Research

CRISIL
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Securing life's second innings

Opportune time to create a sustainable pension system

March 2019

pfrda

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Message from PFRDA

India enjoys a favourable demographic position today, with only 9% of its population aged over 60 years as of 2015. However, the situation is expected to change significantly in the next few decades.

As per UN population estimates, the proportion of the elderly in the country is expected to almost double to ~17% as of 2050. In other words, every 6th Indian would be a sexagenarian by that year, compared with every 11th person today.

The worrying bit is that most of this large population is not covered by any social security measure to cover the sunset years due to it lying within the informal nature of the economy. The situation is exacerbated by the fact that the original social security net, the traditional family structure, is crumbling as families go nuclear.

This comes at a time when longevity is rising as a result of improving healthcare infrastructure, and growth in population is near the replacement level. In short, the population of the elderly is expected to shoot up as the median age of the population climbs from 27 as of 2015 to 38 by 2050.

Thus, the time is ripe to engage and create a sustainable pension system in the country, covering the majority of the population.

PFRDA has over the years been working to develop and regulate the pension sector. In line with its vision, it has been continuously 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.

As part of this endeavour, PFRDA is proud to partner with CRISIL for the third consecutive year to bring out this knowledge report 'Securing life's second innings - Opportune time to create a sustainable pension system'.

The report underlines the opportunities and the challenges faced by the pension sector in the country and I am sure would be of interest to both the financial/pension industry practitioners and academicians.

Hemant G Contractor
Chairman
PFRDA

Message from CRISIL

The International Monetary Fund (IMF) expects India to be the fastest-growing major economy in the current and next fiscals.

While that will have a host of salutary rub-offs, we lag significantly when it comes to ensuring social security for the sunset years. This is worrying especially because one of the largest and youngest demographies globally is expected to age substantially over the coming decades.

The population of the elderly – or those aged 60 and above – is expected to increase by ~200 million by 2050, logging a compound annual growth rate of 2.9%, compared with 2.4% for the world[1]. And sans prompt and meaningful steps, the bulk of this ageing population will have little to fall back upon in their retirement years.

Pension penetration in India is estimated to be very low at under 30% of the population above retirement age, compared to over 70% for other Asian peers like Japan, China and Republic of Korea. A major reason for this is that the bulk of the population is engaged in the unorganised sector, which lacks the wherewithal to ensure a decent enough vesting corpus.

The good part is, things are beginning to change.

In the organised space, we are seeing an intent towards pension adequacy through appropriate asset allocation. And in the unorganised segment, government measures are afoot to bring the masses into pension fold through guided steps at formalisation of the economy and targeted incentivisation.

The Pradhan Mantri Shram Yogi Maan-dhan (PM-SYM) Yojana, for instance, is a break from earlier attempts such as the National Pension System – Swavalamban, and Atal Pension Yojana in proposing a co-contribution approach for all subscribers through the accumulation phase.

This approach is in line with suggestions in previous CRISIL-PFRDA reports for providing monetary incentives to promote pension in the unorganised segment, given the low affordability of pension products in the informal sector.

However, much more needs to be done. Spreading awareness of the product is critical, coupled with flexible contribution and withdrawal terms to accommodate the deprived classes. Bundling insurance with pension would be an additional incentive for increasing persistency of such schemes.

CRISIL is pleased to partner with PFRDA for the third consecutive year. We hope this report would act as a catalyst in spreading awareness and spurring concerted action among stakeholders.

Warm regards

Ashu Suyash
Managing Director & CEO
CRISIL Ltd

[1] UN population estimates at constant fertility

Content

Executive summary

Developing a well-thought out pension system and encouraging adoption of pension products has gained urgency in view of the rising proportion of the elderly in India's population. More so, because the traditional safety net – that of family support – has started crumbling in the face of rising nuclearisation.

True, with a median age of 27, India is among the youngest major economies today. But the demographic dividend is expected to shrink in the next three decades. An expected improvement in life expectancy and a decline in fertility rates could combine to shore up the share of the population that needs support in old age significantly.

A comprehensive social security net is also critical to growth of the economy. It can serve two major objectives – 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 and the capital market.

We believe a developed pension sector can reduce the fiscal burden on the exchequer, and also have a stabilising effect on the economy by promoting long-term savings coupled with long-term investments.

For this, however, the large chunk of workers in the informal sector must first be brought into the pension fold.

The Pradhan Mantri Shram Yogi Maan-dhan Yojana, proposed by the government, has the potential to make a difference here, provided it is implemented well.

In addition, given the income profiles of the targeted group and the fact that pension is a long-term engagement, steps can be taken to bundle pension with insurance. This could act as an incentive for increasing the persistency of such subscribers.

Previous editions of our annual knowledge report had examined India on the World Bank's five-pillar framework and then looked inward to see variations within its states on the pension barometer.

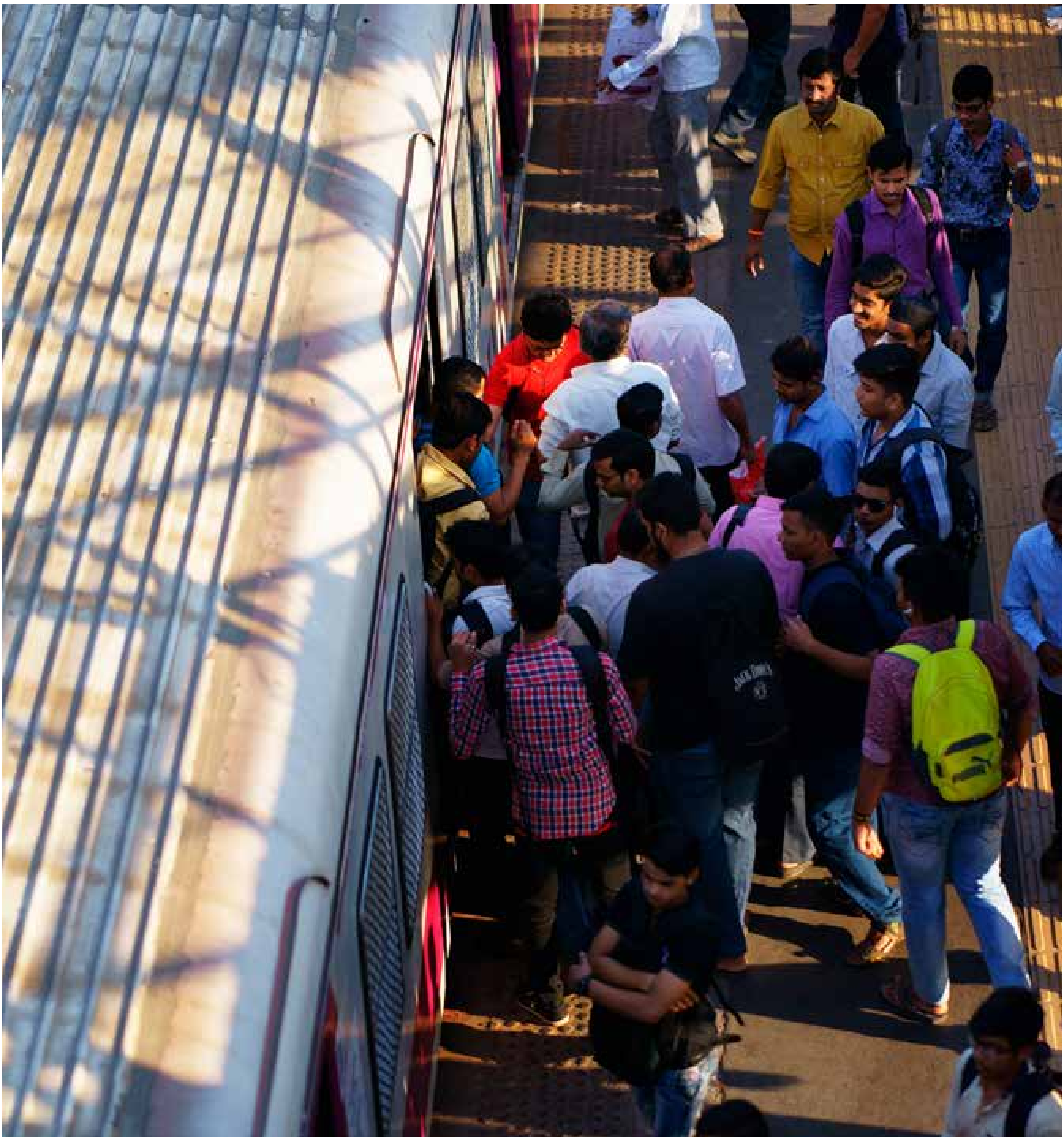
In this edition of the annual report, we compare the country with its neighbours in South and Southeast Asia on various parameters.

A number of points emerge for emulation and incorporation in the nation's pension architecture.

Recent years have seen growing formalisation of the economy through implementation of the Goods and Services Tax and stricter implementation of tax measures. At this juncture, augmenting the capital market exposure of the formal sector pension corpus to map with the young demography and long investment horizon would help boost the vesting corpus for retirees.

But where the informal sector is concerned, monetary incentivisation does have its role. Our study shows that in most of the countries where voluntary pension coverage has grown, the success has been due to either matching contributions from the government or tax benefits.

The ball has been set rolling with PM-SYM, which proposes to take the co-contribution line. However, developing a pension ecosystem that is robust and inclusive will take sustained efforts on the ground and quick incorporation of the learnings.



India's large young population is a blessing...

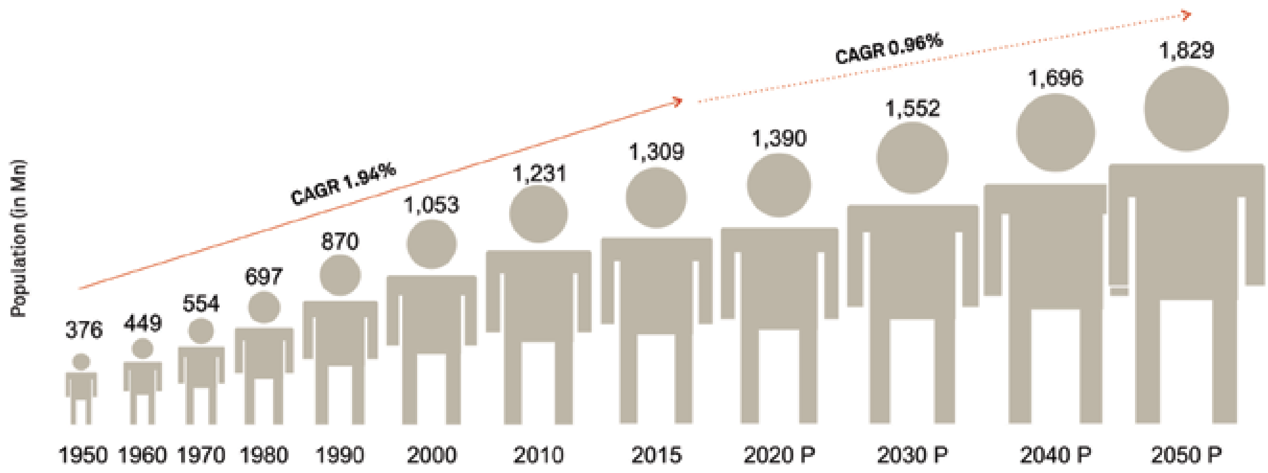
Demographically, India is in a sweet spot today. With the median age of its population at 27 years, it is a young country; this number stands at 37 for the neighbouring giant China.

What's more, India's workforce, or those between 15 and 59 years of age, comprises over 60% of the population and is expected to remain so over the next decade as well.

That's a formidable number, considering India is the second-most populous in the world – with ~1.3 billion people as of 2015 (as per United Nations – World Population Prospects 2017 data) – after China (~1.4 billion).

Between 1950 and 2015, India's population logged a compound annual growth rate (CAGR) of 1.94%, faster than the world's 1.66%. However, population growth has been stabilising of late, and is expected to log 0.96% CAGR to 1.8 billion through 2050 as against 1.13% for the world.

