



Institute  
and Faculty  
of Actuaries

# **IFoA India Conference 2024**

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# Overview of India's retirement social security landscape: opportunities and challenges from an actuarial perspective

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**IFoA India Conference 2024**

# Today's session

- Overview of the Indian Landscape
- Introduction about EPS1995
- Actuarial and related considerations with EPS1995
- Discussion on evolution of EPS1995
- Actuaries' opportunities in social security
- Final Thoughts



# The India Landscape – World Bank Framework

## Pillar 0

Basic Public Pension with minimum level of protection

- BPL State Plans?
- No universal national scheme

## Pillar 1

Public mandatory and contributory system linked to earnings protection

- No universal national scheme

## Pillar 2

Private mandatory and funded system

- **EPS1995**
- EPF
- Central & State Gvt. Employees Plans (OPS/NPS/UPS/others)
- PSU Banks Plans (Pension / Others)
- **PSU Plans under DPE guidelines (Pension / Superannuation/ Others)**

## Pillar 3

Voluntary and funded system

- **NPS**
- APY
- Superannuation (rare)
- Others (very rare e.g, Pension / PRMB)

## Pillar 4

Financial and non-financial support outside formal arrangements

- Retail Investment products
- Private savings
- Insurance products



# EPS1995 as a backdrop for today

- Deemed as most widespread scheme in India across formal employment?  
**c.7.5m pensioners and estimated c.40m+ actives**
- Visible statistics and actuarial valuations being conducted
- Defined Benefit with fixed contributions
- Sustainability Challenges
- Future of nature of EPS1995 debate

