

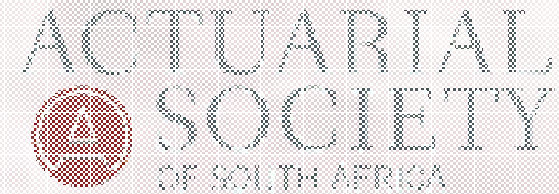


Defined Contribution and Age Related Benefits: The Equitable Myth

Neil Parkin and Vivek Moodley

“The worst form of inequality is to try to make unequal things equal.”
Aristotle

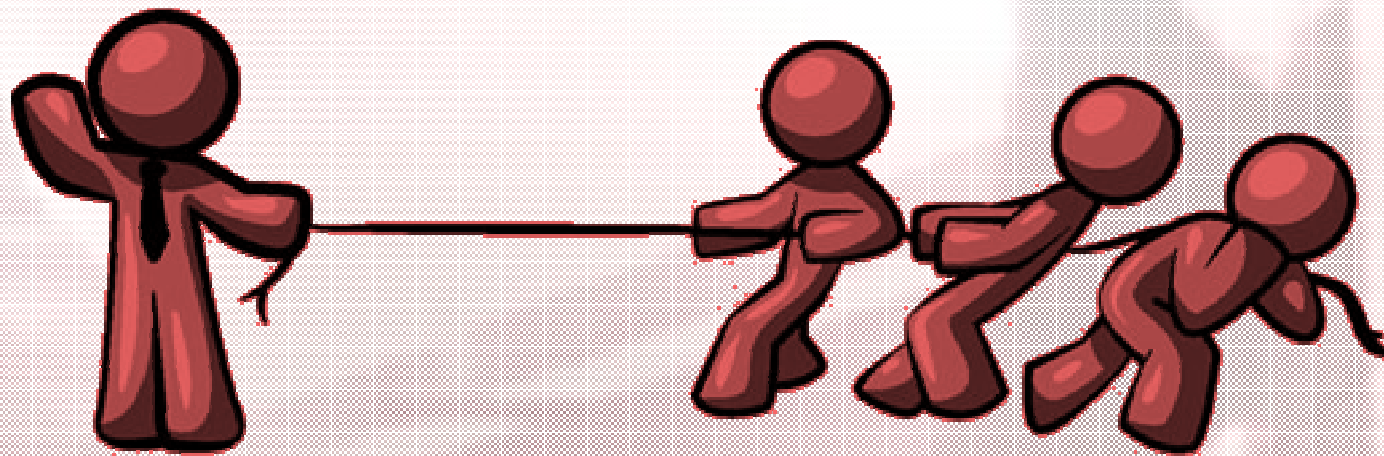
Today's Agenda



1. Introduction... and some background
2. Defined Contribution Risk and Age Related Benefits
3. Why would we want this?
4. Reviewing DC Risk schemes
5. The Role of the Intermediary
6. Structuring DC Risk schemes
7. The Impact of AIDS
8. Conclusion