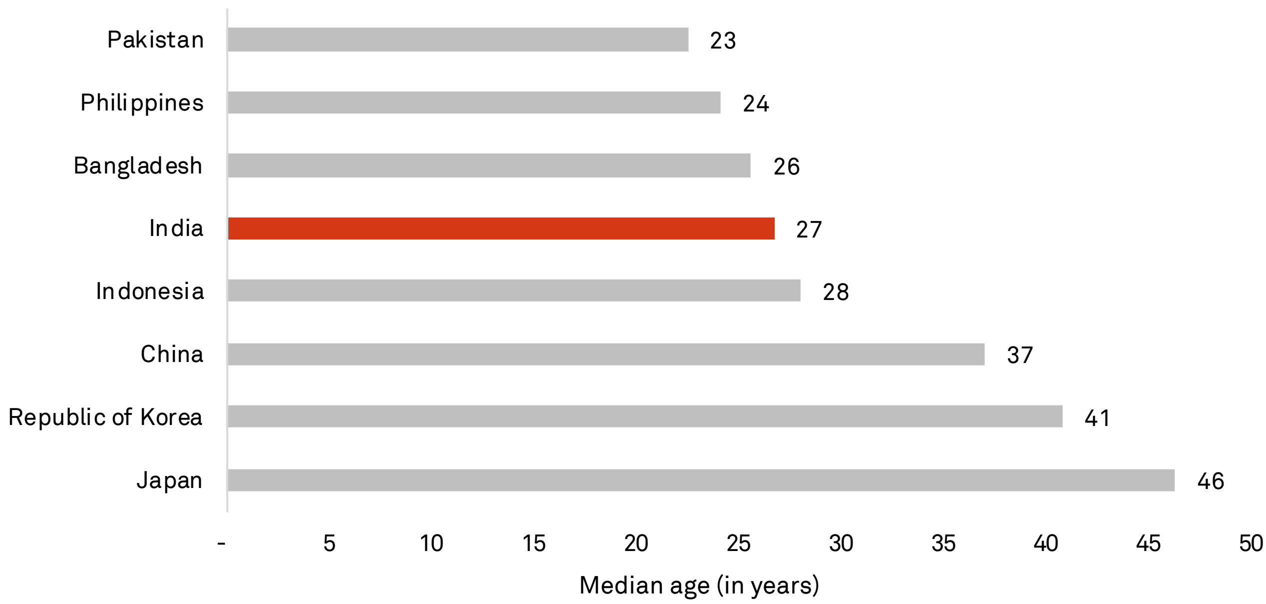
India's population growth slowing (Constant fertility)



Source : UN Population estimates; P: Projections

Interestingly, over a quarter of India's population is below 15 years of age, which means the country is expected to account for a fifth of the growth in the world's working age population by 2050. The 1.4 billion individuals expected to join the world's working age population (15-59 years) from 2015 to 2050 will likely include ~274 million Indians.

Demographic in South and Southeast Asia (2015)

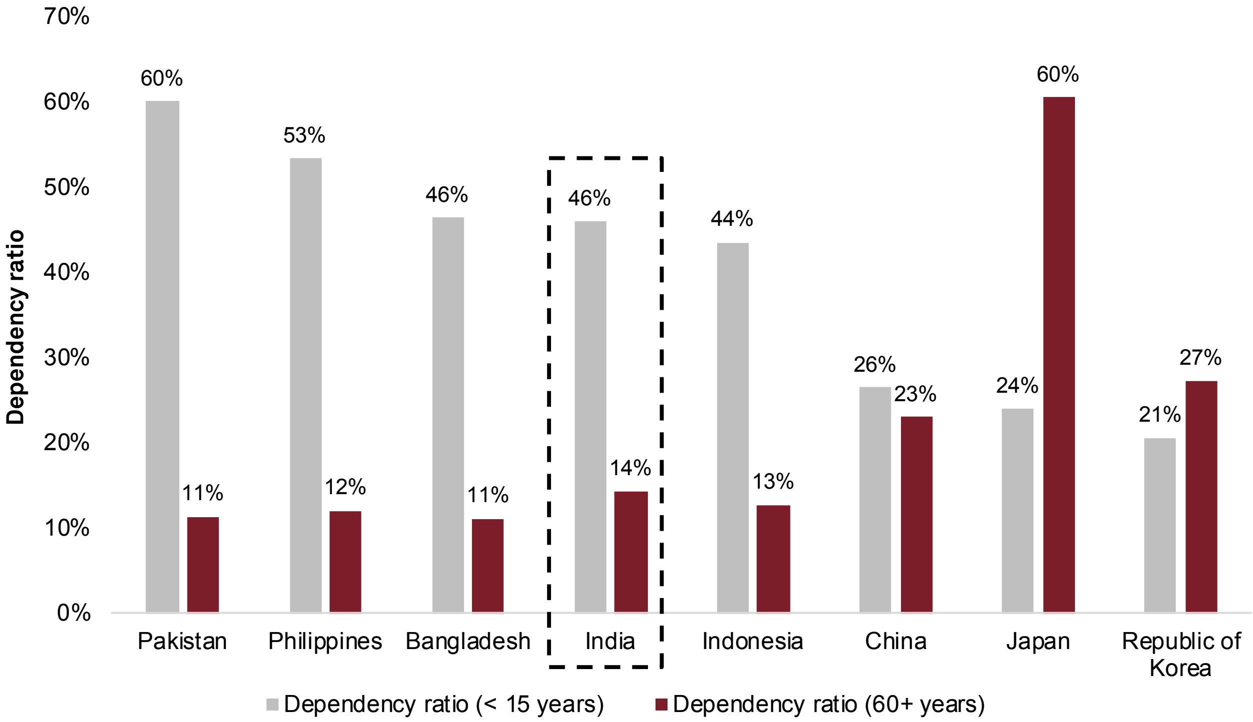


Source : UN Population estimates

A young population translates to a low age-dependency ratio for the country. Based on available data, for every 100 Indians of working age, the dependency ratio for senior citizens is just 14%.

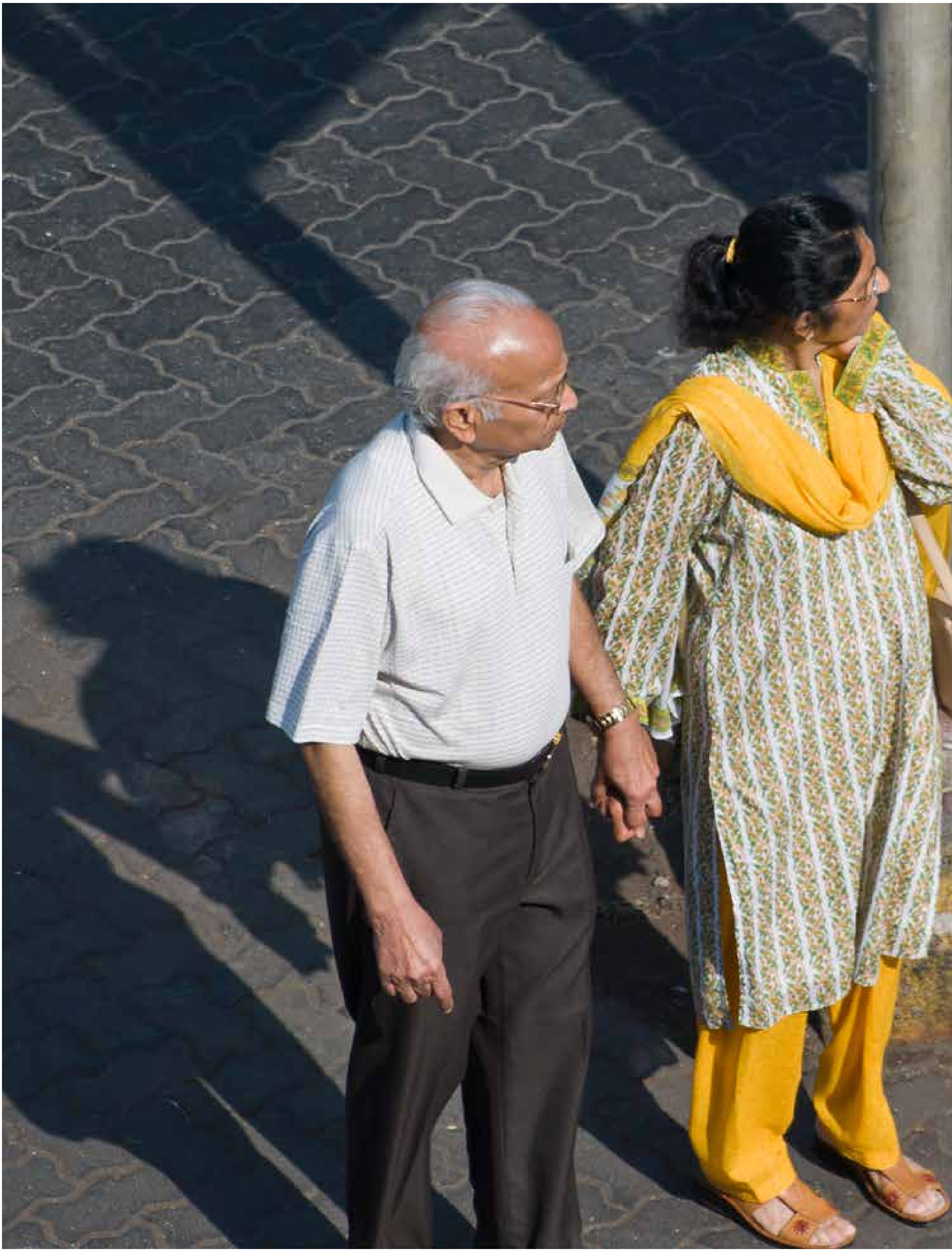
Nevertheless, a young population also indicates that the dependent group of those below 15 years is rather large.

Old age dependency ratio in South and Southeast Asia



Note: Dependency ratio (<15 years) is the ratio of population below 15 years to the working age population (15 to 59 years).
Dependency ratio (60+ years) is the ratio of population aged 60 and above to the working age population (15 to 59 years).

Source : UN Population estimates



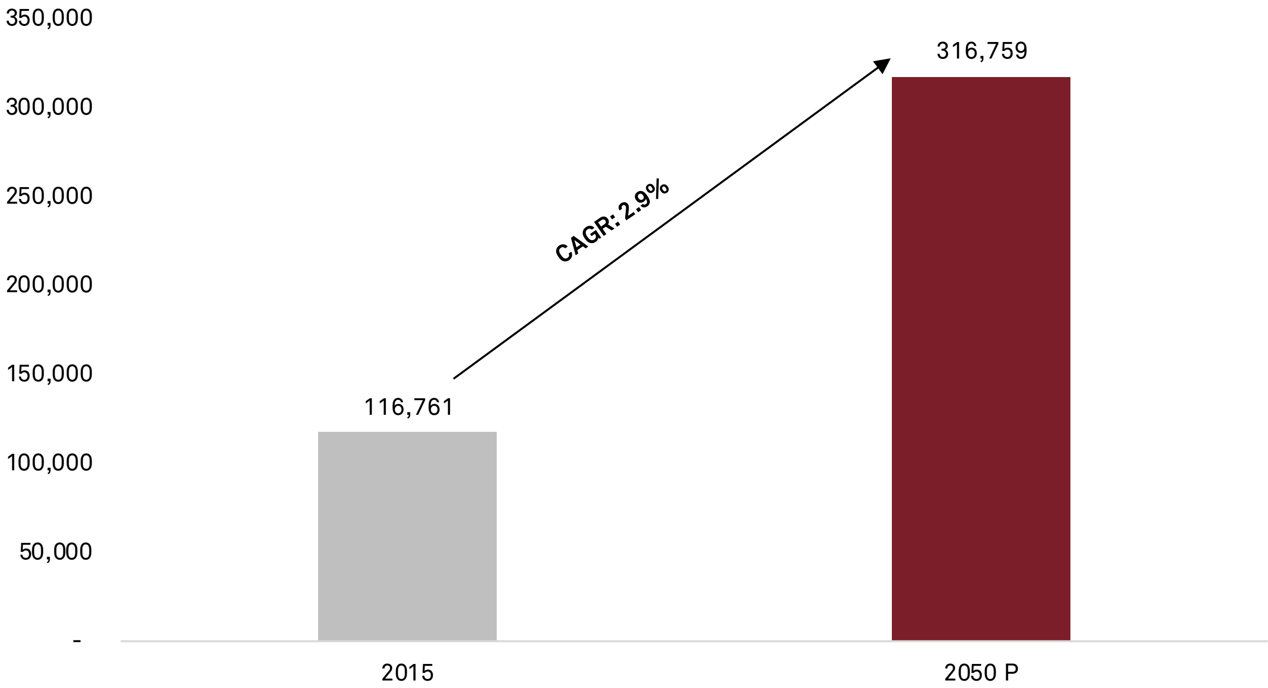
...but in three decades, share of elderly will double

Buoyant as India's demographic profile appears today, the median age of its population is expected to increase to 38 by 2050 from 27 as of 2015, even as that of China rises to 48 from 37.