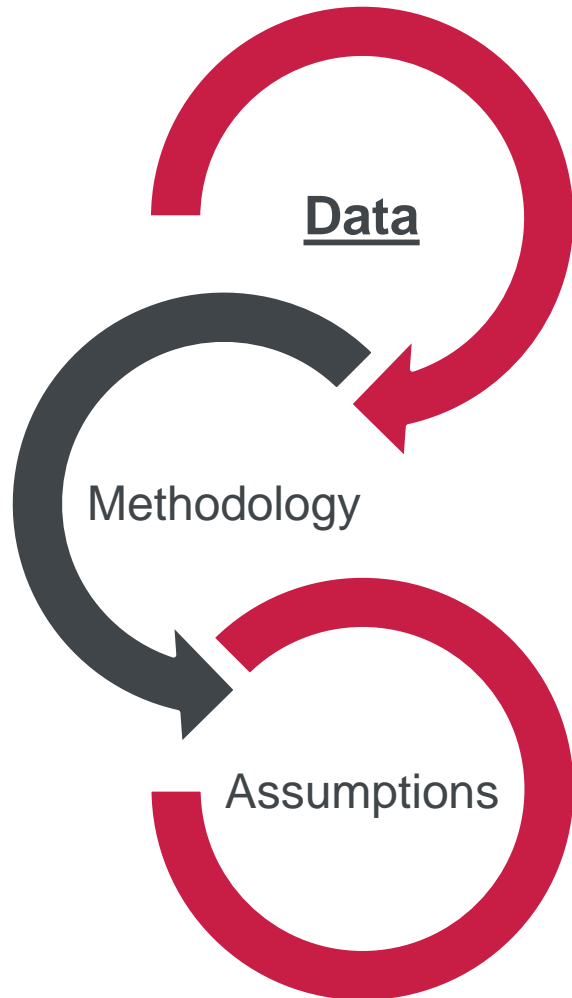


# Brief overview of EPS1995

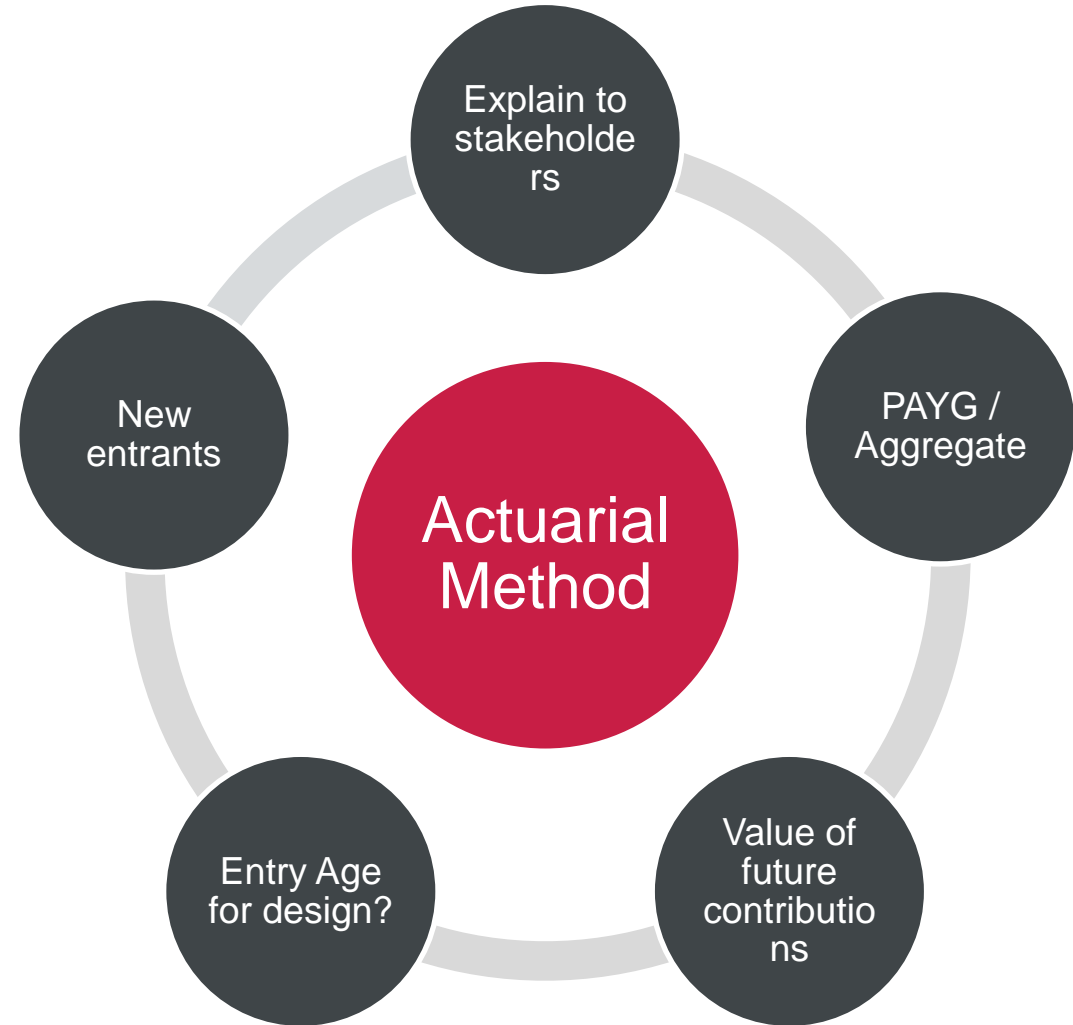
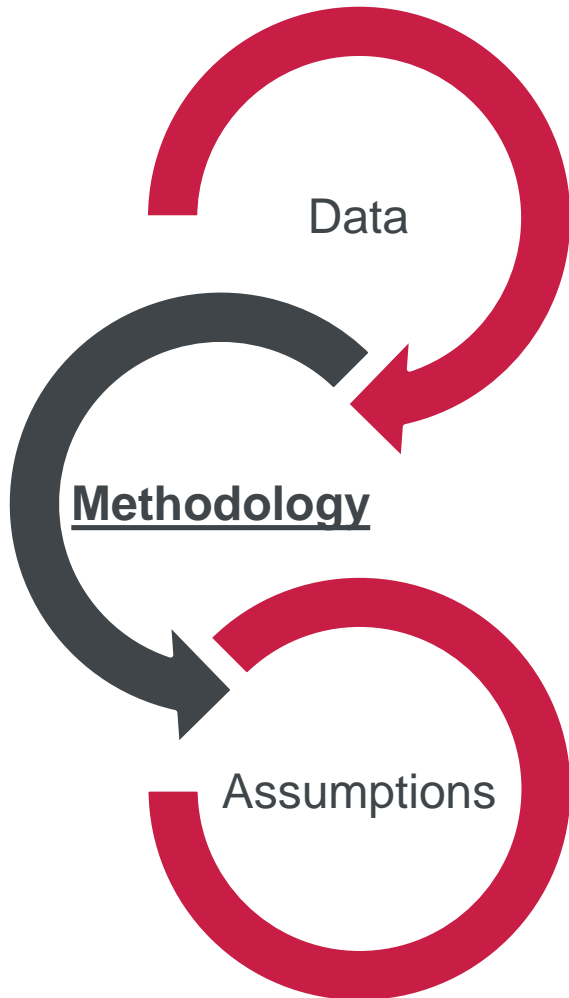
	Overview	Detail	Further Info
Retirement Age	58	Early retirement from age 50 and 10 yrs service	There is a pre EPS1995 scheme in existence
Retirement Benefit	<p>1/70ths of pensionable salary x pensionable service</p> <p>No increases in payment</p>	<p>Pensionable salary capped and averaged final 60 months</p> <p>pre and post 1 September 2014 split</p> <ul style="list-style-type: none"> <li>6,500 p.m.</li> <li>15,000 p.m.</li> </ul>	<p>Minimum pension of 1,000 p.m.</p> <p>Service capped at 35 years</p> <p>2 yrs addition upon 20 years</p>
Survivor Pension	Available on death 50% in post retirement phase	Minimums and special circumstance benefits are available too.	Children pension also available
Contributions	<p>1.16% Government</p> <p>8.33% Employer (out of overall 12% PF contribution)</p>	Capped to capped pensionable salary	complexity about judicial decision about contributions on higher salary
Pre-retirement benefits	Upon 10 yrs service a benefit is available	Calculated on set factor Tables	