Introduction

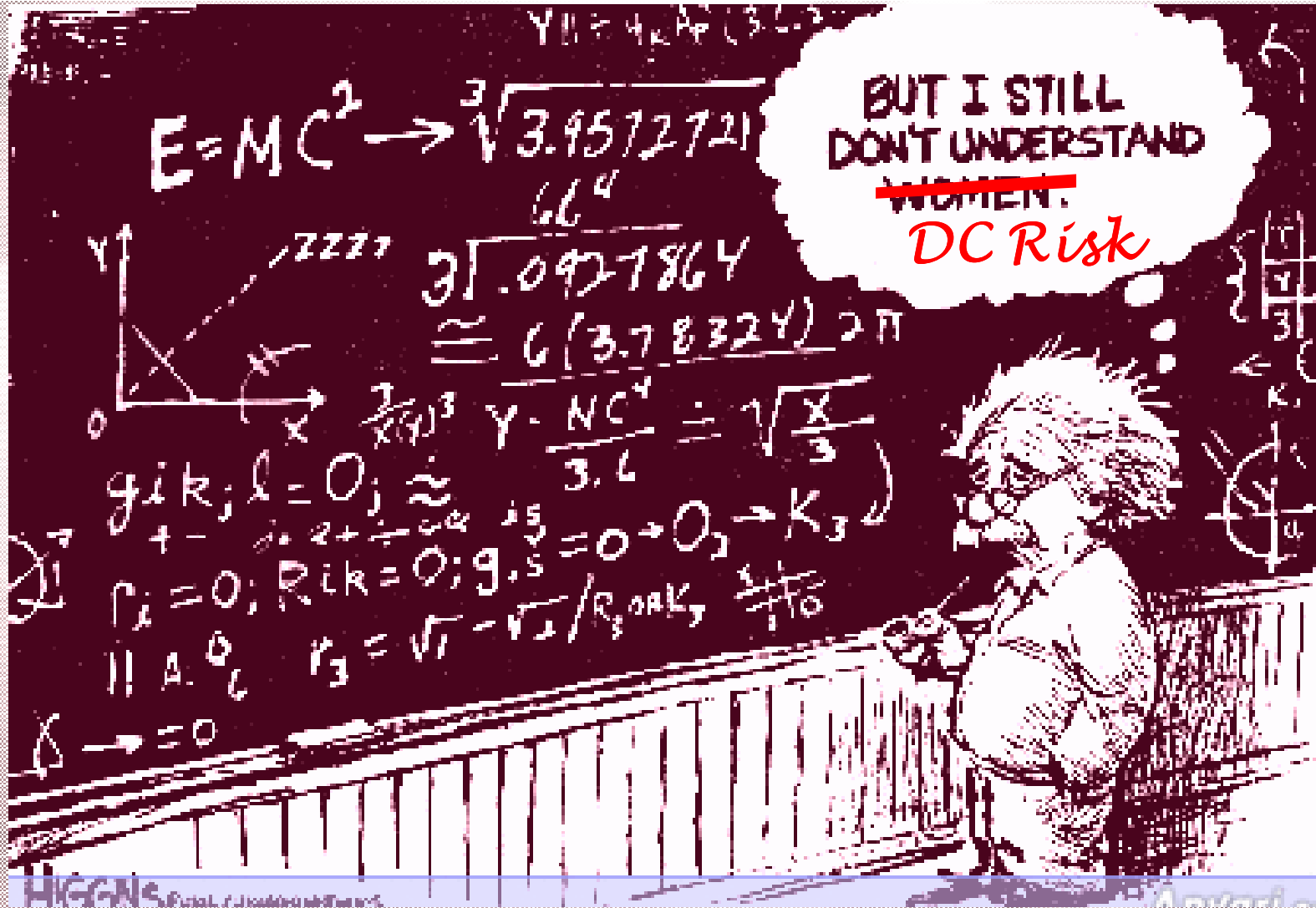
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What's not covered?

- Assumption of basic group risk understanding
- Focus on death benefits
- Lump Sum Disability briefly discussed in paper
- How to price a DC Risk scheme is outlined in paper
- Credibility theory and free cover limits are not part of the scope

Complexity



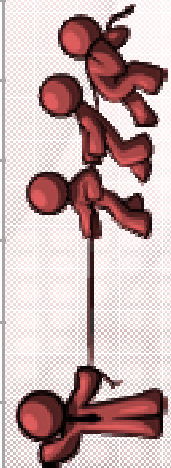
What is Defined Contribution Risk?

- Retirement fund changes
 - Defined Benefit vs. Defined Contribution
 - 1990s – many conversions to DC funds
 - Limit employer costs and transfer investment risk
- Cost of risk cover is pre-determined and fixed
- Amount of cover fluctuates
- A useful means of limiting risk costs in the face of increasing mortality experience