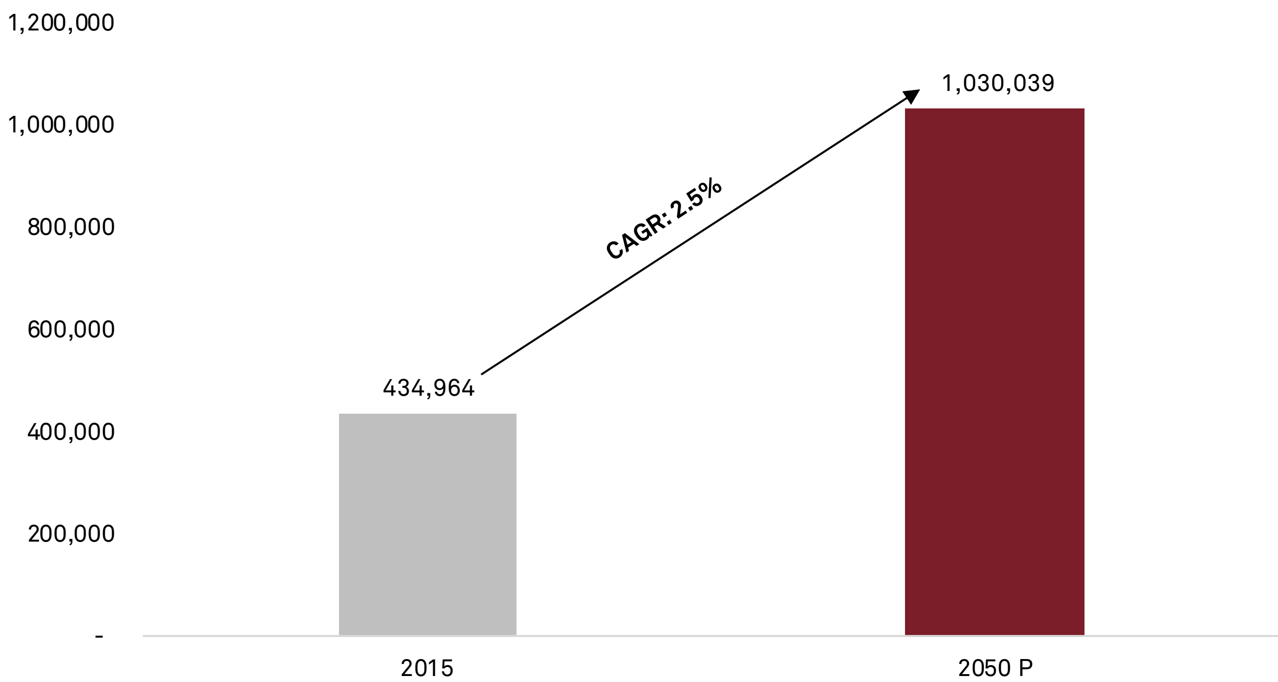
The population of the elderly – or those aged 60 and above – is expected to increase by ~200 million by 2050, logging a CAGR of 2.9%, this growth rate stands at 2.5% for major Asian countries at aggregate level (including India).

With this the share of the elderly in India's population will almost double from 9% in 2015 to 17%. That means one in six people would be a sexagenarian a little over three decades, this stood at one in 11 now in 2015.

Estimated elderly population in India (in '000)



Estimated elderly population in major Asian countries (in '000)

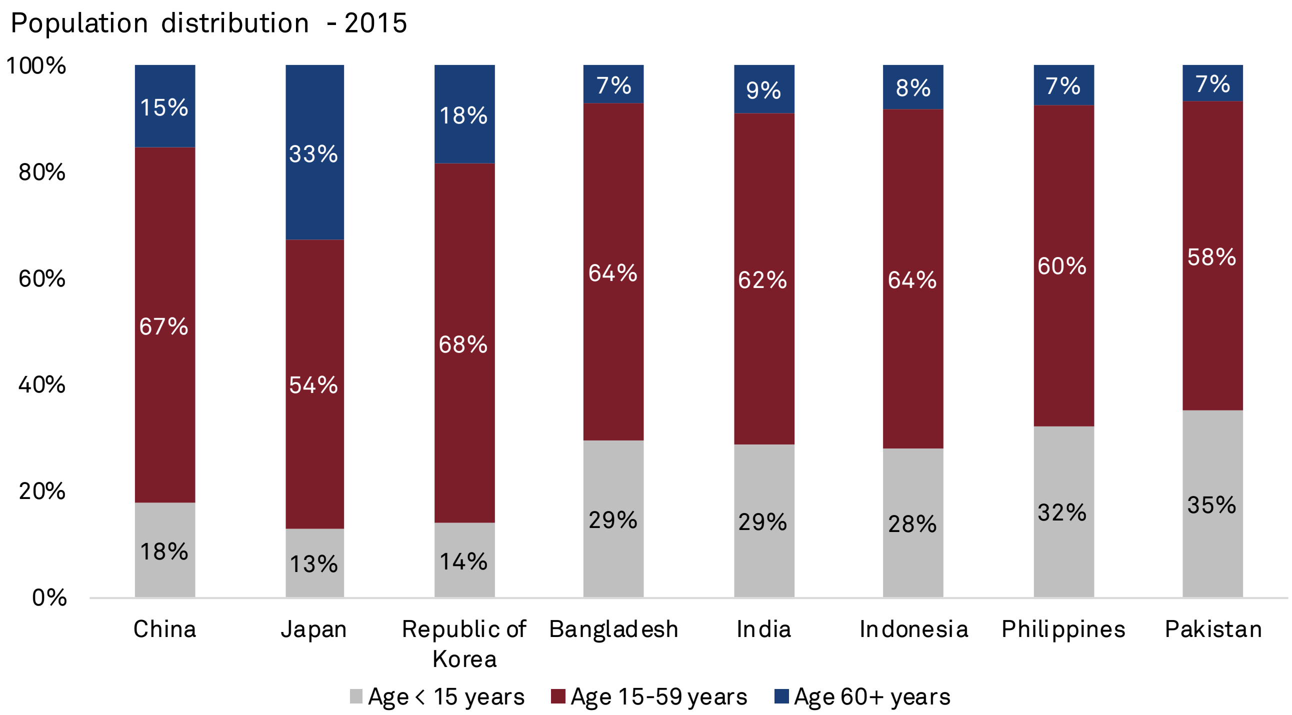


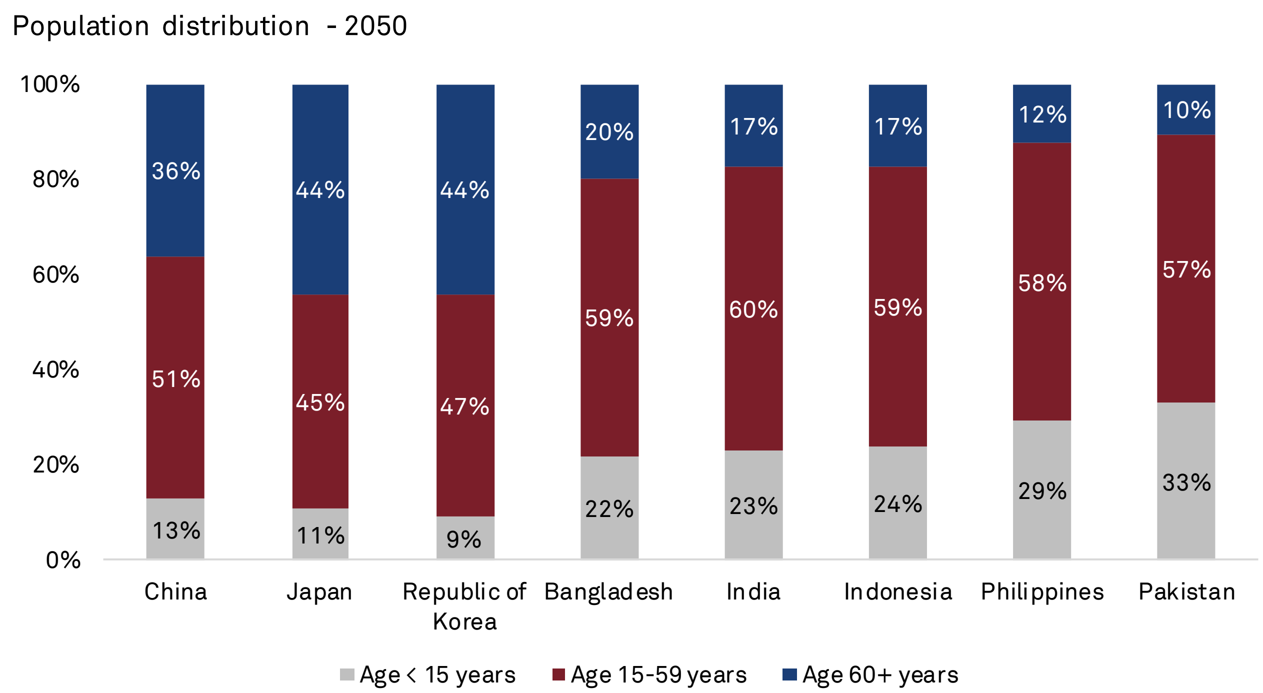
Source : UN Population estimates; P: Projections

Note : Major Asian countries include India, China, Japan, Republic of Korea, Bangladesh, Indonesia, Philippines & Pakistan

The frailty of the demographic dividend thus rings an alarm bell for the long term – it tells us that the cost of providing for the elderly is going to explode unless urgent steps are taken to develop the pension architecture in the country.

Share of elderly in the population on the rise



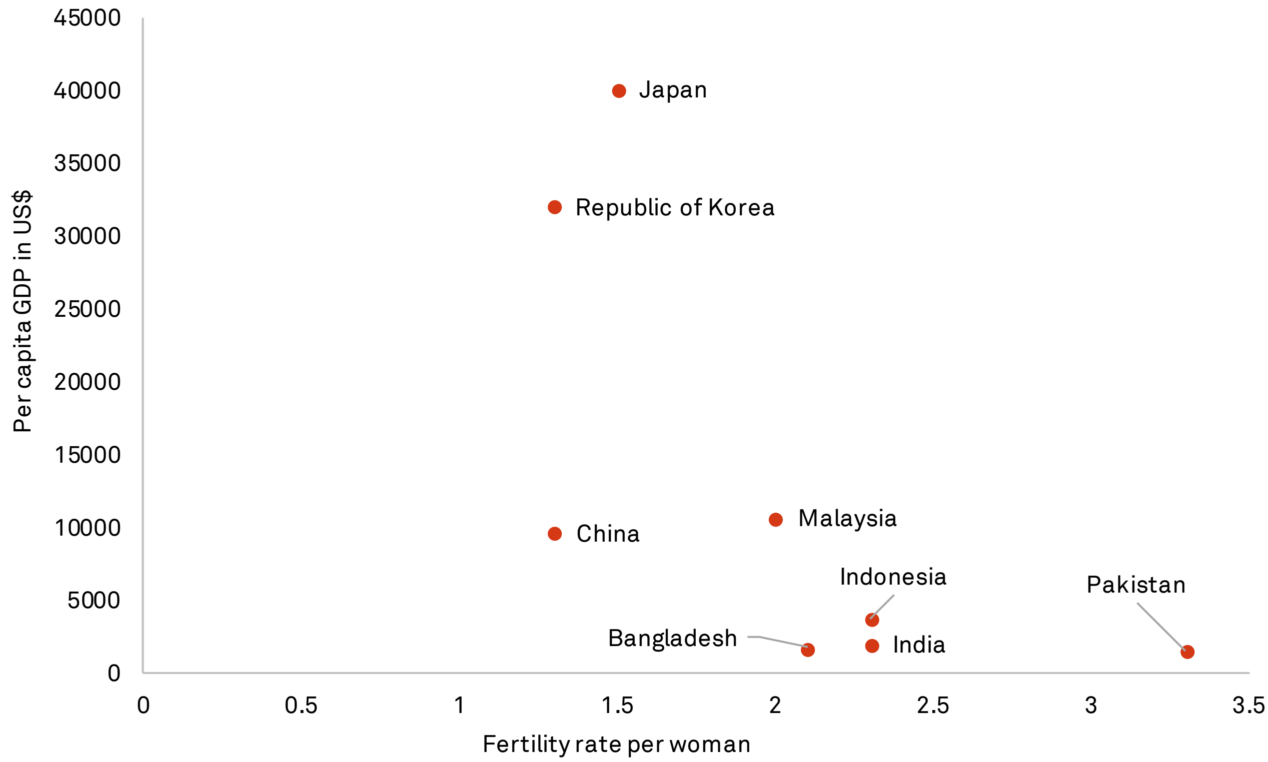


Source : UN Population estimates
Note: Total might not add to 100% due to rounding off

Further, as per the United Nations Fund for Population Activities (UNFPA) State of the World Population 2018 report, India's fertility rates are near replacement level (around 2.1) despite it having lower per capita income than other countries with replacement level fertility. The aggregate fertility of the country is 2.3 births per woman, though there is variation within the country with states below replacement level fertility accounting for 50% of the country's population.