# Actuarial and related considerations with EPS1995



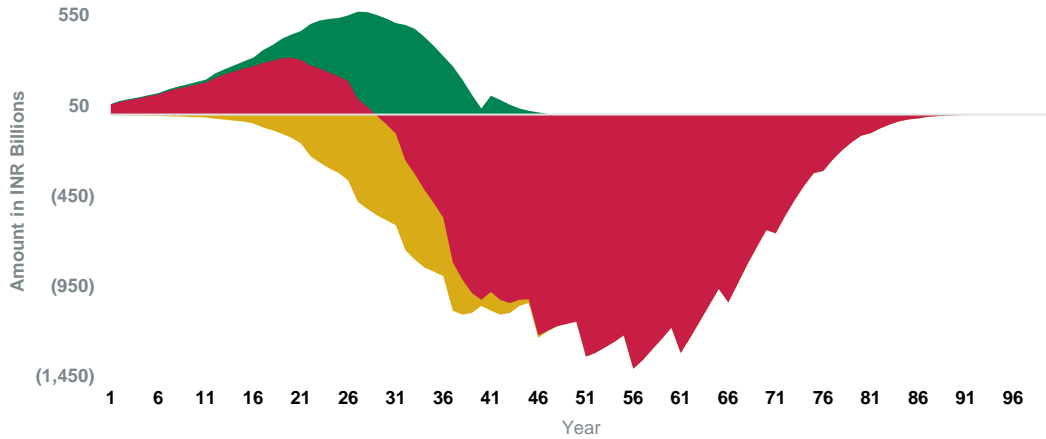
# Actuarial and related considerations with EPS1995