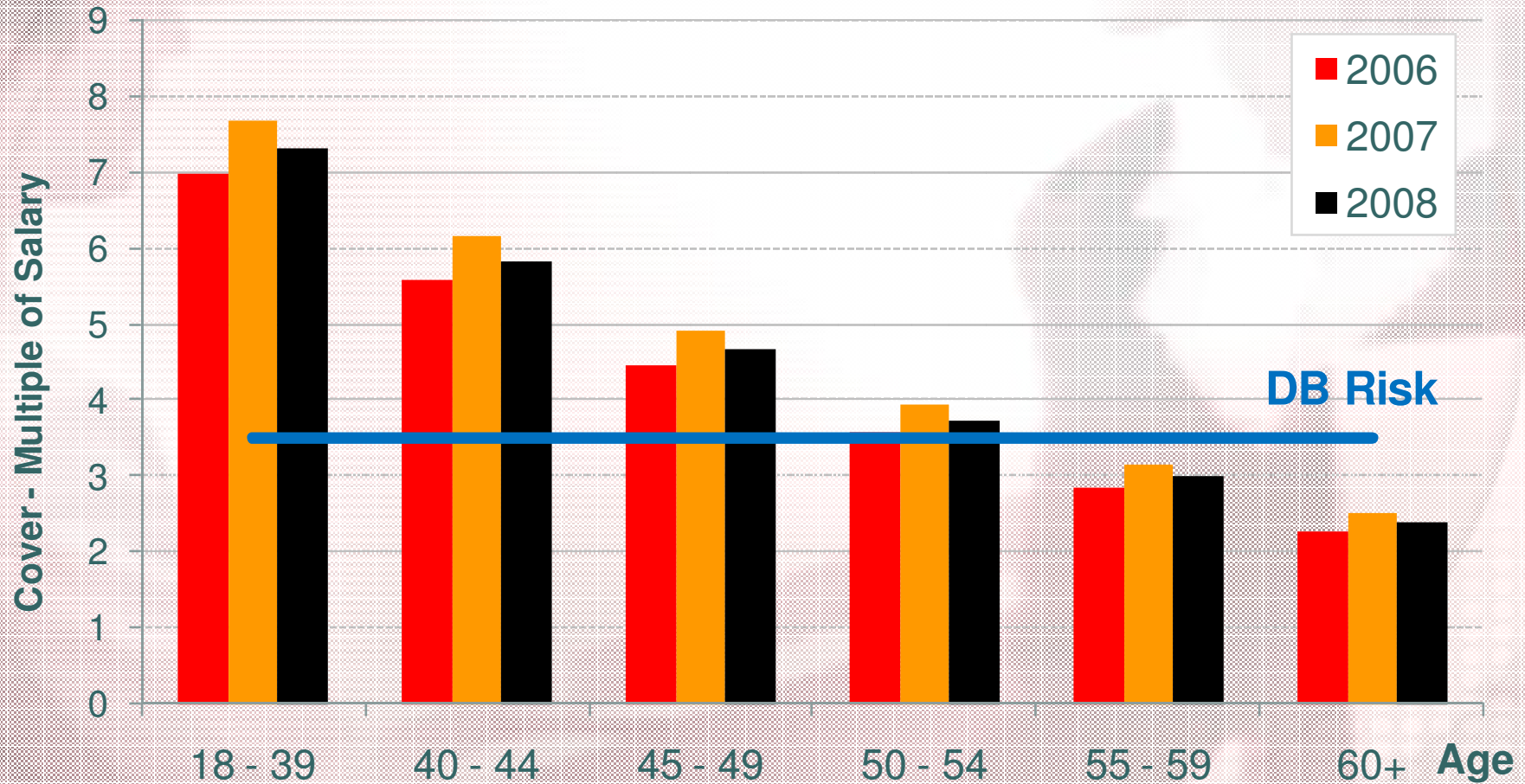
What are Age Related Benefits?

- Increasing provision of risk by retirement funds
 - cross-subsidy was questioned
- DC structured retirement funds increased awareness
- Age related benefits
 - cover varies by age
 - popularised
- What is reasonable?
- DC Risk = Age Related Cover?

Age	Cover as a multiple of salary
18 - 39	6.0 9.0
40 - 44	4.0
45 - 49	3.5
50 - 54	3.0
55 - 59	2.5
60+	2.0 0.25



What are Age Related Benefits?



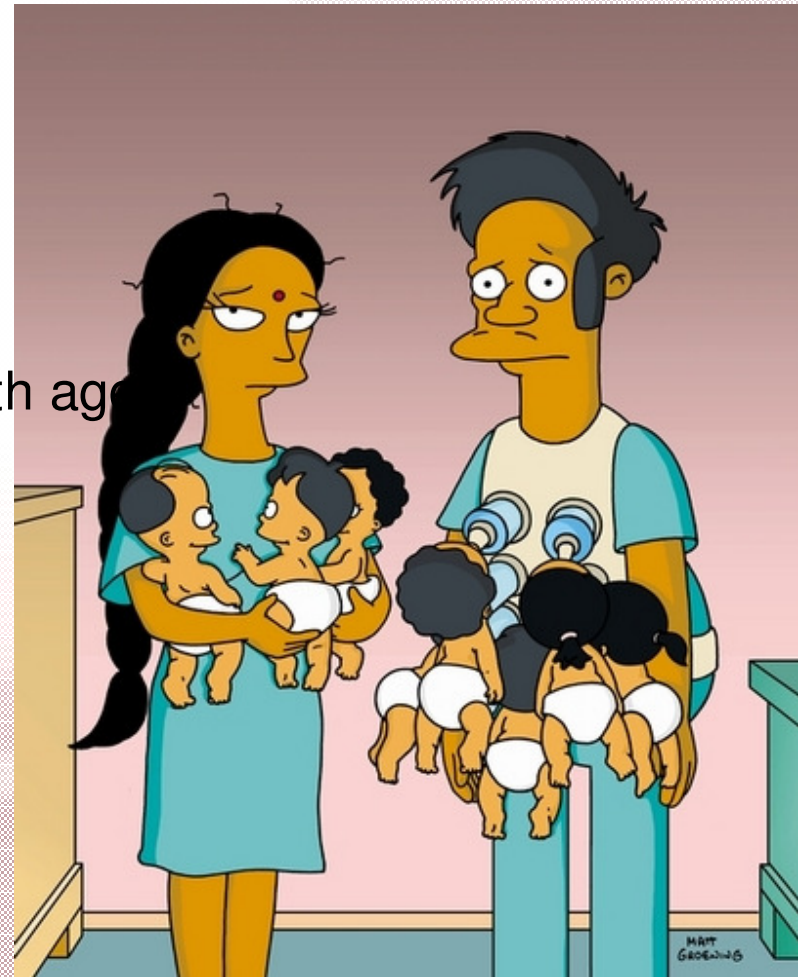
Why would we want this?