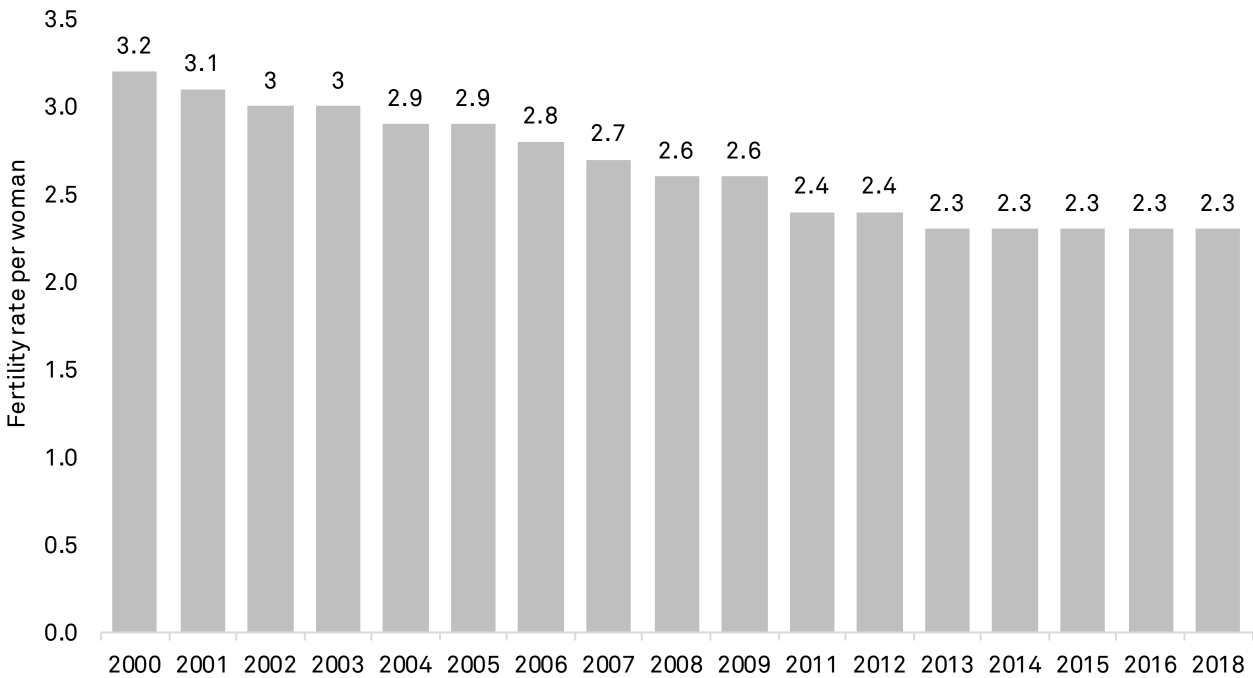
Within the urban-rural divide, as per the report, fertility in urban India fell to below the replacement level in 2007.

Fertility rate versus per capita GDP (2018)



Source: UNFPA, IMF

Fertility rate on a decline in India



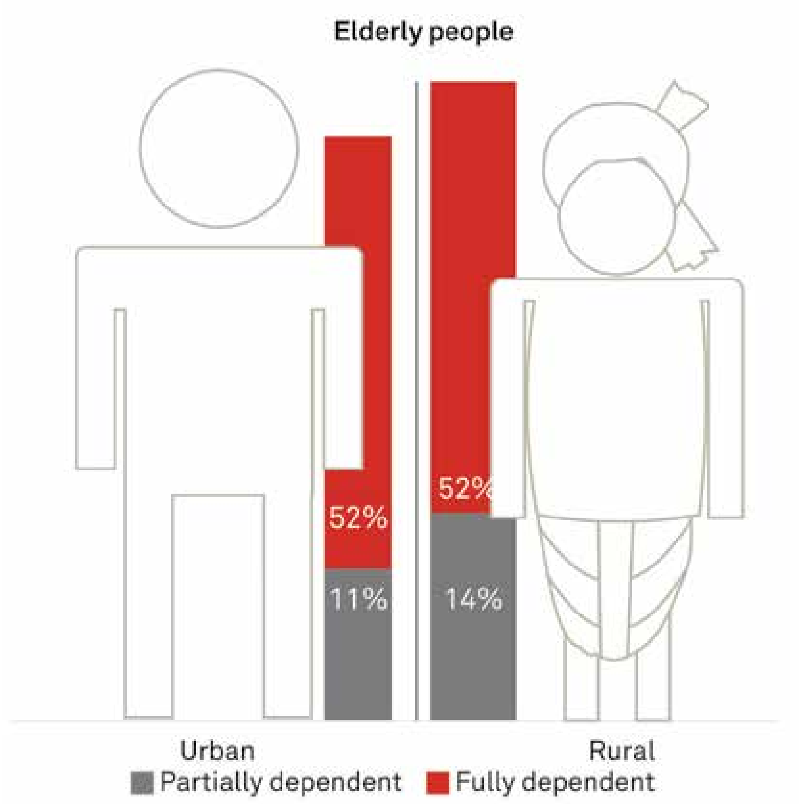
Source: NITI AAYOG, UNFPA (for 2018)

The age-old safety net is inadequate

Indians have traditionally relied on family support in post-retirement years – a phenomenon termed as pillar zero in the World Bank's five-pillar pension framework. But this cushion is withering away as families go nuclear.

According to the National Sample Survey, 16th round (January – June 2004), over half of the elderly population in India is fully dependent on others for its daily living, which includes providing for food, healthcare and other expenditures. Also, 11% of elderly population in urban areas and 14% in rural areas are partially dependent on others.

Majority of the elderly in India are fully dependent

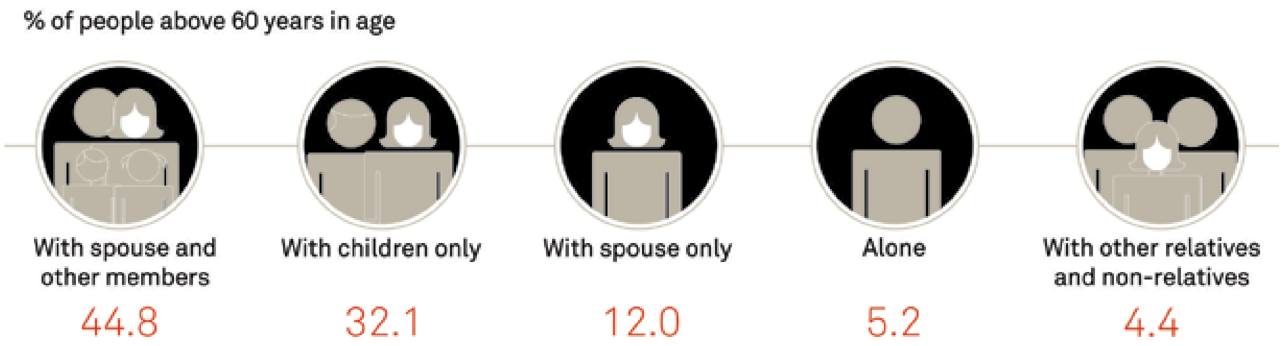


Source: National sample survey office (NSSO), 2004

Further analysis of family dependency shows that around 45% of elderly people were living with their spouse and other members of the family, while around 32% were living with their children. It is estimated that over three-fourth of the dependent elderly population, in both urban and rural areas, are supported by their children.

Income analysis of the data shows family support plays an important role for low-income households compared with high-income ones.

A chunk of elderly in India tend to stay with immediate familly



Source: NSSO, 2004

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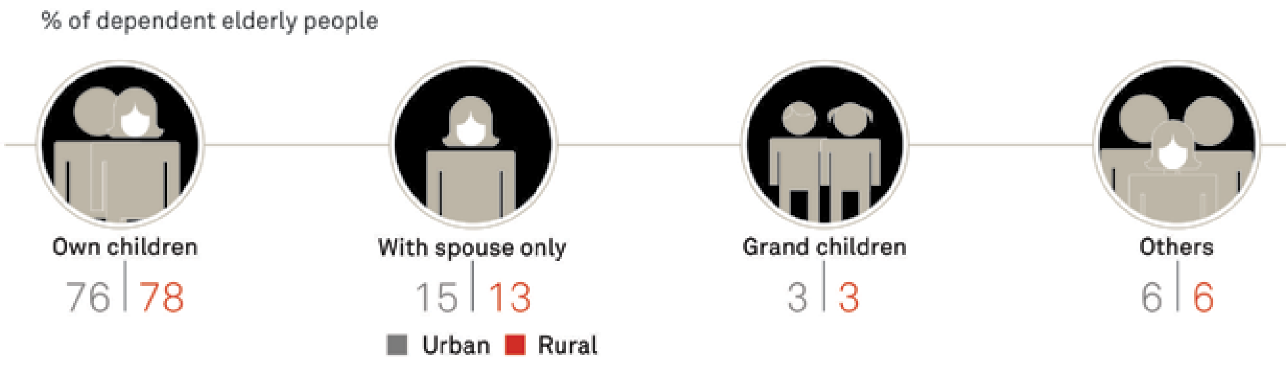


Source: NSSO, 2004

The family size of lower-income households is also larger as they need more support for each other. In higher-income households, family support plays a smaller role, and the family size tends to be smaller.

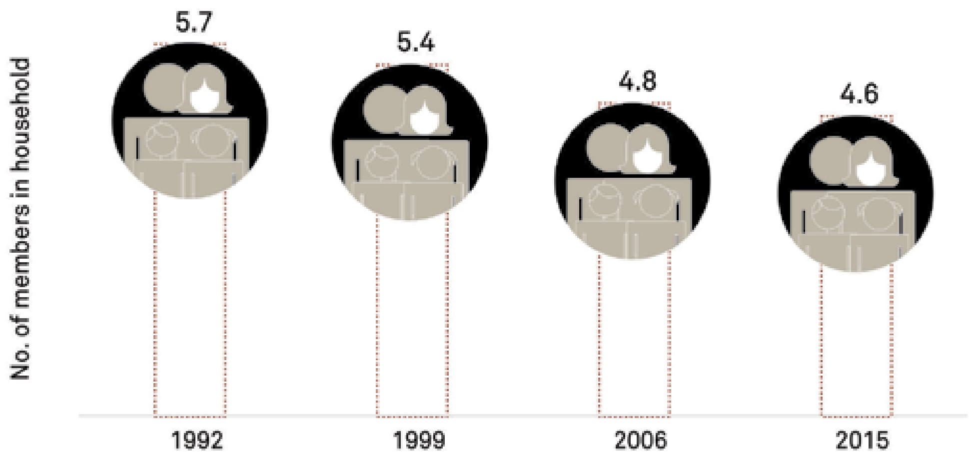
Family support / size decreases with increase in income

Monthly per capita consumer expenditure (in Rs)	Average no. of persons per household	
	Rural	Urban
0-235	5.6	5.9
235-270	5.9	5.8
270-320	5.7	5.5
320-365	5.4	5.2
365-410	5.3	5.0
410-455	5.1	4.7
455-510	5.0	4.5
510-580	4.8	4.2
580-690	4.5	3.9
690-890	4.3	3.5
890-1155	4.1	3.3
1155 & above	3.6	2.9

Source: NSSO, 2004

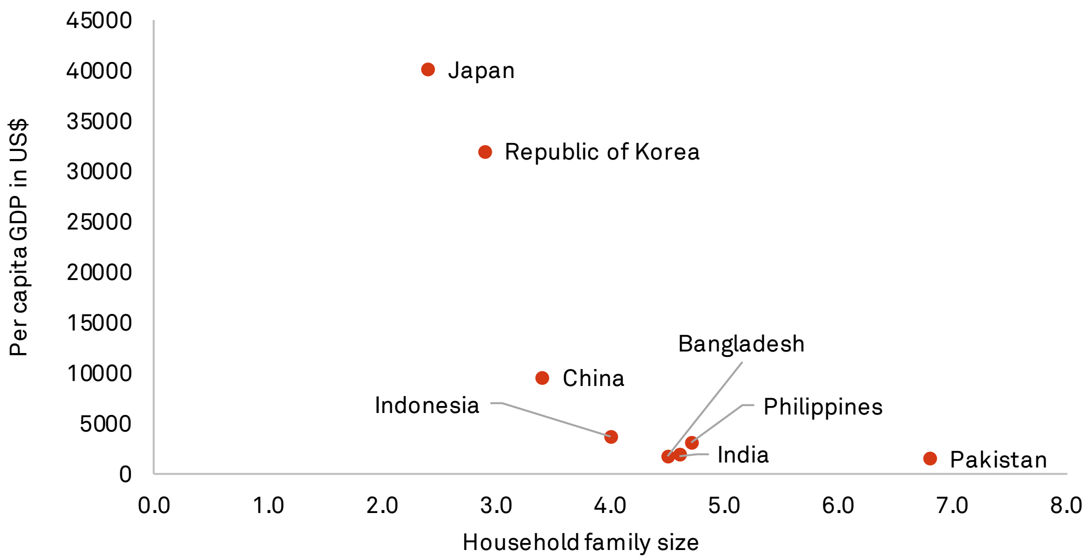
With increasing nuclearisation of families in India, the traditional pillar support has been on the decline. This stresses the case for building an adequate retirement corpus.