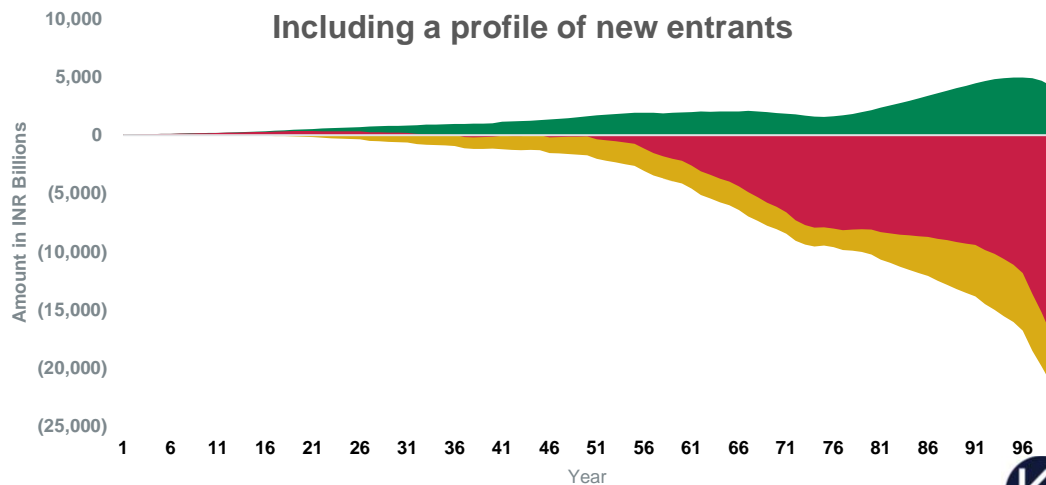
# Complexity to explain Sustainability

Cashflow Projection (All Inflows v/s Outflows)  
For a DC to DB conversion of State Scheme (2020)



Projected Payout Total Inflow Net Cashflows

Including a profile of new entrants



Projected Payout Total Inflow Net Cashflows

- In a young country, things might look good
- Especially in the shorter term
- Cashflow in Government related plans sometime more important than PV/Accrued methods

	Illustrative (INR Crs) (INR10m)
PV of Total Projected Benefits	1,050,000
PV of Future Projected Contributions	550,000
Net Future projected Liability	500,000
Current Corpus	450,000
(Shortfall)/Surplus	(50,000)



# Complexity to explain Sustainability

Monthly Starting PF Wages - Cap INR 15000					
Age	5,000	7,500	10,000	12,500	15,000
20	8.2%	6.8%	6.1%	5.8%	5.6%
21	8.5%	7.0%	6.3%	5.9%	5.7%
22	8.8%	7.2%	6.5%	6.1%	5.9%
23	9.2%	7.5%	6.7%	6.3%	6.1%
24	9.5%	7.8%	6.9%	6.5%	6.3%
25	9.9%	8.0%	7.1%	6.7%	6.5%
26	10.3%	8.3%	7.4%	6.9%	6.7%
27	10.7%	8.6%	7.6%	7.1%	6.9%
28	11.1%	9.0%	7.9%	7.4%	7.1%
29	11.5%	9.3%	8.2%	7.6%	7.4%
30	11.9%	9.6%	8.5%	7.9%	7.6%
31	12.4%	10.0%	8.7%	8.1%	7.9%
32	12.8%	10.3%	9.0%	8.4%	8.1%
33	13.3%	10.7%	9.3%	8.6%	8.4%
34	13.7%	11.0%	9.6%	8.9%	8.6%
35	14.2%	11.4%	9.9%	9.2%	8.9%
36	14.6%	11.8%	10.2%	9.4%	9.1%
37	15.1%	12.1%	10.5%	9.7%	9.4%
38	15.5%	12.5%	10.8%	9.9%	9.6%
39	15.2%	12.3%	10.7%	9.8%	9.4%
40	15.4%	12.7%	10.9%	10.0%	9.7%
41	15.5%	13.0%	11.2%	10.2%	9.8%
42	15.5%	13.4%	11.4%	10.4%	10.0%
43	15.5%	13.7%	11.7%	10.6%	10.2%
44	15.4%	14.1%	12.0%	10.9%	10.4%
45	15.4%	14.4%	12.3%	11.1%	10.7%
46	15.7%	14.7%	12.7%	11.4%	10.9%
47	16.0%	14.8%	13.1%	11.7%	11.2%
48	16.4%	15.0%	13.5%	12.0%	11.5%

