

# **Whole life Annuities - Opportunities and Challenges**

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## **Retirement Planning - in the Indian Context**

India is the largest democracy with 29 states, 23 official languages and 2000 dialects and most diverse nation in terms of religion and social practices. With 1.3 billion populations it is 11th largest economy in the world in terms of nominal GDP and 3rd largest in terms of PPP. There are 487-million worker Indian labour force - service sector (56% of GDP), the industrial sector (26%) and agriculture (18%) with an average literacy level of 61%, rural population – 69% and Formal pension system covers only 12% of population

## **Why retirement planning is important for India**

There are various factors driving the pension system in India like increased life expectancy, reduced fertility rates and savings restricted to physical assets or short term and medium term products. A majority of the population do not have access to formal channels of pension. There has been a shift from Defined Benefit system (DB schemes) to Defined Contribution system (DC Schemes) even with respect to government employees. There has also been increasing liability for central and state governments and there is a general lack of individual choices and portability in the formal pension products. Following are a list of existing pension products in India:

- Civil Pension Scheme
- Employee Pension Scheme
- New Pension Scheme
- Micro Pension Scheme
- **Annuity Scheme by Insurance Companies**
- National Social Assistance (NSA) Programme
- Employee Provident Fund (EPF)
- Public Provident Fund (PPF)

## **Annuity Scheme by Insurance Companies**

Life insurance and annuities are supposed to accomplish straightforward goals: life insurance provides for your family if you die unexpectedly and annuities guarantee a steady stream of income in retirement.

A life annuity is a financial contract in the form of an insurance product according to which a seller (issuer) — typically a financial institution such as a life insurance company — makes a series of future payments to a buyer (annuitant) in exchange for the immediate payment of a lump sum (single-payment annuity) or a series of regular payments (regular-payment annuity), prior to the onset of the annuity.

The payment stream from the issuer to the annuitant has an unknown duration based principally upon the date of death of the annuitant. At this point the contract will terminate and the remainder of the fund accumulated is forfeited unless there are other annuitants or beneficiaries in the contract. Thus a life annuity is a form of longevity insurance, where the uncertainty of an individual's

lifespan is transferred from the individual to the insurer, which reduces its own uncertainty by pooling many clients.

### **Types of life annuities**

- Fixed and variable annuities
- Guaranteed annuities
- Joint annuities
- Impaired life annuities
- Deferred Annuities

### **Whole life fixed rate annuities**

The simplest form comes in the shape of single premium contracts, often known as immediate pension annuities. The policyholder exchanges a lump sum in exchange for guaranteed payments for life. These are very popular in the UK and US.

Whole Life Fixed Rate Annuities (“WLFRA”) can also come with an accumulation phase before the payout/ income phase. This accumulation phase can be unit linked where the policyholder bears the risk and return or there can be some form of guaranteed accumulation or minimum maturity benefit embedded in the terms and conditions. The latter are more commonly known as “variable annuities” even though the guaranteed minimum accumulation rate may be fixed in nature. Variable annuities are common in Japan, UK, US and Canada. Their popularity amongst policyholders comes from the features which allow the policyholders to participate in the upside of an index (say, equity market) whilst at the same time providing an ultimate floor against adverse performance.

Other variants to the above structures include guaranteed annuity options whereby the rate at which an accumulated fund will be converted to an annuity may be guaranteed in advance, and impaired annuities (providing higher regular payments to reflect an impaired life) or life settlement annuities (providing replacement income for accident victims due to court settlements) etc.