Average family size in India is getting smaller



Source: UN Department of Economics and Social Affairs, Population division (2018)

Average family size versus per capita GDP



Note - Household size as of 2000 for China, 2005 for Republic of Korea, 2010 for Japan, 2012 for Indonesia, 2013 for Pakistan and Philippines, 2014 for Bangladesh and 2015 for India

Per Capita GDP in US$ for countries as of 2018

Source: UN Department of Economics and Social Affairs, Population division (2018), IMF

Increasing life expectancy is good, but poses a risk

Based on UN Population estimates, life expectancy for Indians aged 60 has risen steadily from 14.7 years in 1980-85 to 17.7 years in 2010-15. It is expected to increase to 20.3 years by 2050-55, led by improvement in medical facilities, increase in awareness, and access to healthcare and wellness.

Though life expectancy is lower compared with most Asian peers, a low retirement age in India lengthens the sunset period, bolstering calls for better pension planning.

Life expectancy at age 60 expected to increase

Country	Retirement age		Life expectancy at 60 (years)			
	Men	Women	1980-1985	2000-2005	2010-2015	2050-2055
Japan	65	65	20.9	24.8	25.8	30.0
Republic of Korea	65	65	16.9	21.1	24.1	29.2
Bangladesh	59	59	14.1	17.9	19.2	24.7
China	60	55	16.7	18.8	19.6	24.0
India	**58**	**58**	**14.7**	**16.6**	**17.7**	**20.3**
Philippines	65	65	16.1	16.9	17.2	19.5
Indonesia	65	65	15.2	16.1	16.5	19.1
Pakistan	60	55	17.0	17.4	17.7	18.6

Source: Organisation for Economic Co-operation and Development (OECD), UN population estimates, CRISIL Reaserch

It is important to understand that life expectancy is correlated with a person's socioeconomic status.

A study by the Indian Journal of Medical Research[1] for participants in Kerala at the turn of this decade showed life expectancy varied across different socioeconomic categories. As per the study, participants from high income households with good housing conditions, materially privileged households and small households had a 2-3-year longer life expectancy than deprived people. Also, those who went to college lived longer than the illiterates. Gaps were wider for men compared with women.

[1] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3121277/

Pension penetration and contribution rate remain low

Penetration of pension in India is low at 24% of the population above retirement age, compared with over 80% for Japan, 78% for Korea and 74% for China.

Penetration of pension within elderly (%) in India versus Asian peers

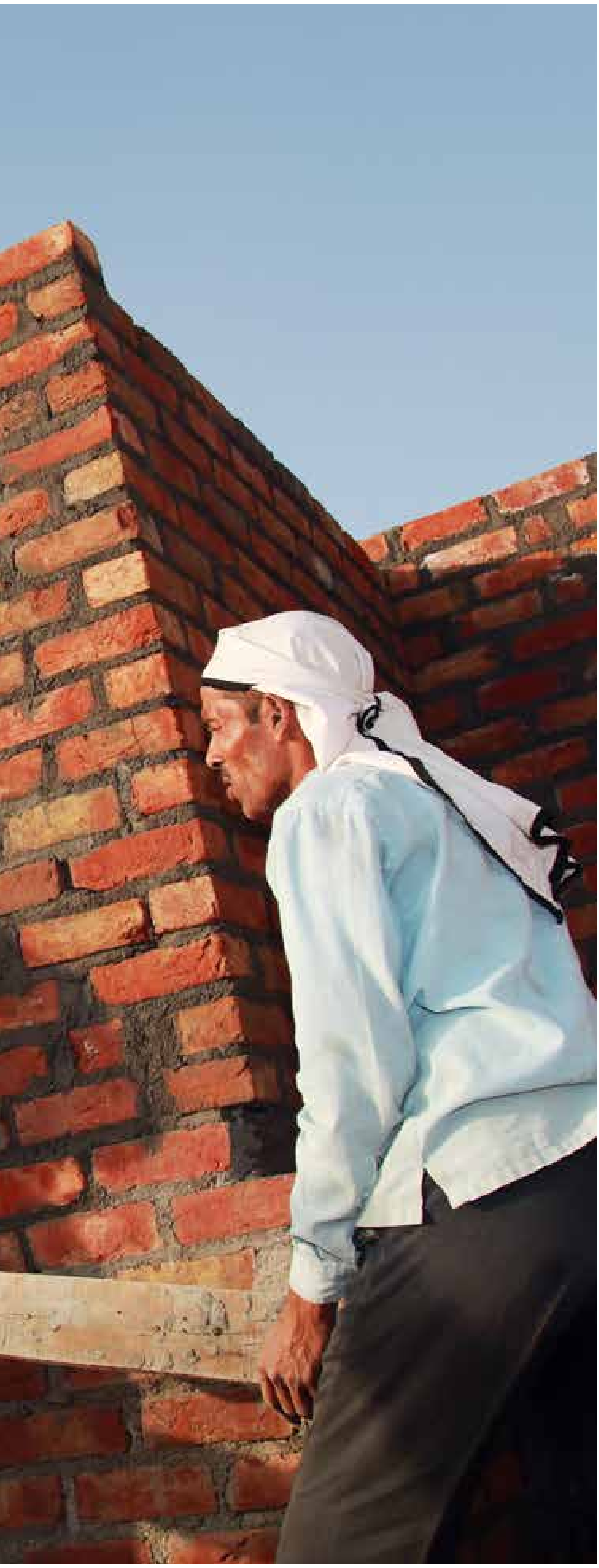
Source: International Labour Organisation (ILO)

Proper retirement planning during working age, along with supportive government policies, is key to ensuring maintenance of lifestyle and providing for health-related expenses through a steady flow of income.

However, when it comes to the percentage of labour force that contributes towards retirement pension, India fares poorly with around 12% (as of 2010) compared with Japan (100%), South Korea (78%), China (56%), and the Philippines (26%).

Share of labour force (%) actively contributing to an old age contributory scheme

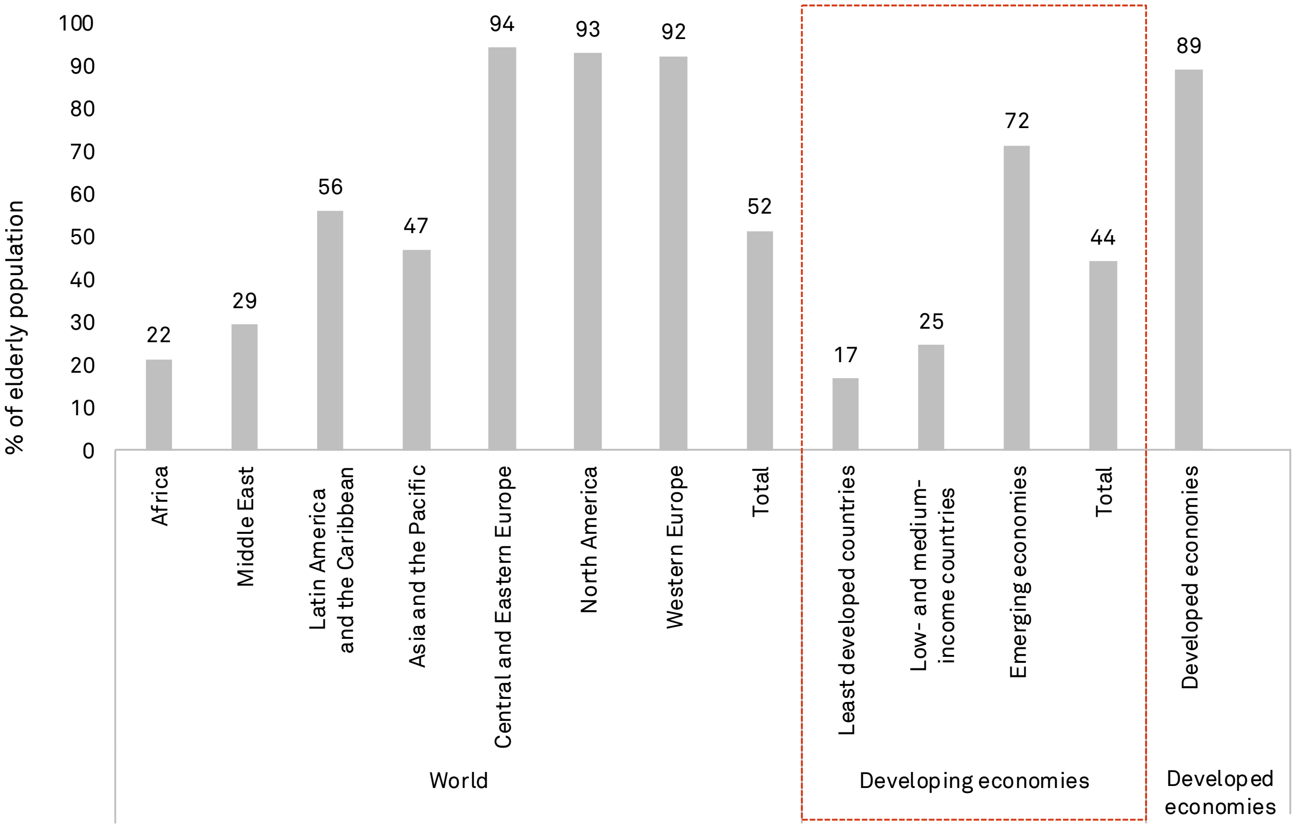
Source: ILO



Informality a challenge for pension penetration

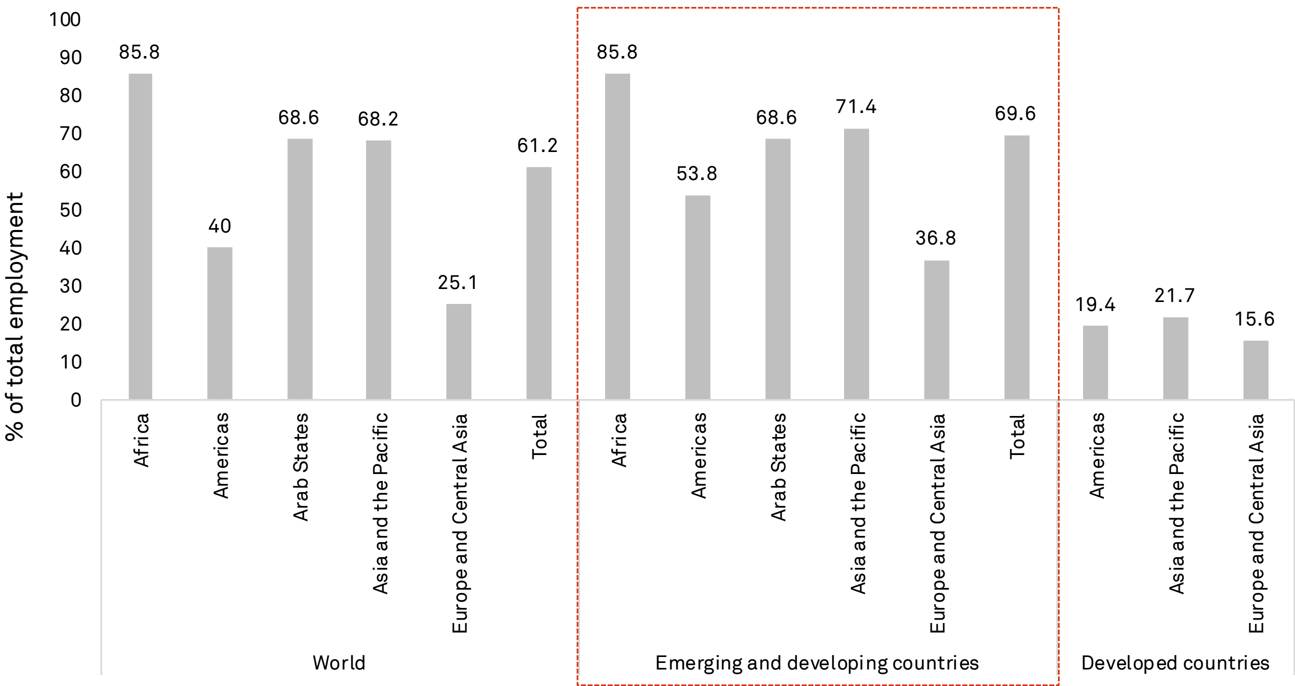
Typically, pension systems across the world cover the formal or organised sector of the economy, while the informal sector is largely ignored. Concern for the informal sector is more acute in developing countries as they have a higher percentage of the populace in that segment compared with developed peers.