- Members' needs
- Cost saving or limiting
- Reducing cross-subsidy

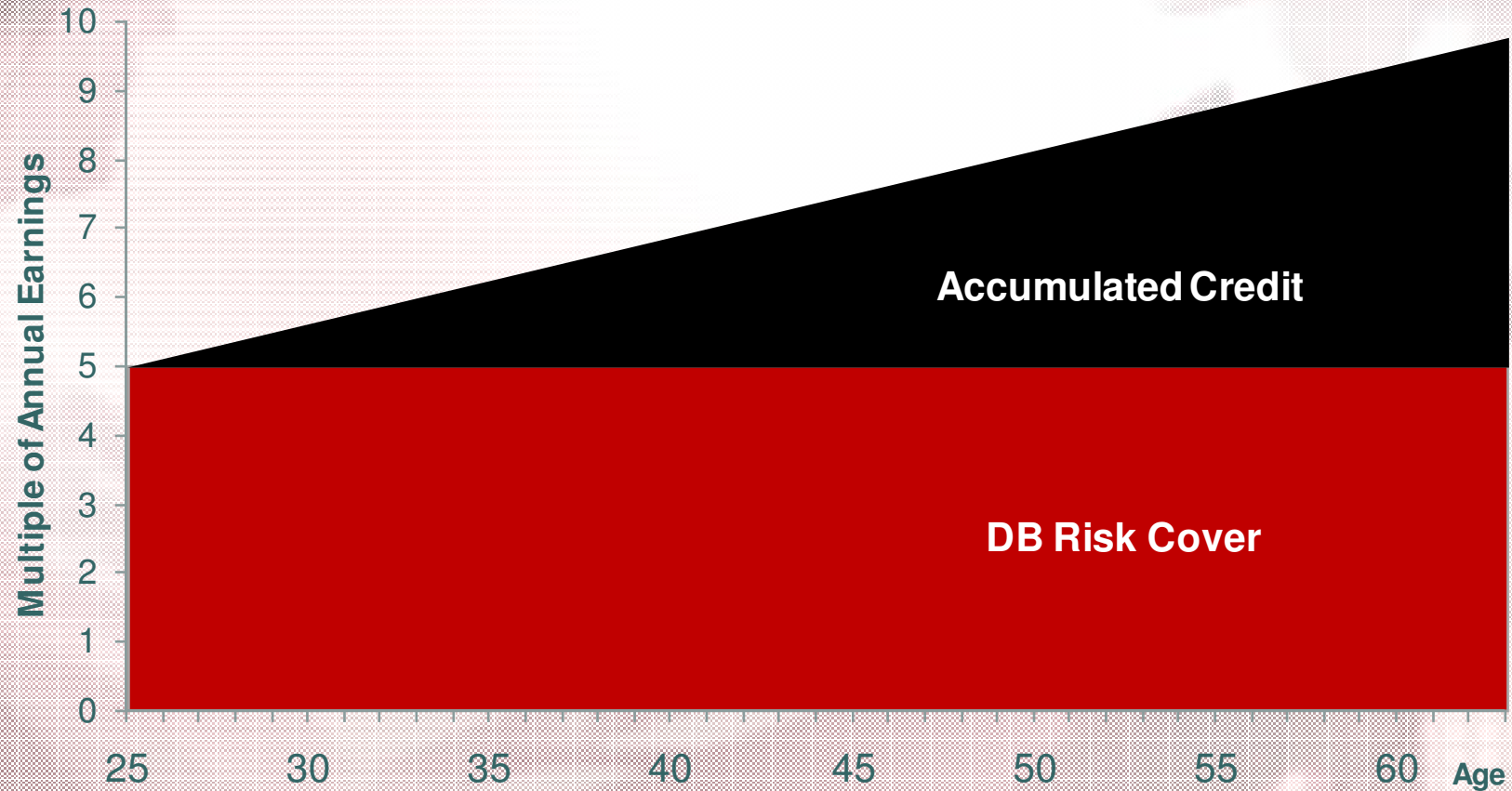


Needs...