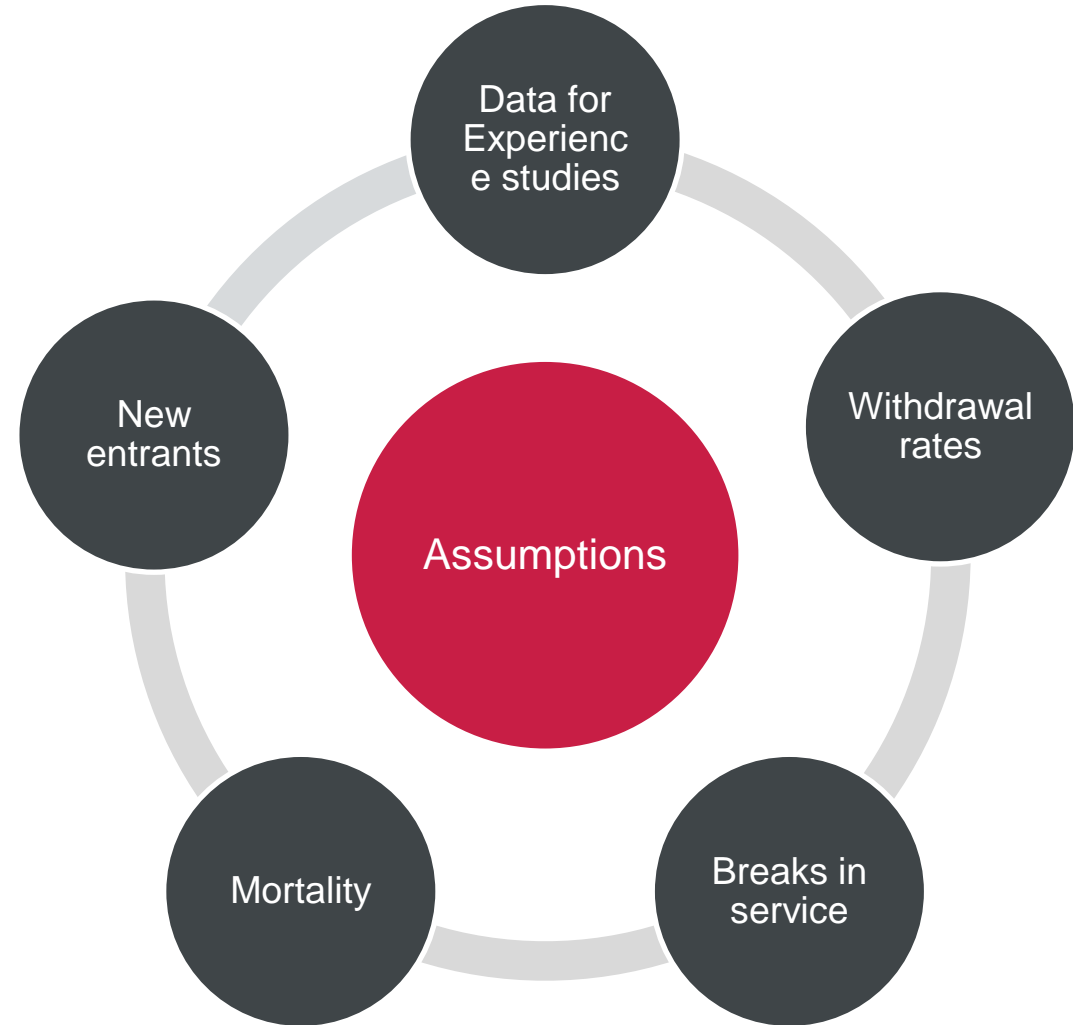
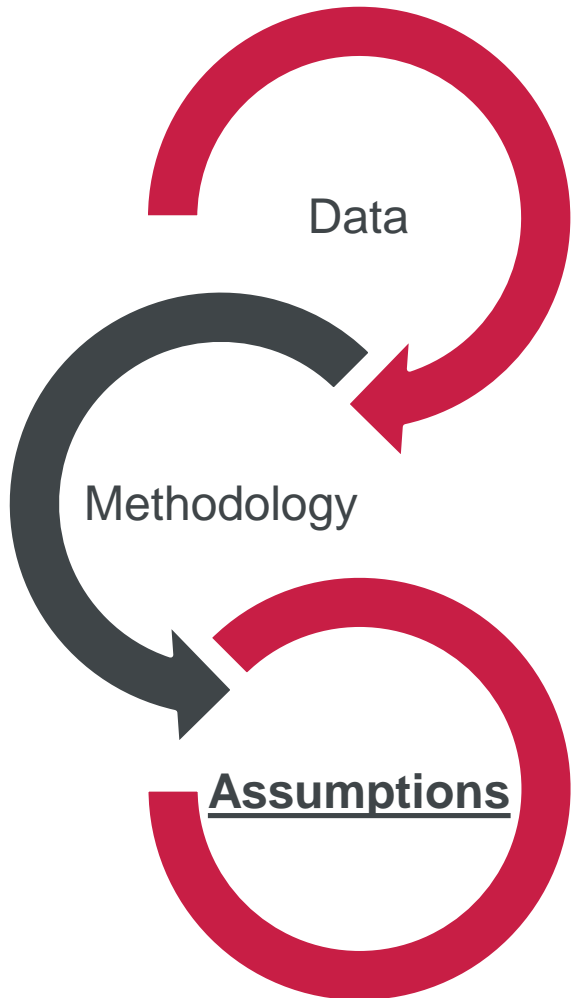
- However, that is not the case for all cohorts
- Entry Age RCRs Heat Maps a good tool
- Actual new joiners and then actual salary progression etc., will then dictate actual position
- Complexity arise to project number and nature of new entrants

