



International Actuarial Association
Association Actuarielle Internationale



Actuaries : Striving for excellence, creating sustainable future



**21st Global
Conference
of Actuaries**

17th - 19th February 2020 | Mumbai, India

Sustainable Retirement for all

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Consulting Actuaries

Date: 19 February 2020

Flow of our session

- Where are we on ***pensions today*** and the macro challenges?
 - Defined Benefit and Defined Contribution
- Why are we talking about it in ***India***?
- Bringing ***ERM*** into pensions? –Some food for thought
- ***Defined Benefit***
 - Funding for long term promises: The Basics
 - Liability Driven Investment Strategies: A refresher and rekindled opportunity?
- ***Defined Contribution***
 - Collective Defined Contribution plans: An introduction to the next avatar of DC?

The fine print:

In the interest of time today, most of the session will mostly reference workplace plans, though many of the principles will no doubt apply to social security schemes too.

A few numbers...and a letter

65%

DB is **NOT** DEAD

Pension & Investment World 300
2019
Thinking Ahead Institute: WTW

>50%

DC AUM in top 22 markets

Global Pension Assets Study 2020
Thinking Ahead Institute: WTW

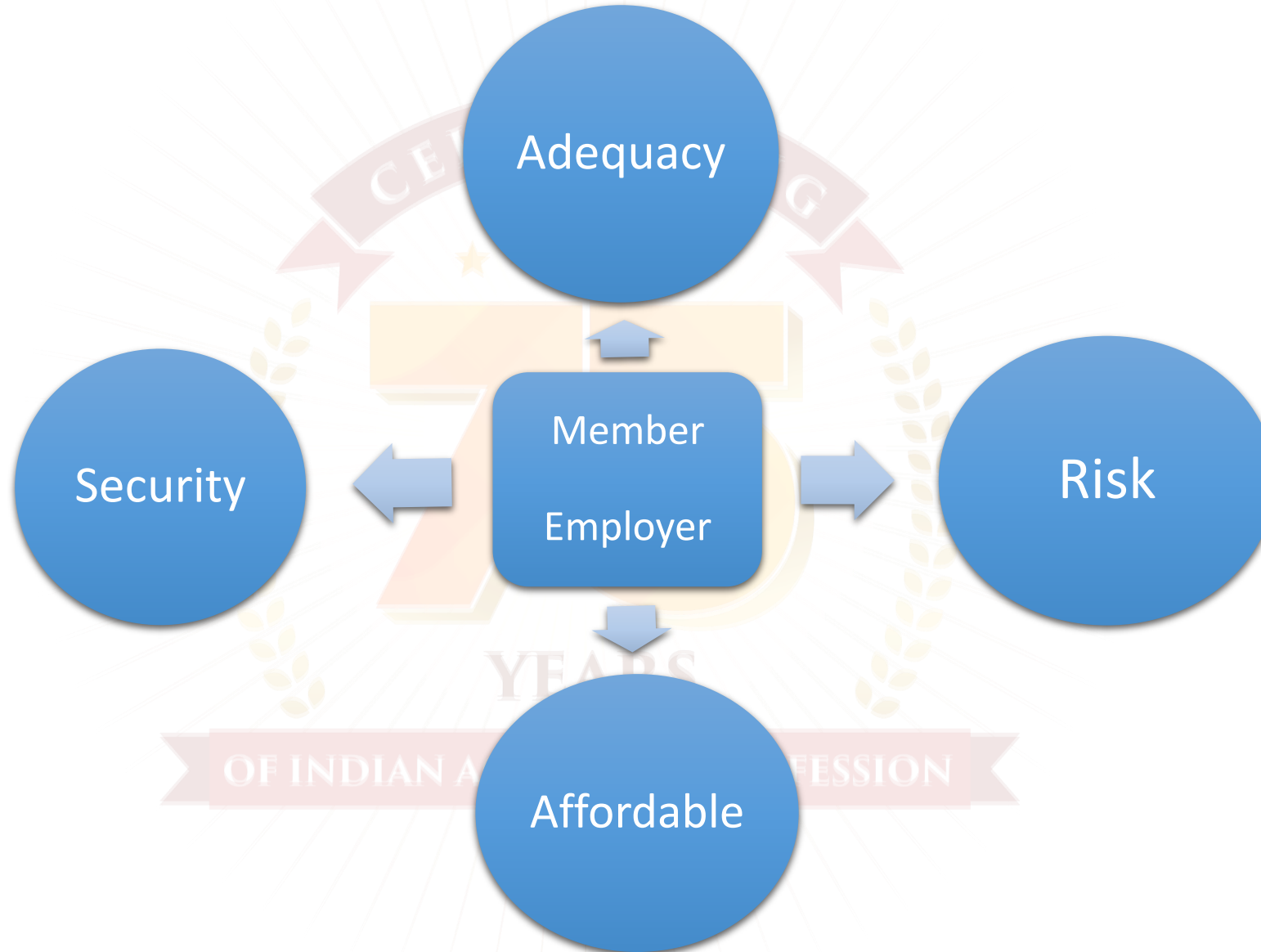


D



Melbourne Mercer
Global Pension Index 2019

Challenges



Why India?

Rs 4,227 bn
(c.\$60bn)
YE2013 BSE100
DB obligations

Accounting for
Employee Benefits 2014: WTW

Rs 3,000 bn
(c.\$40bn)
Public Sector Banks