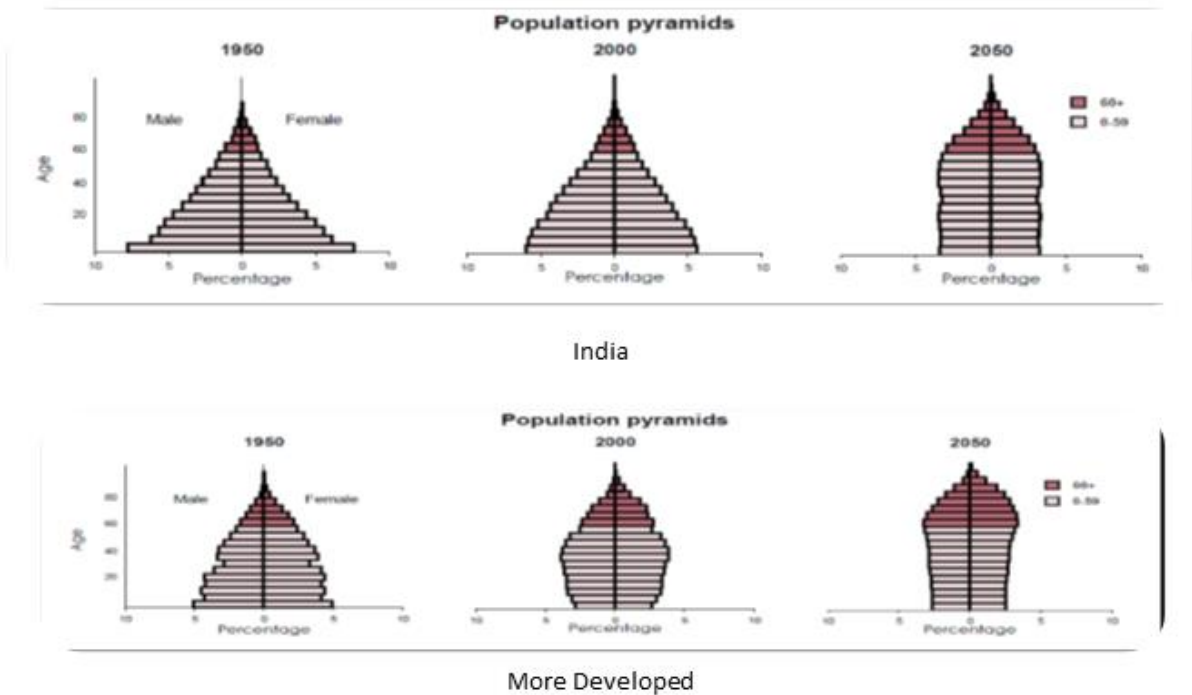
## Opportunities

The analysis are based on the assumptions of India likely to experience the same kind of demographic pattern as by developed nation while growing towards as a developed nation.