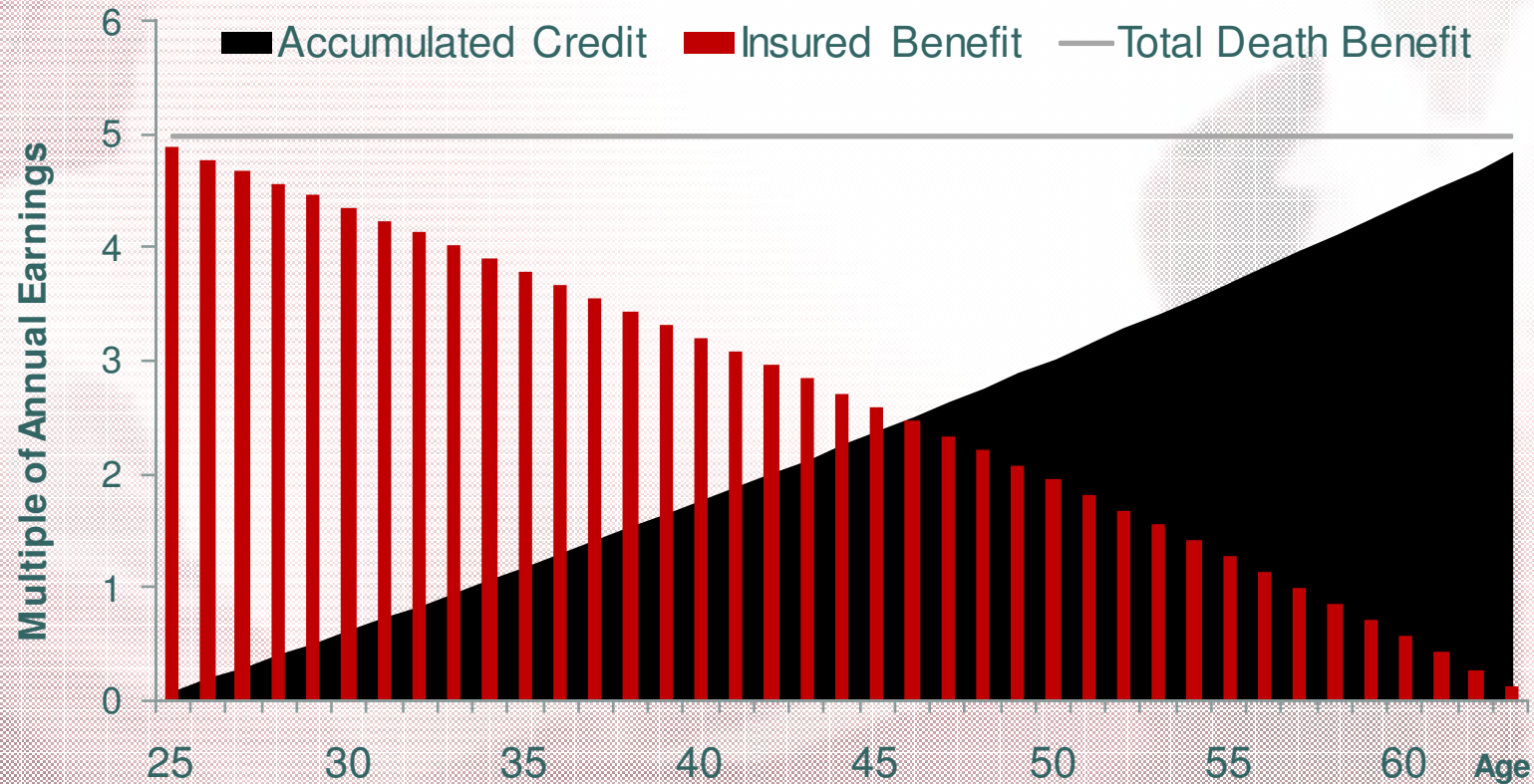
- Complex!
- Number of dependants?
 - Very different needs
- Could argue – reducing need with age



Needs...