## For conceptual illustration purposes only

- Pre - Retirement Mortality IALM 06-08
- Post Retirement Mortality IALM 06-08
- Discount Rate - Base 8.00% p.a.
- Discount Rate - Reduction 0.20% p.a.
- Discount Rate - Min Floor 6.00%
- Salary Escalation Rate 7.00%



# Actuarial and related considerations with EPS1995

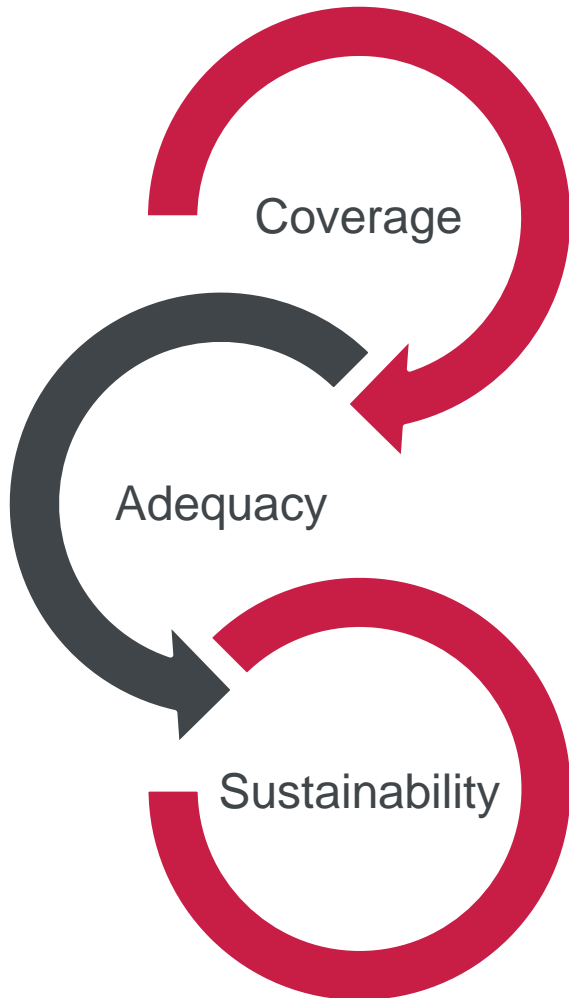


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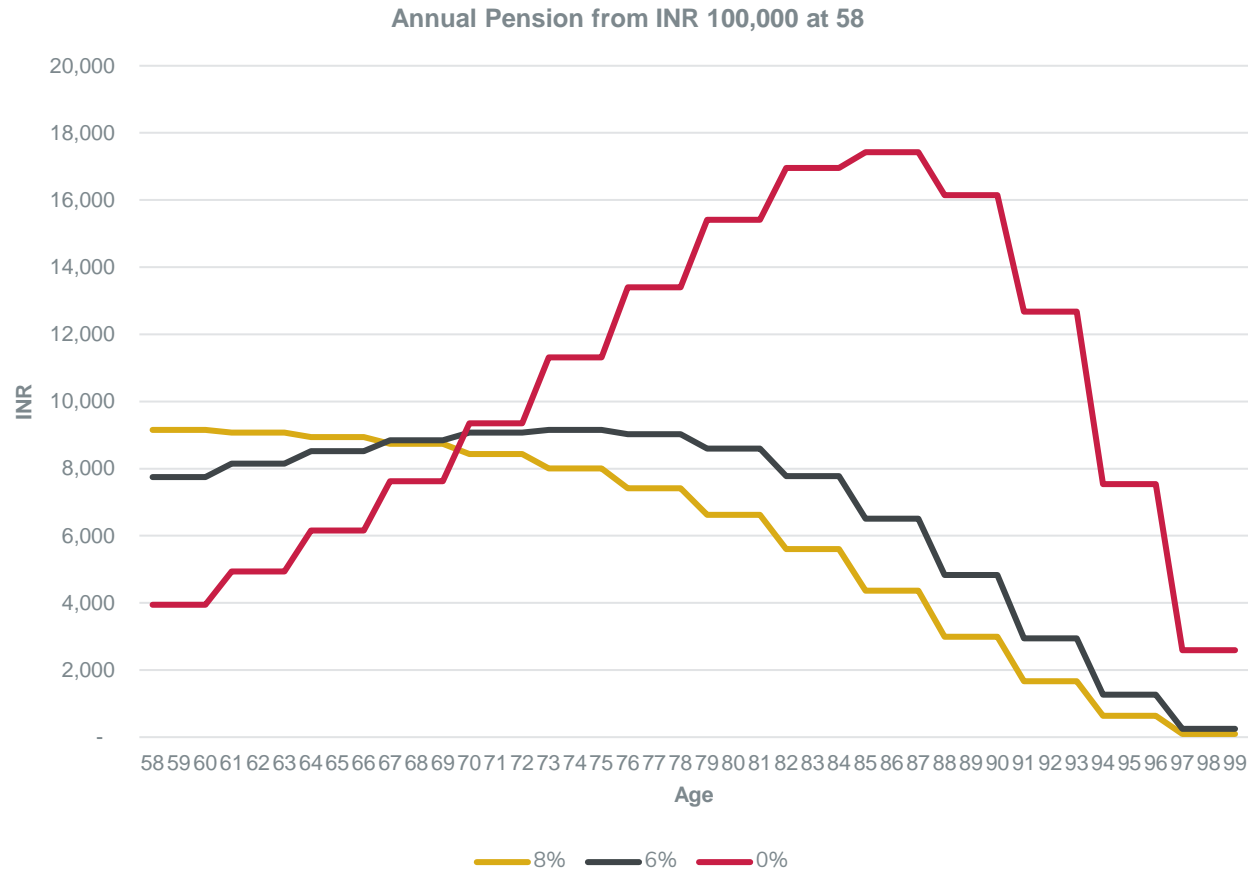
# What's next for EPS1995?