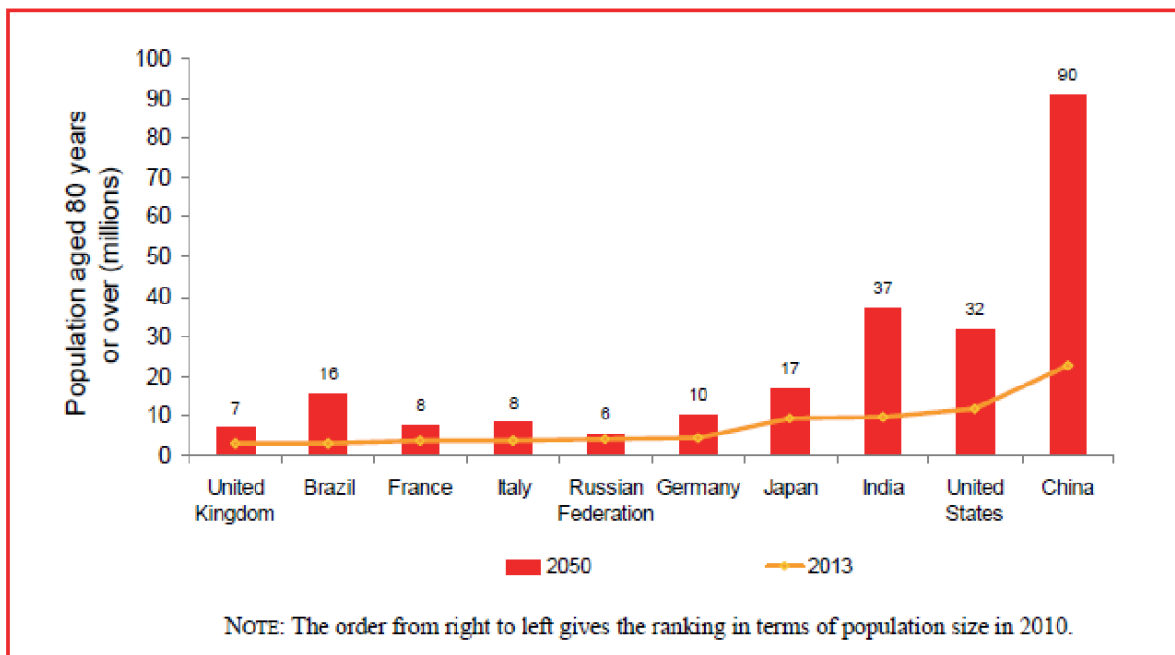


### **Population pyramid:**

- Tending towards ageing population in long term
- changing the shape of the population pyramids into a nearly rectangular form until about age 60, a shape that is characteristic of a demographically “aged” population
- In the more developed regions, the 2013 pyramid shows a full mid-section, an indication that there is a predominance of young and middle-age adults, together with significant volume at the older ages, an indication of ageing. But this structure is in rather rapid transition to a more aged population in the more developed regions, with more than 30 per cent of older persons by 2050
- India ranks 105 with 8.2% of world population aged 60+ in 2013



**Top ten countries with the largest population aged 80 years or over in 2013**



- India has 10 million population in 2013 aged 80+ which is going to increase to 37 million in 2050 becoming the second largest population in this category
- The number and proportion of centenarians (people aged 100 years or more) is growing even faster. The number of centenarians in the world is projected to increase rapidly from approximately 441,000 in 2013 to 3.4 million in 2050 and 20.1 million in 2100

## Youngest population

Ageing index	1950	1975	2000	2025	2050
Developed	42.9	63.7	106.2	187.7	215.3
India	14.4	15.6	22.7	53.6	105

- India has the world's highest number of 10 to 24-year-olds, with 356 million—despite having a smaller population than China, which has 269 million young people
- The ageing index is calculated as the number of persons 60 years old or over per hundred persons under age 15
- India has nearly 4 times lower index level compared to developed nation
- The current index level of developed nation to be reached in 2050 indicating high proportion of younger population compared to old age
- Scope for rapid increase in wealth and potential for huge market for pension solutions with both an accumulation phase and eventual income phase

## Fertility rate

fertility rate (per woman)	1950-1955	1975-1980	2000-2005	2025-2030	2045-2050
Developed	2.8	1.9	1.5	1.7	1.9
India	6	4.8	3	2.1	2.1

- Fertility rate to decrease further from current level of 3 as experienced by developed nation
- This further add to the increased financial security required for old age

## Life expectancy

### India

Age	1980-1985	2010-2015	2030-2035	2045-2050
0	56.30	66.30	70.40	72.90
60	14.90	17.00	17.90	18.90
65	12.10	13.70	14.50	15.30
80	6.20	6.90	7.20	7.50

### More Developed

Age	1980-1985	2010-2015	2030-2035	2045-2050
0	72.80	77.70	80.80	82.80
60	19.20	22.60	24.60	25.80
65	15.60	18.80	20.50	21.70
80	7.10	8.90	10.10	10.90

## Dependency

Dependency ratio (per 100 working-age persons):

India:

Dependency Ratio	1980	2013	2030	2050
Child	68.80	44.30	35.00	28.80
Old-age	6.40	8.00	12.00	18.70
Total	75.20	52.40	46.90	47.60

More Developed:

Dependency Ratio	1980	2013	2030	2050
Child	34.20	24.60	26.30	27.70
Old-age	17.80	25.30	36.60	44.40
Total	52.00	49.90	62.80	72.10

Proportion living independently, age 60+ (per cent):