YE2019 DB
Obligations

Secondary research: KA Pandit

c\$145bn
AUM EPFO

Pension & Investment World 300 2019
Thinking Ahead Institute: WTW

Rs 4,170 bn
(c.\$60bn)
AUM NPS/APY

PFRDA: Feb 2020

Rs 2,500- 3,000 bn
(c\$40bn)
Gratuity Obligation
estimate

Assumptions...
10 year service
24m organised workforce
Rs 20,000 basic per month
Actuarial assumptions so they net off (i-e) etc..

Back of the envelope: Kulin Patel

These will keep growing!!!

- *No occupational retirement/long term benefits regulator or Authority – excl. EPFO*
- *No funding requirement for Gratuity or other long term DB occupational schemes*
- *Those who fund have limited long term strategy*
- *Limited formal governance oversight requirements*
- *No mandatory employee education/awareness norms*

Things will change....

- *Social Security Code*
- *Pace of NPS Growth*

No wonder we got a “D”

*Aim for a “B”
in 5 years?*

What could we do?

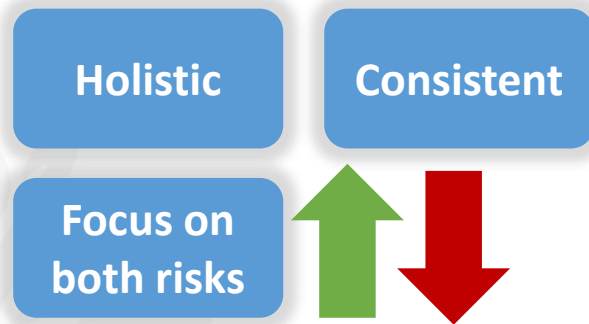
Risk Governance Framework



What could we do?

Risk Governance Framework

CORE



Employer

Trustees

Longevity

Investment

Member

Regulator

Operational

Covenant

Liquidity


How do we go about implementing it?




- Assess Current Risk Appetite (typically in Qualitative Terms) from the standpoints of the key stakeholders




- Measure Current Risk Profile



- Compare Current Risk Appetite with Current Risk Profile



- Define and assess ongoing risk appetite



- Develop metrics and framework to enable ongoing management and monitoring of risks