Pension beneficiaries as a % of the elderly population are lower in developing economies...



Source: ILO – World Social Protection Report 2014/15

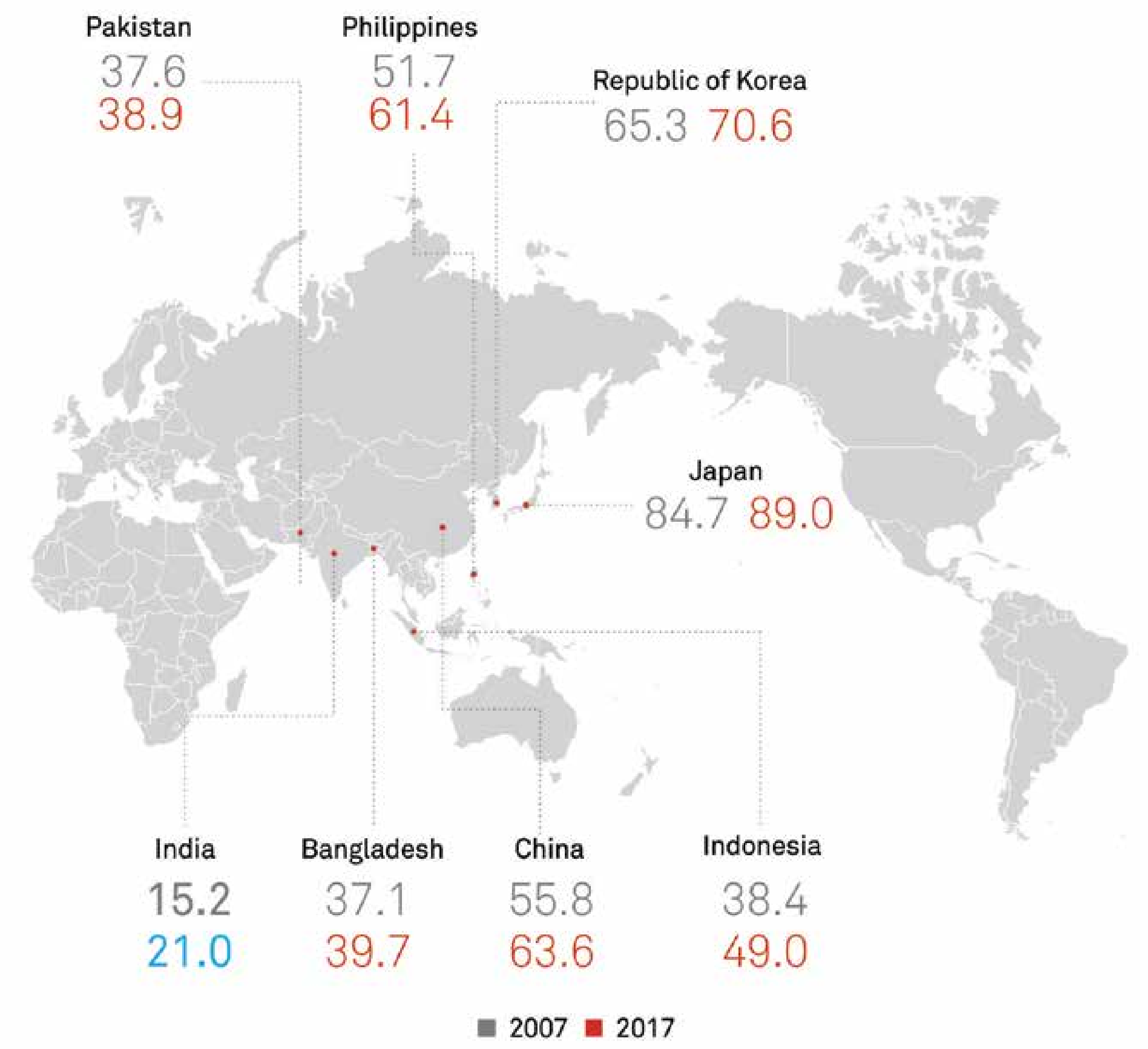
... Correlated with high share of informal sector in these economies



Source: ILO – World Social Protection Report 2014/15

India's share in the formal sector is low, with wage and salaried employees as a percentage of total employment at 21% compared with ~59% for the economies analysed for the year ended 2017.

India's share in wage and salaried employees as a percentage of total employment versus peers



Source: World Bank

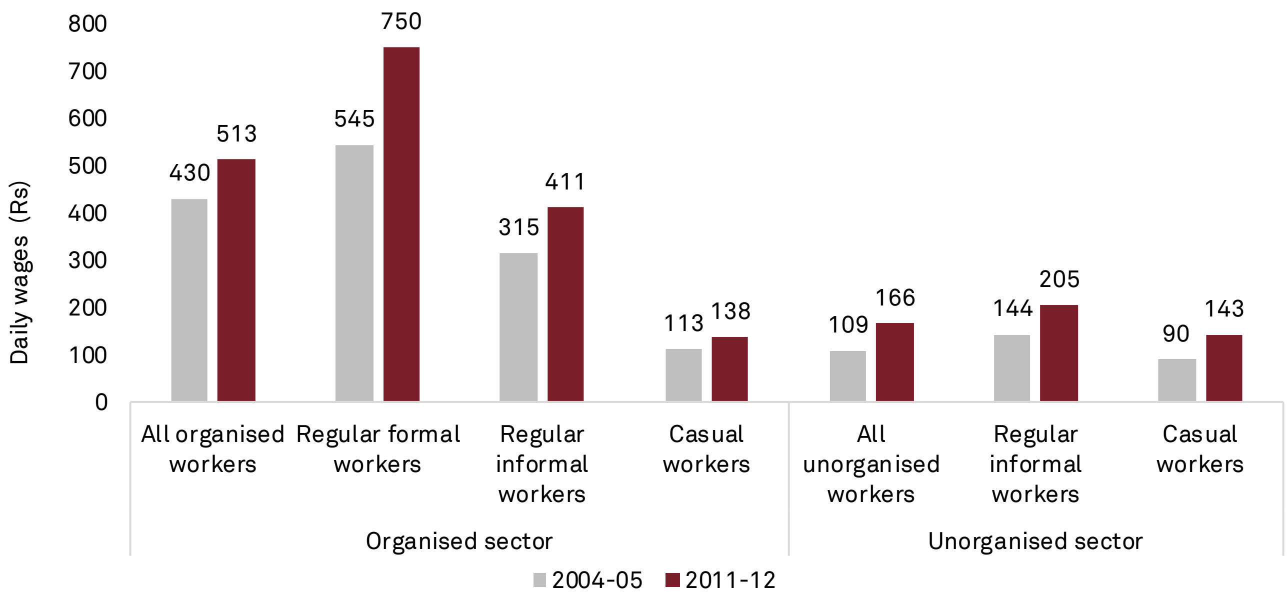
The finance minister in his budget speech in February 2019 mentioned that around 420 million workers are estimated to be employed in the unorganised sector, which includes street vendors, rickshaw pullers, construction workers, rag-pickers, agricultural workers, beedi workers, etc.

Data from the World Bank also indicates that as of 2012, around three-fourths of the non-agricultural employment was in the unorganised sector. These workers earn daily wages and do not have proper access to formal banking, health/ life insurance and retirement support. They are victims of zero job security, high labour mobility, dispersed functioning of operations, casualisation of labour, lack of organisational support, and low bargaining power, making them vulnerable to socio-economic hardships.

Further, compared with the organised populace, the informal sector provides drastically lower wages, adding to the income and social security divide between the two major employment components, furthering the cause of pension coverage for the deprived.

As the following chart shows, income of a regular formal worker is nearly four times that of a regular informal worker. Hence, the formal worker gets both higher pay and social security benefits such as contribution towards pension compared with the informal worker, whose low pay doesn't allow any buffer for retirement.

Sharp divide between wages of organised and unorganised segment workers in India



Source: ILO – India Wage Report

Compared with other countries in Asia, very few in India get minimum pension or social assistance from the government. Thus, the retired poor have to work to meet their needs during the sunset years.

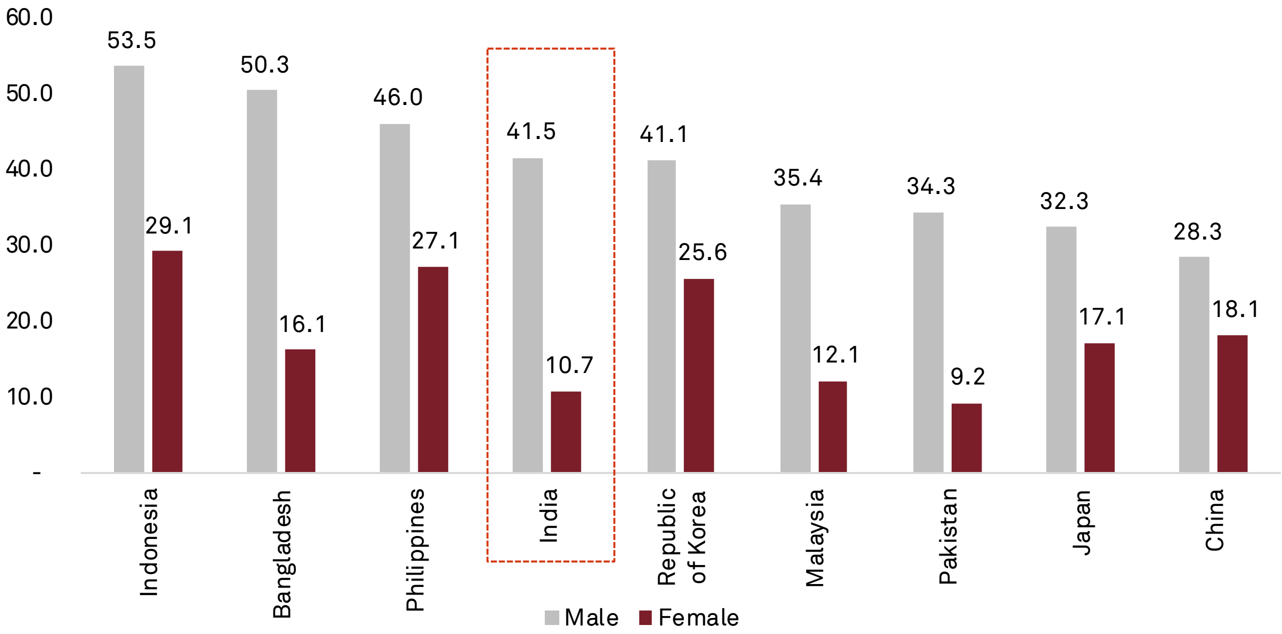
Based on available data with United Nations Economic and Social Commission for Asia and Pacific (UN ESCAP), 41.5% of elderly male population (aged 65+) and 10.7% of elderly female population in India were a part of the labour force as of 2016. A high share of working elderly population was also observed in other Asian countries like Indonesia, Bangladesh and Philippines, where pension penetration is lower than in developed nations.

India's minimum pension and social assistance compared with Asian peers (2016)

	Relative benefit value (% of average wage earnings)			Absolute value (units of national currency per year)		
Country	Basic	Minimum	Social assistance	Basic	Minimum	Social assistance
Hong Kong	9.8	-	19.0	15,480	-	29,940
India	-	12.1	2.4	-	12,000	2,400
Indonesia	-	12.3	-	-	36,00,000	-
Malaysia	-	-	4.3	-	-	3,600
Pakistan	-	39.3	-	-	63,000	-
Philippines	3.4	27.5	-	3,900	31,200	-
Thailand	-	-	4.1	-	-	7,200
Vietnam	-	31.5	10.5	-	1,45,20,000	48,60,000

Source: OECD

Share of elderly (65+) working to meet their retirement needs (as of 2016)



Source: UN ESCAP

Public pension system needs prudent asset allocation

India moved to the defined contribution (DC) 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 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 with effect from January 1, 2004.