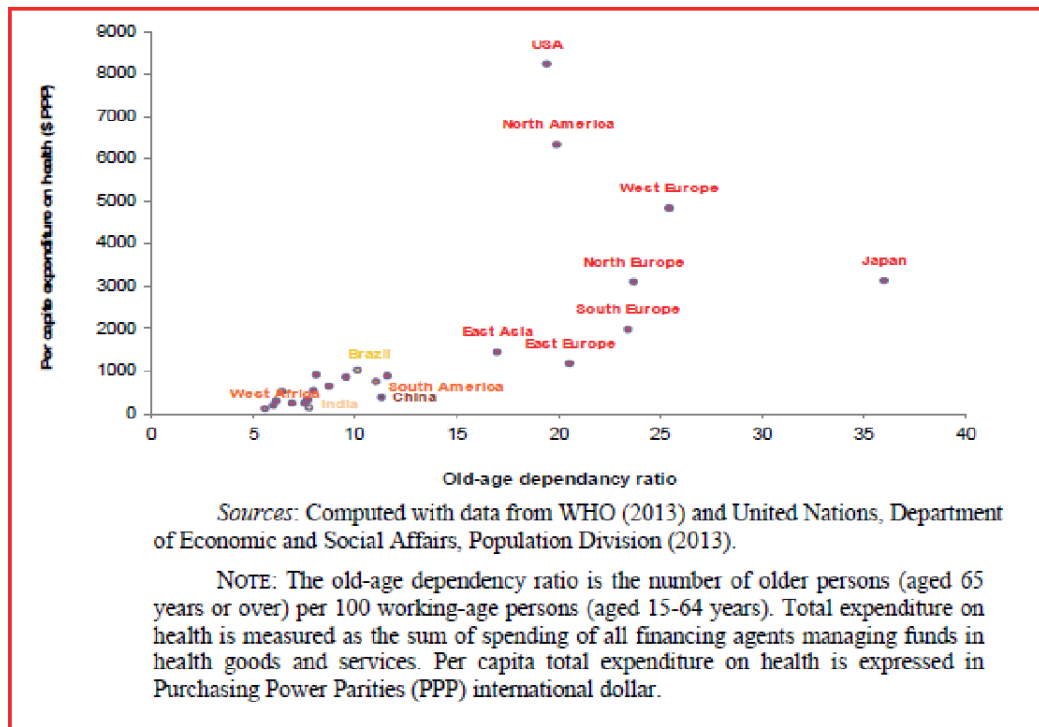
Region	Female	Male
India	15.8	17.3
More Developed	73.4	75.1

- Increase in this proportion expected as country develops leading to more nuclear family structure indicating requirement for support at older age
- Old age dependency ratio of India to reach a level of developed nation observed in 1980, so further increase is going to be expected as experienced by developed nation

## Per capita health expense

- Per capita health expenditure tends to increase with population ageing and with old-age dependency ratio
- Currently India spends around \$100 per capita on health compared to \$3120 by Japan and \$4833 by Western European countries
- Expected expense going to increase as India emerge as a developed nation
- Thus there is clear indication of increased in demand for financial certainty in older

## Old-age dependency ratio and per capita expenditure on health (\$PPP): selected countries and regions, 2010



## Pension scheme

### NPS

- NPS introduced for Central Government employee in 2004
- From 1<sup>st</sup> May, 2009 NPs available for all citizen on voluntary basis
- NPS accretes contribution of subscribers (18-60) years while working and uses the accumulation at retirement to procure a pension
- Tax benefit:
  - o Employers contribution can be deducted as 'Business Expenses' upto 10% of the salary u/s 36(1) of IT act
  - o Employee's contribution is eligible for tax benefit u/s 80CCD(1) of IT /Act, up to 10% of the salary

### Atal Pension Yojna

- The APY will be focussed on all Citizen of India, especially those in the unorganised sector, who do not have any formal pension provision. The scheme encourages these workers to save voluntarily for their retirement.
- APY is a Government scheme administered by PFRDA through NPS architecture.
- Subscriber joining at 18 years of age have to contribute Rs. 42 and Rs. 210 on monthly basis to get a fixed monthly pension of Rs 1000 and Rs 5000 respectively.
- Government co-contribution is 50% of the total contribution amount or Rs. 1000 per annum, whichever is lower, for a period of 5 years. Government co-contribution is available for those who are not covered by any Statutory Social Security Schemes and are not income tax payers.