- Code on Social Security
  - Gig and Platform workers
  - 400m informal sector workers
- Amend scheme for better adequacy
  - Lower employee number threshold
  - wages ceiling increase
  - Reduce averaging period
  - Restrict withdrawals more by higher minimum service
  - All however come at a cost!
- Balance that with
  - Higher contribution rates
  - Greater investment allocation freedom and ALM



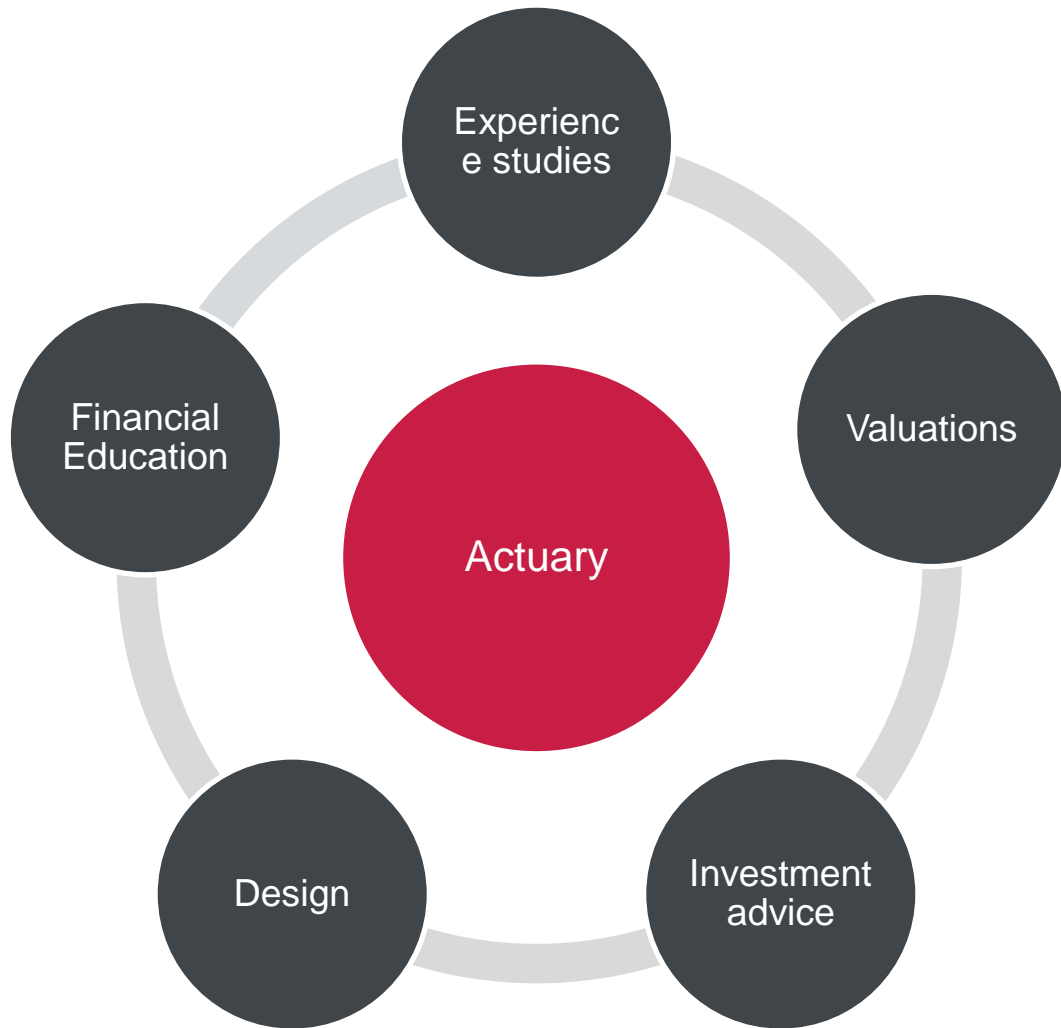
# What about something different?



- Have a very minimal DB benefit
- Use notional accumulated contributions for a member to choose a pension payment pattern
- Type of systematic withdrawal based on annuity rates calculated by EPS1995
- E.g three options (Low, Mid, High), reworked every 3 years. EPFO has control over conversion terms to adapt in future
- Could work to extend to gig workers too?



# Actuarial and related opportunities



- There are Practice Standards to help
  - Social Security Schemes IAA ISAP2 which APS X4 IFoA uses for non-UK work
  - IAI APS20



# Final Call for Action

- Who believes there is a case to have our profession lead the development of a compendium of various retirement Social Security programs in India?
- Experience Studies with Government Institutions needed.

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# Questions

# Comments

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The views expressed in this presentation are those of the presenter.

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