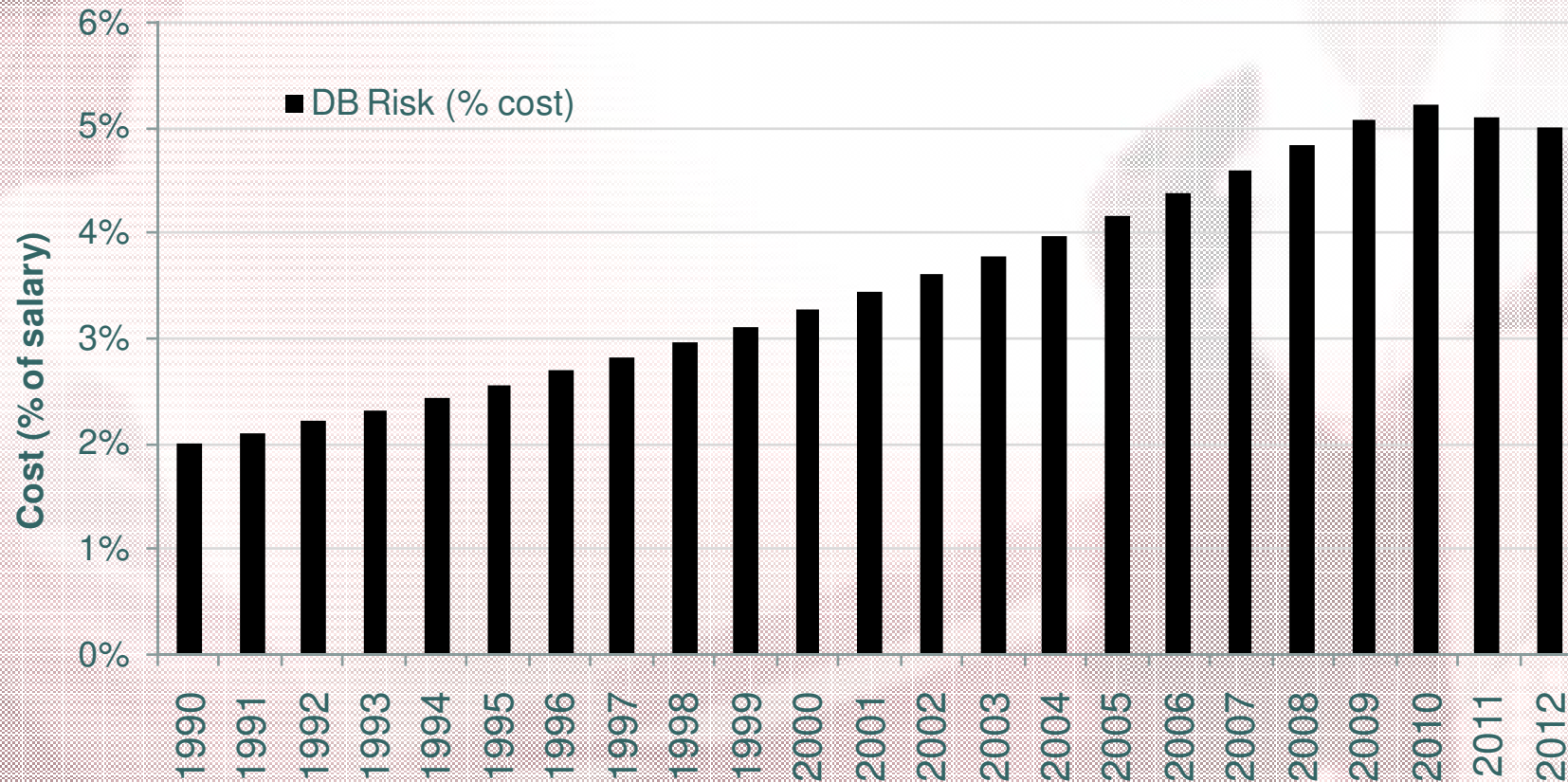
Needs...



Needs...

- Complex!
- Number of dependants?
 - Very different needs.
- Could argue - reducing need with age...
 - Equitable to reduce life cover by assumed retirement savings?
 - Does it make sense?
 - Preservation of savings?!

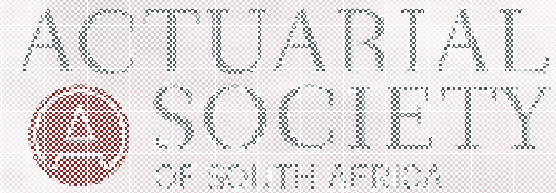
Cost Saving



Cost Saving



Removing Age Cross-Subsidy



Age cross-subsidy might be reduced, but other (and potentially larger) cross-subsidies exist...