Most of India's neighbours such as China, Indonesia, the Philippines and Malaysia, continue to have a defined benefit (DB) plan for government employees.

When seen as part of fiscal arithmetic, India seems to be well-off in terms of the cost to the government to fund the pension of its employees. While the government will have to pay pension benefits for employees who joined before 2004 when they retire, they contribute 10% (proposed to be 14%) of the pay towards the NPS contribution for the employees who have joined after April 1, 2004; the overall cost to the government to meet its pension and retirement benefits requirement is expected to remain constant at 1% of GDP till 2050 and subsequently it will decline gradually.

In China, too, where civil servants get pension funded by the government, expenditure as a percentage of GDP was 4.3% in 2016. However, with the share of China's elderly population (60+) expected to grow from 15% in 2015 to 36% in 2050, the government's expenditure on pension is expected to more than double to 9.5% of GDP in 2050 (based on OECD estimates).

The corresponding figure for Indonesia, a country whose public pension is funded by the government, is expected to increase from 0.8% in 2013-15 to 1.2% in 2050.

The Philippines however, is an exception. While it follows a DB pension system, 9% of the contribution comes from the employee and 12% from the employer, making the total contribution 21%.

Pension plans for government employees

Country	Type of pension plan	Contribution	Current cost as a % of GDP	Expected cost as a % of GDP - 2050
India	Before 2004: Defined benefit	Defined benefit: Funded by the government	1.0 (2013-15)	1.0
	After 2004: Defined contribution	Defined contribution: 10% by employee; 14% by employer (as per announcement in the Union Budget 2019, proposed to be increased from 10%)		
China	Defined benefit	Funded by the government	4.3	9.5
Indonesia	Defined benefit	Funded by the government	0.8 (2013-15)	1.2
Philippines	Defined benefit	9% by employee, 12% by employer	1.7	Not available
Malaysia	Defined benefit	Funded by the government	2.0	Not available

Source: OECD, Asian Development Bank (ADB), CRISIL Reaserch

Prudent asset allocation to meet adequacy of vesting corpus

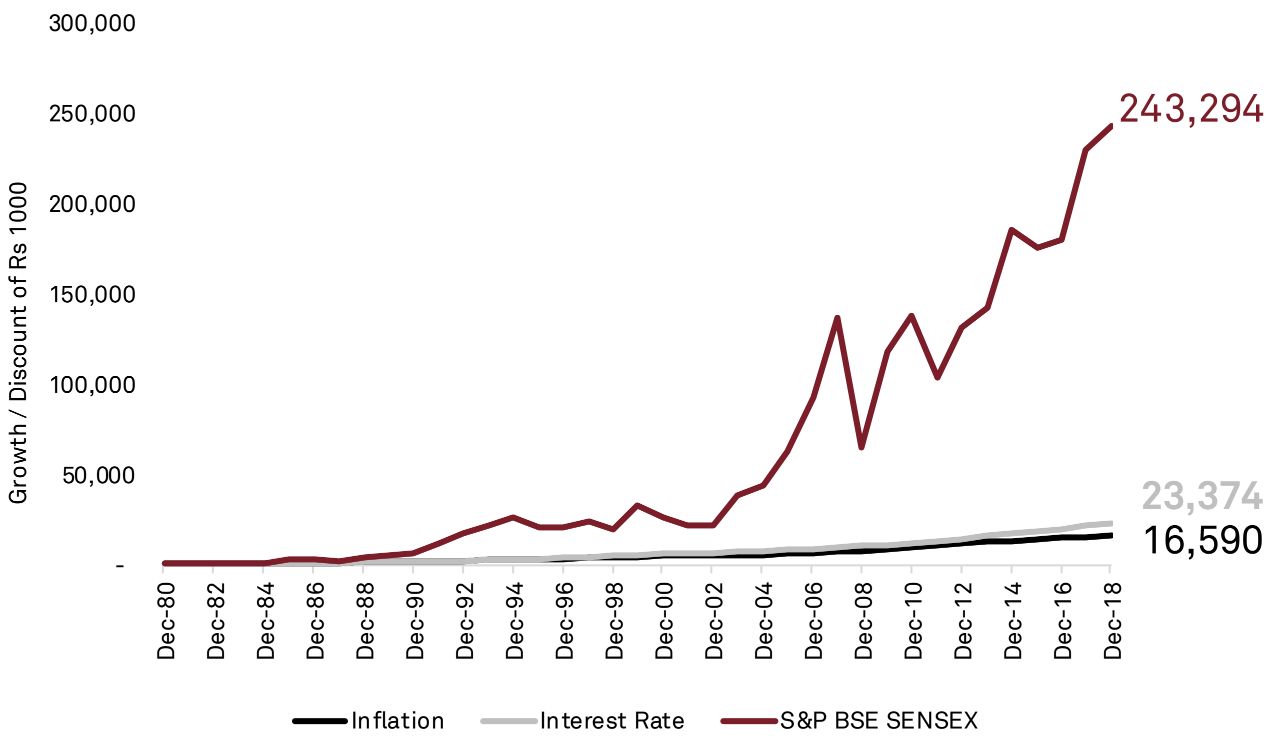
While the previous DB pension plan was funded by the government, the DC one is jointly contributed by the employee (10%) and the employer (10% and proposed at 14%). The money collected is invested by NPS as per the permissible investment limits to generate a vesting corpus, which is then used to buy annuities for the retiree.

Previously, the asset allocation to high risk-high return asset classes such as equity was restricted to 15% of the incremental corpus. This has, however, been modified by the government, providing freedom of choice for selection of pension funds and pattern of investment to central government employees, thus enabling them to invest up to 50% in equity, under lifecycle (LC) 50. This higher equity exposure marries well with the long-term investment horizon of more than 30 years for an average retirement period, enabling higher wealth creation.

The benefit of equity investments over the long term, compared with fixed income, can be corroborated by historical analysis.

As the following chart shows, an investment of Rs 1,000 in equity (represent by S&P BSE Sensex) on December 31, 1980 would have grown to nearly Rs 2.43 lakh as on December 31, 2018, compared with Rs 23,000 if invested over the period in fixed income instruments (fixed deposits). During the period of analysis, inflation trended at nearly 8%, on average – in rupee terms, this means something that cost Rs 1,000 at the start of the analysed time series would cost nearly Rs 17,000 when adjusted for inflation.

Equity infuses growth in long-term investments

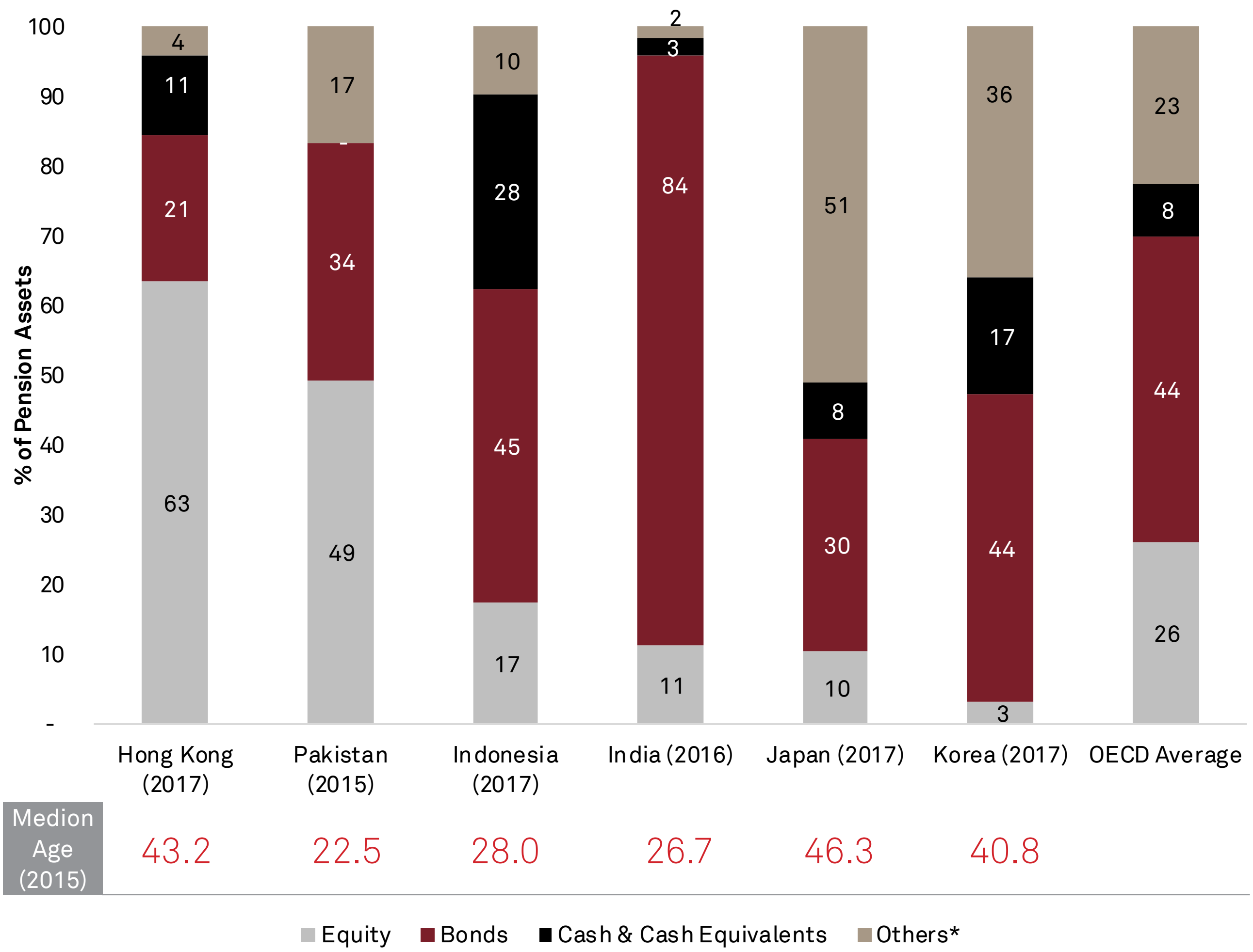


Source: BSE, IMF, RBI CRISIL Reaserch

India's pension assets have traditionally been invested in fixed income assets, the following chart confirms. These assets are predominantly invested in bonds, way higher than its Asian peers.

Recent years have seen some improvement in equity exposure. However, more needs to be done to align the country's asset allocation to its young populace.

Pension asset allocation



Source: OECD, UN Population estimates

* Includes collective income schemes, where asset class split is not available

Note: Total might not add to 100% due to rounding off

Private pension system must meet diverse needs

Employees in the organised segment of the private sector can contribute either to the Employees' Provident Fund (EPF), the oldest pension scheme in the market, or invest in NPS. Most private sector employees are enrolled with the former as NPS is fairly new.

In EPF, a fixed proportion of the salary from the employee and employer (average 12% a piece) is contributed and the accumulated amount, along with growth, is paid to the beneficiary on retirement.

India's pension system is similar to that of its neighbours. However, while in India enrolment in EPF is mandatory only for organisations which have 20 or more employees, in Malaysia, enrolment in EPF is mandatory even if the organisation has just one employee. In Malaysia, employees contribute 11% of their monthly salary to EPF. For employees who earn monthly salary of RM 5,000 and below, the employer's contribution is 13% and for those who earn more than RM 5,000, the employer contributes 12%. Contributions can be withdrawn at the age of 55, five years before the retirement age of 60.

The pension system in the Philippines, which also is a demographically young Asian country, is different. It follows a DB pension system. Contribution by the employee and the employer is much lower than the public pension system in the Philippines. The former contributes 3.33% and the latter 7.07%, taking the total contribution to 10.4%, which is ~50% lower than the total contribution of 21% in the public sector.

In Indonesia, the pension system is largely DC, in which the employee contributes 2% and the employer 3.7%, taking the total monthly contribution to 5.7%. In 2015, Indonesia introduced a social security system in order to provide pension to the private sector. Under this plan, the employee contributes 1% of monthly income and the employer 2% (maximum monthly earnings used to calculate contributions is Indonesian IDR 7.3 million). The mandatory DC portion is accumulated and the employee, at retirement, can opt for full lump sum payment or part lump sum payment with periodic pension till death.

