retirement income. The individual may face the following risks during the payout phase.

Risk	Feature
Market risk	Risk that the assets invested performs badly compared with the market
Longevity risk	Risk that the annuity would not suffice the investor's retirement period, especially in the light of increasing lifespan
Inflation risk	Risk that the vesting annuity is not 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. When an individual retires in a defined contribution pension scheme, there are mainly three ways in which the assets can be released.

1. **Lump sum payment:** Here, the entire corpus built by the pension funds will be paid to the employee on his retirement. This form of payment involves a reinvestment risk, i.e. the individual is unable to re-invest this stream of payment efficiently and thus may not be able to generate sufficient income to maintain the lifestyle as well as health needs. Another issue is the longevity risk where a person lives more than the national average.
2. **Programmed withdrawals**: This allows the individual to remain invested in the markets and hence generate a market-linked payout along with payout of a portion of original corpus every year. Since the payments are market-linked, phased withdrawals provide relatively better protection against inflation risk, but there is a great deal of market risk involved. Programmed withdrawals generally provide the poor with protection against longevity risk – since the payouts are designed considering average mortality rates, it would allow more money to be withdrawn in a shorter period of time. In case of shorter lifespan after retirement, phased withdrawals allow the assets to be bequeathed to the heirs/survivors.
3. **Annuity payments:** The only contract which guarantees income right up to the point of death. The corpus is generally transferred to an insurance provider which guarantees a fixed payout to the individual, generally till his/her death and sometimes additionally till the spouse's death. The original corpus can be returned to the heirs or is taken by the insurance provider in lieu of higher payment during annuity payout phase. The major risk in this type of payout is the inflation risk, i.e. the value of fixed payouts falling in real value. Inflation indexed annuities can counter this drawback effectively. Annuities are specifically designed to cover the risk that an individual will outlive his/her own resources by transferring such risk to an insurance

undertaking or other annuity provider, and thus cover the longevity risk. Given the longevity risk, annuities are better suited for the old age.

4. The other methods of payouts can be a hybrid of these methods, or allowing the individual to move from one option to another. Such portability holds some merit as individuals can effectively increase their benefits by joining the best system at any given point.

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 overall success of the system.

Case study: Chile's experience:

Chile moved from a pay-as-you-go pension system to a fully funded system in 1981. From a modest pension base and nascent insurance sector, today the Chilean pension system covers 5.1 million paying participants, covering 63% of the workforce, as well as 1.3 million benificaries drawing a payout. The total pension assets of Chile are a healthy $180 bn (67% of GDP). The development of a well-structured payout phase is critical to the success of this system.

Workers contribute 10% of their wages to an individual account, up to a ceiling of 60 unidades de fomento (UFs), the equivalent of about three times the average wage. The UF is a unit of account indexed to prices which is widely used in the valuation of contracts and tax parameters. Workers can choose freely among different pension funds managed by dedicated pension fund administrators and A, B, C, D, E plans with allocation to equities from 80% in Plan A to 0% in Plan E.

Conditions for retirement: Workers can retire from the pension system at the normal retirement age of 65 and 60 for men and women, respectively. A worker can retire early if he or she has accumulated a sufficient balance in his or her account. This is defined as the balance needed to generate a pension equal at least to 70% of his or her average real wage in the past 10 years, and at least 150% of the guaranteed minimum pension (MPG).

There are broadly three options available to the person who is retiring:

- A phased withdrawal based on actuarial formula
- An annuity with fixed payments every month
- A temporary withdrawal combined with a deferred annuity.

Government's role in developing the pension market:

Chile has provided the following four type of guarantees to improve the pension system:

- A minimum relative return guarantee, with an obligation of AFPs to ensure a minimum return relative to the industry's average
- A guarantee of coverage against disability and death risks
- A basic state solidarity pension which guarantees $142 for all
- Guarantee against the bankruptcy of annuity providers.

The Chilean pension system has also benefitted from the presence of inflation-linked fixed income instruments in the country's capital market. Given these instruments, the insurer bears only the longevity and market risk, and not inflation risk. Hence, inflation-linked instruments form a majority in Chile.

Further, there is a good marketing system for the product in the country, both from the pension fund manager and annuity provider, thus increasing awareness in the country. Further, there is an extensive network of brokers and dealers providing annuity and pension related advice to the individuals. Technology enabled developments such as electronic quotation system and process in place for certification of independent brokers adds to the value in the system.

Investment in corporate bonds rated AA and above by annuity providers to generate higher returns has also helped enhance their annuity rates and ensured sustainability of the system.

Recent changes proposed in Chile pension system

The Chile pension system has recently faced issues of insufficient payouts at the time of retirement because of low contributions (10% versus over 19% for OECD economies) and persistency especially in the informal work force. To increase the sufficiency of payouts, the government has proposed 5% tax proposed for the employers over a six year period, 3% of which would go into the personal savings of each worker, while 2% would go into a collective account, managed by the state. The new tax is expected to raise the savings of current pensioners by 20% and future generations by 50%.

Acronyms:

ASHA: Accredited Social Health Activist

AMFI: Association of Mutual Funds of India

APY: Atal Pension Yojana

BPL: Below Poverty Line

DB: Defined Benefit

DC: Defined Contribution

EPFO: Employees' Provident Fund Organization

GDP: Gross Domestic Product

IGNOAPS: Indira Gandhi National Ola Age Pension Scheme

IOPS: International Organization of Pension Supervisors

IRDA: Insurance Regulatory and Development Authority

JAM trinity: Jan Dhan, Aadhar and Mobile trinity

NPS: National Pension System

NSAP: National Social Assistance Programme

NSSO: National Sample Survey Organization

OASIS project: Old Age Social and Income Security project

OECD: Organization for Economic Co-operation and Development

PFRDA: Pension Fund Regulatory and Development Authority

PMSBY: Pradhan Mantri Suraksha Bima Yojana

PPF: Public Provident Fund

RSBY: Rashtriya Swastha Bima Yojana

SEBI: Securities and Exchange Board of India

TFR: Total Fertility Rate

TPS: Targeted Pension Scheme

TRAI: Telecom Regulatory Authority of India

UN: United Nations

WHO: World Health Organization

WPR: Worker Population Ratio

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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.

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