- Guaranteed minimum monthly pension between Rs. 1000 and Rs. 5000 to the subscriber and spouse with return of corpus to the nominees after 60 years of age.

#### **Regulation**

- Annuity purchase post accumulation phase
- Under NPS
  - o before age of 60 subscriber need to invest 80% of the pension wealth to purchase life annuity from ASP and remaining 20% may be withdrawn as lump sum
  - o On attaining age of 60 need to invest 60% in life annuity
  - o ASP are annuity service provider empanelled with PFRDA

#### **FDI**

- o Increase the cap on foreign direct investment (FDI) in the insurance sector from 26 to 49 per cent
- o Experience of developed nation insurer can be shared with local for development of annuity market
- o Increased investment paving ways for new annuity products
- o Locally regulation aligning with the global solvency standards

#### **Diversification**

- o Allows life insurer to diversify the business risk
- o Longevity risk act as a natural hedge against mortality risk



## Challenges



### **ALM**

- o Longest tenor of government bonds available is 30 years
- o Inflation index bonds with maximum tenor of 10 years
- o Resulting in high rollover risk
- o Longevity swap market not mature
- o Longevity index used may not be exact replica of underlying population resulting in basis risk

### **Alternative investment**

- o Increase individual access to financial market due to internet and mobile banking
- o Individual making own provision by investing in bonds, equity and properties
- o Equity release scheme where in no lump sum need to be made and individual can enter after retirement after retirement, but scheme provider may hedge their risk by buying annuity

### **Longevity risk**

- o Medical advance had resulted in increase in life expectancy
- o Difficult to predict life expectancy based on past experience
- o Information asymmetry with individual in good health taking the policy

### **Market risk**

- o Annuity rate depends on the market condition at the time of buying resulting in lower amount of benefit during bearish phase

- o Inflation may erode the real benefit of regular income from annuity

#### **Tax**

- o No special tax treatment for retirement
- o Contribution towards pension scheme covered under 80C which also includes investment in ELSS, life insurance premium, home loan principal repayment, ULIPS, fixed deposits
- o No incentive for retirement savings

#### **Regulation**

- o Longevity risk and mortality risk are not allowed to offset on the books of life insurers in current stator regime
- o Insurers in India allowed to hedge interest rate risk with the benefit limited to 12 months under the rule of forecasted transactions

#### **Perception**

- o Traditional investment of relying on property as a financial security in old age
- o Aligning the interest of insurance company and policy holders as unlike the life insurance policy both would not like the event of being paid which is not the case in annuity

#### **Operational risk**

- o Model and parameter risk in predicting the long term interest rate, life expectancy and expenses related to the scheme
- o Higher chance of mismanagement of fund over the longer period of the policy
- o Reputational risk if the obligation are not fulfilled or under paid affecting the social welfare of the country

#### **Liquidity**

- o Most of the investment in pension scheme is not accessible until retirement
- o Even on retirement only part of the accumulated amount can be opted as cash lump sum
- o Alternative investment has more control and flexibility

#### **Conclusion**

It is clear that there is a huge opportunity and need in India for Whole Life Fixed Rate Annuities. The challenges are also many. Some have been listed here to provoke thought. What is clear however is that if we are truly to address the pensions need in India, no one side can do it alone. Tax Authorities, Regulators and the Insurance Industry need to come together to develop an optimal solution which includes raising awareness, creating tax incentives to drive the savings behaviour and regulatory changes to allow insurance companies hedge the financial guarantees implicit in many of the products so that we can fulfil our promises to our customers and provide stable returns for our shareholders.