In India's private sector, the employer's contribution to the pension account is lesser than or equal to that of the employee's compared with countries such as Indonesia, China, the Philippines and Malaysia, where the employer contributes a larger amount than the employee. Also, the contributions are accumulated and paid as a lump sum at growth as against payout consisting of annuity and lump sum payment in China and Indonesia.

Pension plans for non-government employees

Country	Type of pension plan	Participation	Contribution
India	Defined contribution	Mandatory (for organisations with 20 employees and above)	For monthly salary up to Rs 15,000: 12% by employee in EPF; 3.67% by employer in EPF and 8.33% (maximum of Rs 1,250) by employer in Employees' Pension Scheme (EPS); additionaly 0.5% is contributed by employer towards Employees Deposit Linked Insurance (EDLI). For monthly salary above Rs 15,000: 12% by employee and 12% by employer contributed towards EPF (for people joining after September 1, 2014); additionaly 0.5% of Rs 15,000 is contributed by employer towards EDLI.
China	Earnings related pension / defined contribution	Mandatory	8% by employee; 20% by employer
Indonesia	Defined contribution / Earnings-related social insurance scheme	Mandatory	Defined contribution: 2% by employee; 3.7% by employer Earnings related: 1% by employee, 2% by employer
Philippines	Defined benefit	Mandatory	3.33% by employee; 7.07% by employer
Malaysia	Defined contribution	Mandatory	11% by employee; 13% by employer if monthly salary is up to RM 5,000 and 12% if monthy salary is greater than RM 5,000

Source: OECD, ADB, CRISIL Reaserch

While EPF contributions in India help individuals, primarily employed in the formal sector, accumulate wealth for their sunset years, it is also important to understand that the contributions made to these accounts are accumulated and paid as a lump sum. The responsibility of managing regular income after retirement lies with the subscriber.

The NPS has tried to address this concern. One can make voluntary contributions to the NPS, which is locked in till the individual turns 60. The NPS provides tax benefit on contributions made by the subscriber during the financial year up to Rs 200,000 per year (including section 80C and 80CCD (1b)). It also provides the subscriber an option to select the desired asset allocation and fund manager. At retirement, while 60% of the corpus can be withdrawn as lump sum without tax, under the current regulations, the remaining 40% has to be used to purchase an annuity product in order to ensure regular income after retirement.

The Malaysian government, in 2012, introduced a similar voluntary pension system, Private Retirement Scheme (PRS), mainly to cater to the private sector which is not covered under the public pension system. Similar to the NPS, in which the subscriber gets a tax benefit for a contribution of up to Rs 50,000 per year, PRS contributions are tax deductible for up to RM 3,000 till the year 2021. While the PRS is at a nascent stage, the Malaysian government has attempted to increase the penetration by introducing a PRS Youth Incentive for people aged 20 to 30 years. Budget 2014 announced that the government will make a one-time credit of RM 500 to the subscriber's account on a minimum contribution of RM 1,000. This was raised to RM 1,000 in Budget 2017. This incentive programme was available till 2018. As per data available, it has significantly improved the penetration among youth from 7% prior to introduction of the incentive scheme to 33% in 2018.

Better asset allocation needed to enhance corpus accumulation

While NPS allows better asset allocation, majority of the pension assets of the organised segment is with the EPF, which follows a debt-oriented investment strategy.

Allocation of pension assets in India to equities

Pension plan	Allocation to equities
EPF – Mandatory contribution	Up to 15% of new contribution
NPS – Voluntary contribution	Up to 75%

In the current structure, there are two key points:

a) Asset allocation in EPF; mandatory pension schemes favours fixed income; allocation to equity is capped at 15%.

b) Asset allocation for contributions to the voluntary contribution scheme – NPS – can be structured as per the subscriber's choice, thereby increasing its flexibility.

The Malaysian pension system, which is closely comparable to the Indian system, has a much higher allocation to equities (36% on average).

Asset allocation of EPF in Malaysia (2017-19)

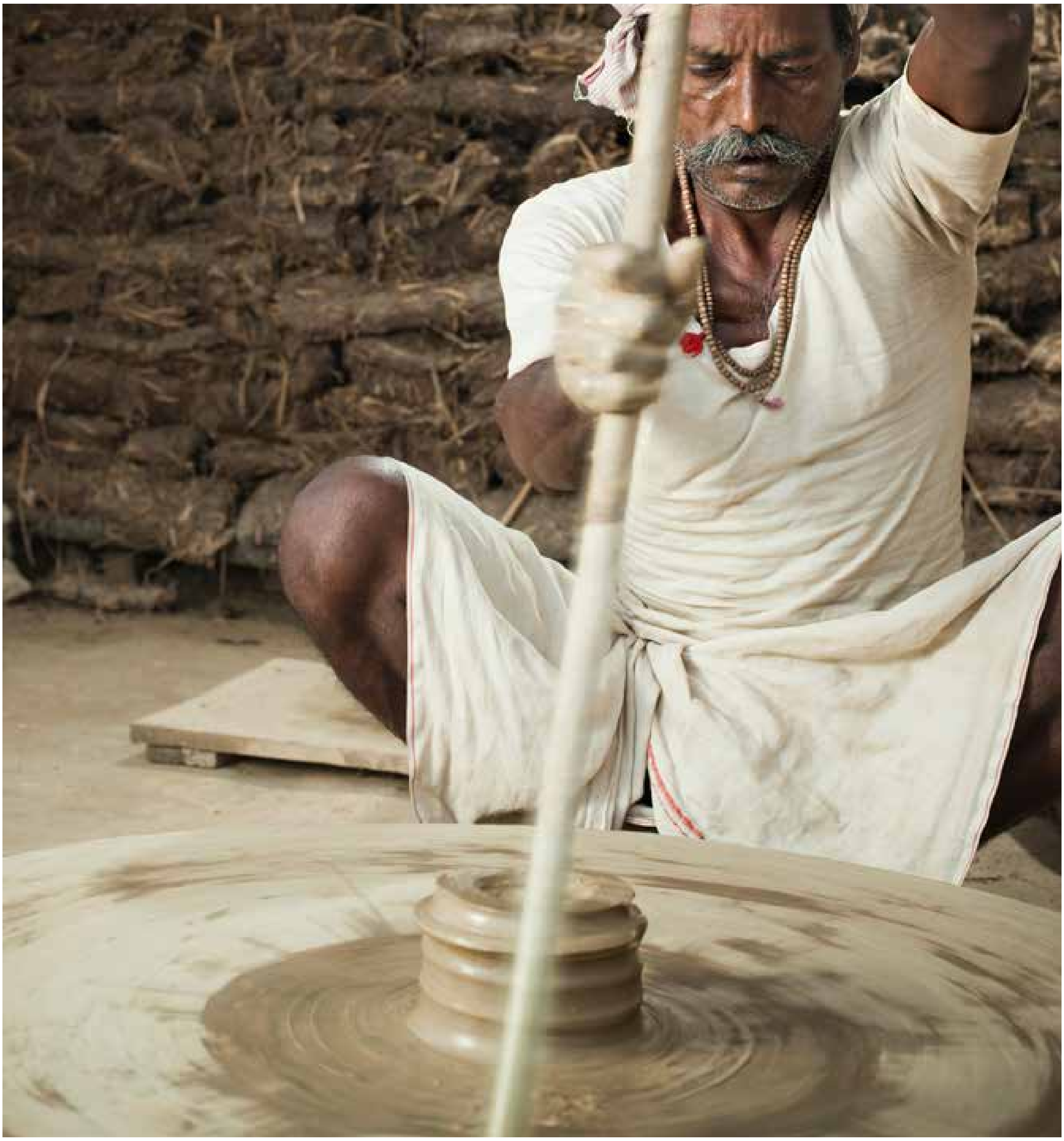
Asset class	Allocation
Bonds	51%
Stocks	36%
Real estate	10%
Money market	3%

Source: PFRDA, CRISIL Reaserch

Additionally, 32% of Malaysia's EPF assets can be invested abroad.

China too allows up to 30% of assets in enterprise annuity plans -- comparable to our EPF -- to be invested in domestic equities. For other pension accounts, such as individual accounts under the urban enterprise pension system and the rural pension system, assets can be invested only in bank deposits or government bonds.

Considering majority of the Indian work force has over a couple of decades to reach retirement age, it is imperative to align the asset allocation of the retirement corpus more prudently during the accumulation phase. While the EPF has recently started investing up to 15% of the corpus in equities, further progress in this direction would be a huge positive for beneficiaries. A higher allocation of the retirement corpus to equities will help increase potential returns, thereby combat inflation more efficiently.



Targeted plan for unorganised segment can boost pension penetration

A key reason for India's low pension penetration has been the large share of the unorganised sector – about 82.7% (as per NSSO survey 2011-12) of the country's employed population. As per the Union Budget 2019, the sector comprises around 420 million workers, including street vendors, rickshaw pullers, construction workers, rag pickers, agricultural workers, and beedi workers.

In view of this, the government has initiated measures to bring the large unorganised chunk into the pension fold.

In recent years, the government has focussed on formalisation of the economy through implementation of the Goods and Services Tax and stricter implementation of tax measures.

As for pension coverage, the government launched the Atal Pension Yojana (APY) in 2015, targeted at low-income group individuals in the unorganised sector. The plan aims 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 following 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.

Monthly contributions for fixed pension ranging from Rs 1,000 to Rs 5,000 in Atal Pension Yojana (in Rs)

Age (in years)	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

Source: NSDL

Based on data available, APY has attracted over a crore of subscribers since its launch in 2015. As of January 31, 2019, it had 1.38 crore subscribers and assets under management of Rs 6,177 crore.

In the latest budget, the government has proposed to launch Pradhan Mantri Shram Yogi Maan-dhan Yojana(PM-SYM), with an aim to cover 10 crore unorganised segment workers in the next five years. Based on details disclosed so far, an individual earning less than Rs 15,000 per month can subscribe to the scheme – an offtake limit similar to that of organised sector masses, to be included in the Employees' Provident Fund Organisation regime. The scheme covers individuals from the age of 18. People of that age would have to contribute Rs 55 per month till they are 60, to get a monthly pension of Rs 3,000 per month after reaching retirement age.

The co-contribution across the entire investment journey is what makes this scheme different from previous schemes for the unorganised masses under the NPS Swalambhan and APY schemes, which had a limited-contribution stance at launch.

This is also in line with our suggestions in the CRISIL-PFRDA report last year, to provide monetary incentivisation to promote pension in the unorganised segment. Globally, in most of the countries where voluntary pension coverage has grown, the success has been due to either matching contributions from the government or tax benefits. Given the low affordability of pension products in the informal sector, an adequate pension is only possible with the government providing a push through monetary incentives. The new plan is also somewhat similar to the targeted pension plan that CRISIL had proposed in its earlier pension reports, notably 'When India ages, whither pension for all' for the indigent poor, thus taking the coverage through the fragmented National Social Assistance Programme to nearly 30% of the old population compared with ~19% now. The plan aims to cover a larger part of this strata during the sunset years.

Though a good start, the plan would need additional aid to make it successful. To start with, options for flexible payment and withdrawal should be given to workers of the unorganised segment as their incomes are irregular and even subject to seasonal changes as in the case of farm labourers. Similarly, in case of extreme events such as floods, drought or severe financial hardships, the subscriber could be allowed to make flexible withdrawals.

Pension is a long-term engagement and given the income profiles of the targeted group, bundling pension with insurance could act as an incentive for increasing the persistency. Existing schemes such as Rashtriya Swasthya Bima Yojana for health cover, and Pradhan Mantri Suraksha Bima Yojana for life insurance and insurance against disability can be bundled with the scheme.

Another important factor for the 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.

The government will also need to work with the insurance industry to come out with a better annuities design for the large targeted populace. Last-mile nitty gritty of identifying the targeted population and getting them to invest in these plans through Jan Dhan - Aadhaar - Mobile (JAM) and other measures to make it a success will also need to worked out.

- Aims to offer banking facilities to all with at least one basic banking account in every household, besides financial literacy, access to credit, insurance and pension facilities

Pradhan Mantri Jan-Dhan Yojana (PMJDY)
As on January 2019, 34.14 crore accounts have been opened under PMJDY, with a total balance of Rs 89,258 crore

- A 12-digit individual identification number issued by Unique Identificiation Authority of India on behalf of Government of India. The number functions as proof of identity and address anywhere in India

Aadhaar
99% adult population above the age of 18 have been assigned Aadhaar numbers

- It will offer access to the banking facilities and facilitate cashless transactions and tranfer of subsidies and other benefits.

Mobile
India has more internet users than the US and its mobile penetration stands at 89% of population

Source: PMJDY, TRAI, Press Information Bureau

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