- Risk Reporting

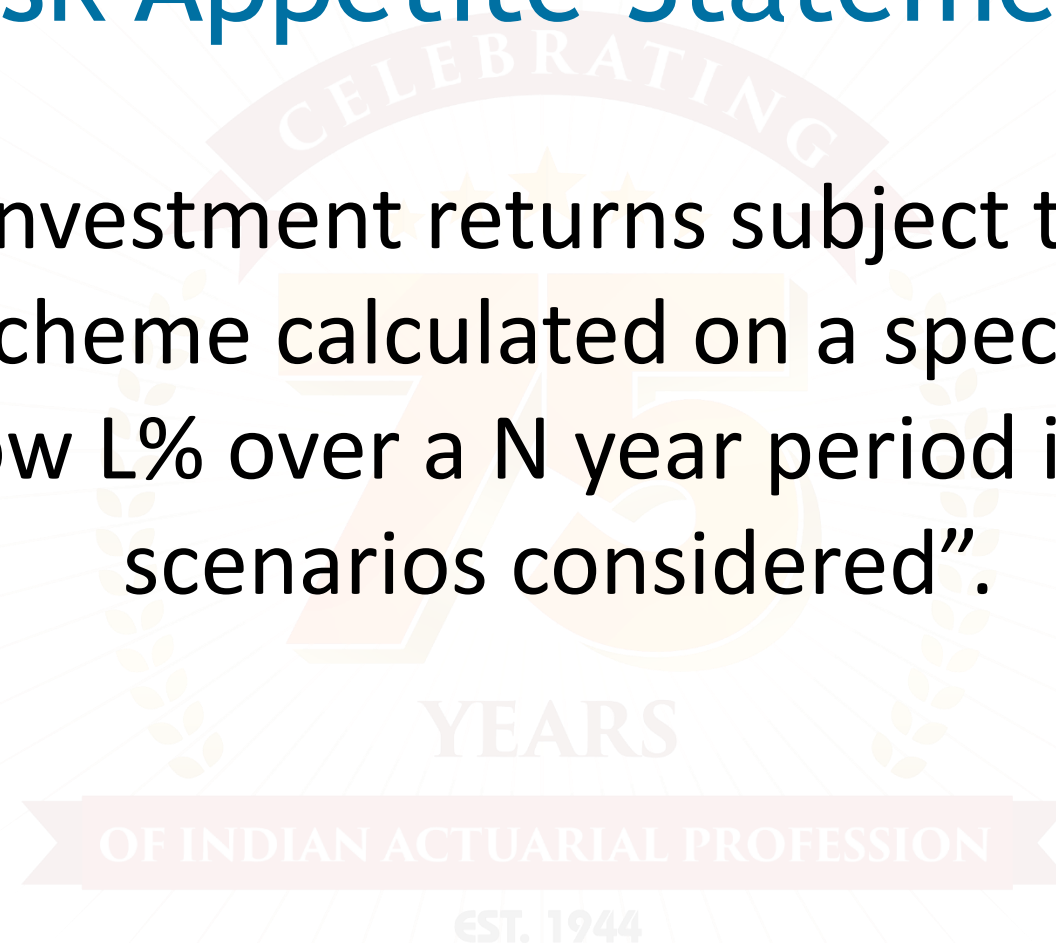
OF INDIAN ACTUARIAL PROFESSION

EST. 1944

Example ?

Risk Appetite Statement

“Maximise investment returns subject to the funding level of the scheme calculated on a specified basis, not falling below $L\%$ over a N year period in $M\%$ of the scenarios considered”.



What could we do?