- Gender
 - More men die!

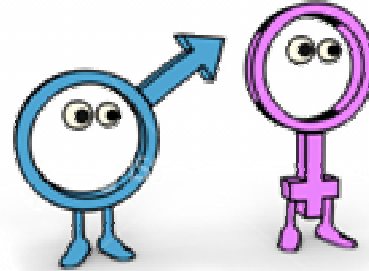


Light Female Mortality

Heavy Male Mortality

Removing Age Cross-Subsidy

Age cross-subsidy might be reduced, but other (and potentially larger) cross-subsidies exist...

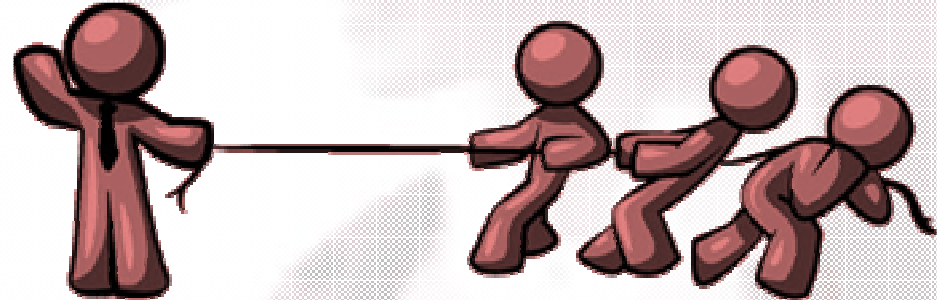


- Gender
- Income and Occupation
 - Higher vs. Lower income groups
 - Social redistribution
 - Executive schemes
- Region
- Health status (including HIV/AIDS)



How much cross-subsidy is ok?

- Who are you asking?
- Can impact retirement savings...
- What is reasonable? And who calculated it anyway?
- Cross-subsidy is widely accepted and encouraged
- Fairness versus equity

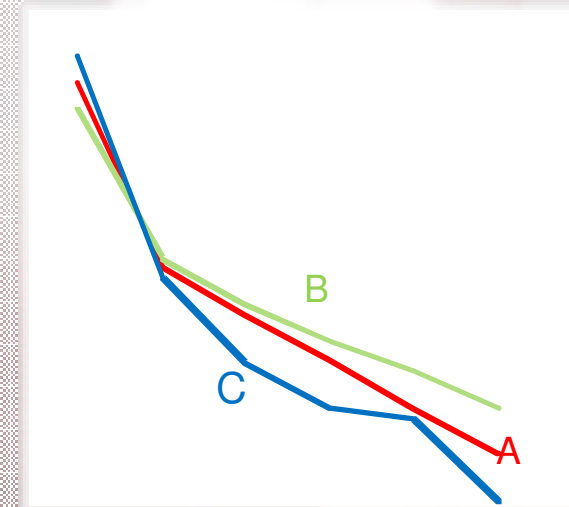


Is an imperfect DC Risk structure better or worse than a defined benefit structure?