Defined Benefit Plans

Long Term Funding Approach

Liability Driven Investment (LDI) Strategy

CELEBRATING
75
YEARS
OF INDIAN ACTUARIAL PROFESSION
EST. 1944

Deep Dive - Long term funding DB plans

Funding and more - UK example

MFR

Scheme Specific Funding

Integrated Risk management

- Minimum Funding ratio
- Actuarial bases: GN27
- Recovery period fixed

- Technical Provisions introduced
- Principles based
- Sponsor Covenant

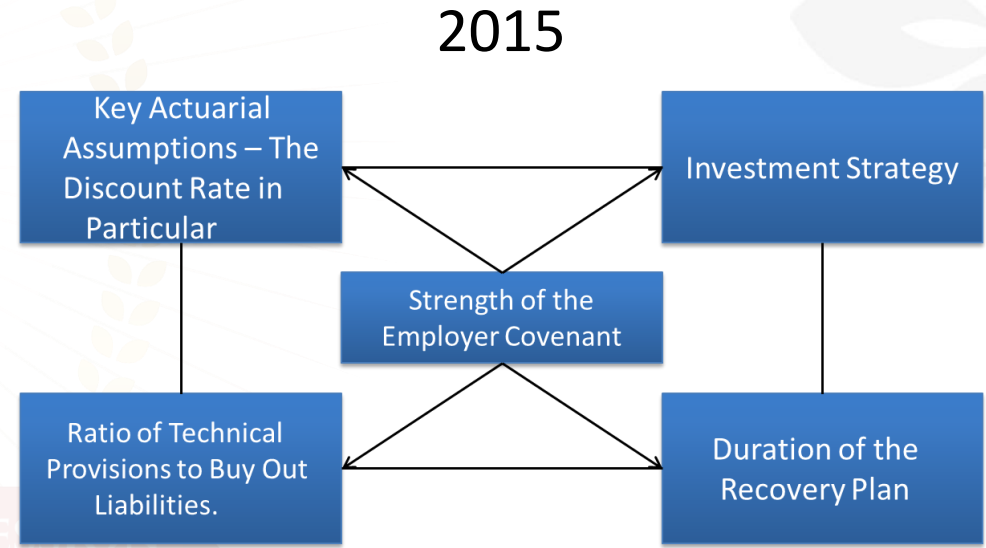
1997 2004

Pension Act 1995

- Employee disclosure requirements
- Capped Inflation linked pensions
- Member Trustees
- MFR / Scheme Actuary role





Pensions Act 2004

- Pension Protection Fund
- The Pensions Regulator
- Debt on employer regs strengthen on wind up
- Capped Inflation linked changes
- Trustee Knowledge & Understanding requirements



Other examples...



| | Minimum Funding Requirements | Insolvency Protection | Other Special Features |
|--|--|--|---|
|  | <ul style="list-style-type: none"> • Minimum Funding Rules target full funding with in a specified period • Rules eased since 2008 | <ul style="list-style-type: none"> • Pension Benefits Guarantee Corporation | <ul style="list-style-type: none"> • Single Employer Plans • Multi Employer Plans |
|  | <ul style="list-style-type: none"> • Ongoing Test • Discontinuance Test | <ul style="list-style-type: none"> • No Insolvency Protection | <ul style="list-style-type: none"> • Permits disadvantageous amendments to Plan Design like benefit reductions subject to certain conditions |
|  | <ul style="list-style-type: none"> • Similar to an ongoing test • Restrictions on determining fund surplus | <ul style="list-style-type: none"> • No Insolvency Protection | |
|  | <ul style="list-style-type: none"> • Financial Assessment Framework based on market valuation & risk based financial requirements | <ul style="list-style-type: none"> • No Insolvency Protection | <ul style="list-style-type: none"> • Benefit reductions can be applied when recovery to full funding is not possible |

LDI Strategy

- Funding Objectives
 - Impact on Investment Strategy
- LDI Philosophy
 - Maximize the funding ratio given a specified risk tolerance



Key Questions

- Have the trustees and sponsor articulated their risk appetite and risk tolerance?
- What should be the liability hedging ratio?
- How to construct the liability hedging portfolio?
- What should be the investment strategy for the return generating component of the asset (investment) portfolio?

Constraints in the Indian Context

- Mandated Investment Pattern
- Lack(or Absence) of Risk Transfer Vehicles
- Focus on ALM approach?
- Insurer Managed Assets



What could we do?

Defined Contribution Plans

CDC Plans: A Game Changer in the DC Space



Collective DC Plans: A Game Changer in the DC Space

• Typical Risks for DC Plan Members

- Capital Risk
- Inflation Risk
- Pension Conversion Risk

• Risks Addressed by Life Style Funds



- Key Features of CDC Plans
 - Collective Investment by investment professionals, not members
 - Benefits expressed in income terms, not capital accounts
 - Pensions are paid from the plan
- The UK Experience

So what next?

*Everyone
find Avenues to
raise*

*awareness
IAI efforts to*

*continue
engaging with
Government
Stakeholders*

*Opportunities
for insurers and
consultancies*

**Watch out for
Social Security Code
APY and PMSY Growth
NPS Growth**

*We need to make sure
stakeholders not under
false sense of security
for too long*

*We don't want to have to
say "We told you so!"*



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Thank You