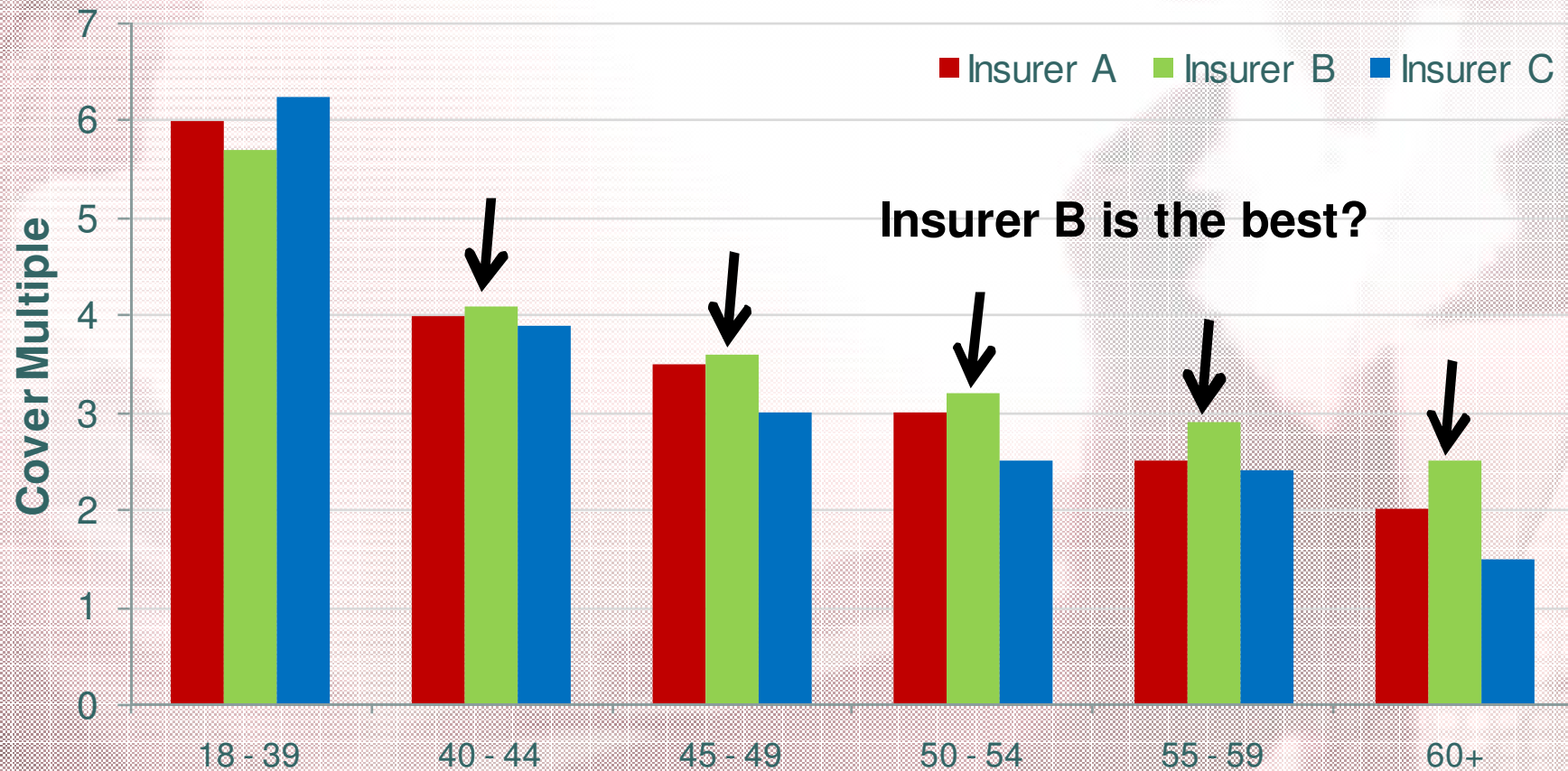
Reviewing a DC Scheme

- Comparing Insurers can be difficult

Age	Cover as a multiple of salary		
	Insurer A	Insurer B	Insurer C
18 – 39	6.0	5.7	6.3
40 – 44	4.0	4.1	3.9
45 – 49	3.5	3.6	3.0
50 – 54	3.0	3.2	2.5
55 – 59	2.5	2.9	2.4
60+	2.0	2.5	1.5



More than meets the eye



More than meets the eye

- Depends on member distribution

Age	Cover as a multiple of salary			% of Members	% of Cover
	Insurer A	Insurer B	Insurer C		
18 – 39	6.0	5.7	6.3	50%	60%
40 – 44	4.0	4.1	3.9	15%	15%
45 – 49	3.5	3.6	3.0	9%	10%
50 – 54	3.0	3.2	2.5	7%	5%
55 – 59	2.5	2.9	2.4	9%	5%
60+	2.0	2.5	1.5	10%	5%




More than meets the eye

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50 – 54	3.0	3.2	2.5	7%	5%
55 – 59	2.5	2.9	2.4	9%	5%
60+	2.0	2.5	1.5	10%	5%

More than meets the eye

- Total cover provided can help...
- But:



Age	Total Cover		% of Members
	Insurer A	Insurer B	
18 – 39	R 600,000	R400,000	50%
40+	R 400,000	R600,000	50%
Total	R1,000,000	R1,000,000	100%

The Role of the Intermediary

- Complex!
- **Qualified & experienced Consultants**
- Great responsibility for trustees
- Structuring of initial and ongoing benefits
- Help set up Risk Policy Statement
- Communication to members
- Assessment of best insurer
- DC Risk requires more time... more generous fees?



Structuring a DC Scheme

- Objective
 - Why?
 - What risk benefits are important?
 - How much do you contribute to risk?
 - How do you feel about cross-subsidy?
- Loss of Cover
 - On initial change from DB Risk to DC Risk
 - Voluntary Schemes
 - Conversion Options
- Risk Policy Statement - Governance
 - Create this on initial setup and review every 3 years
 - Defines the intention of the scheme
 - Deals with complexities e.g. mortality curves, equity

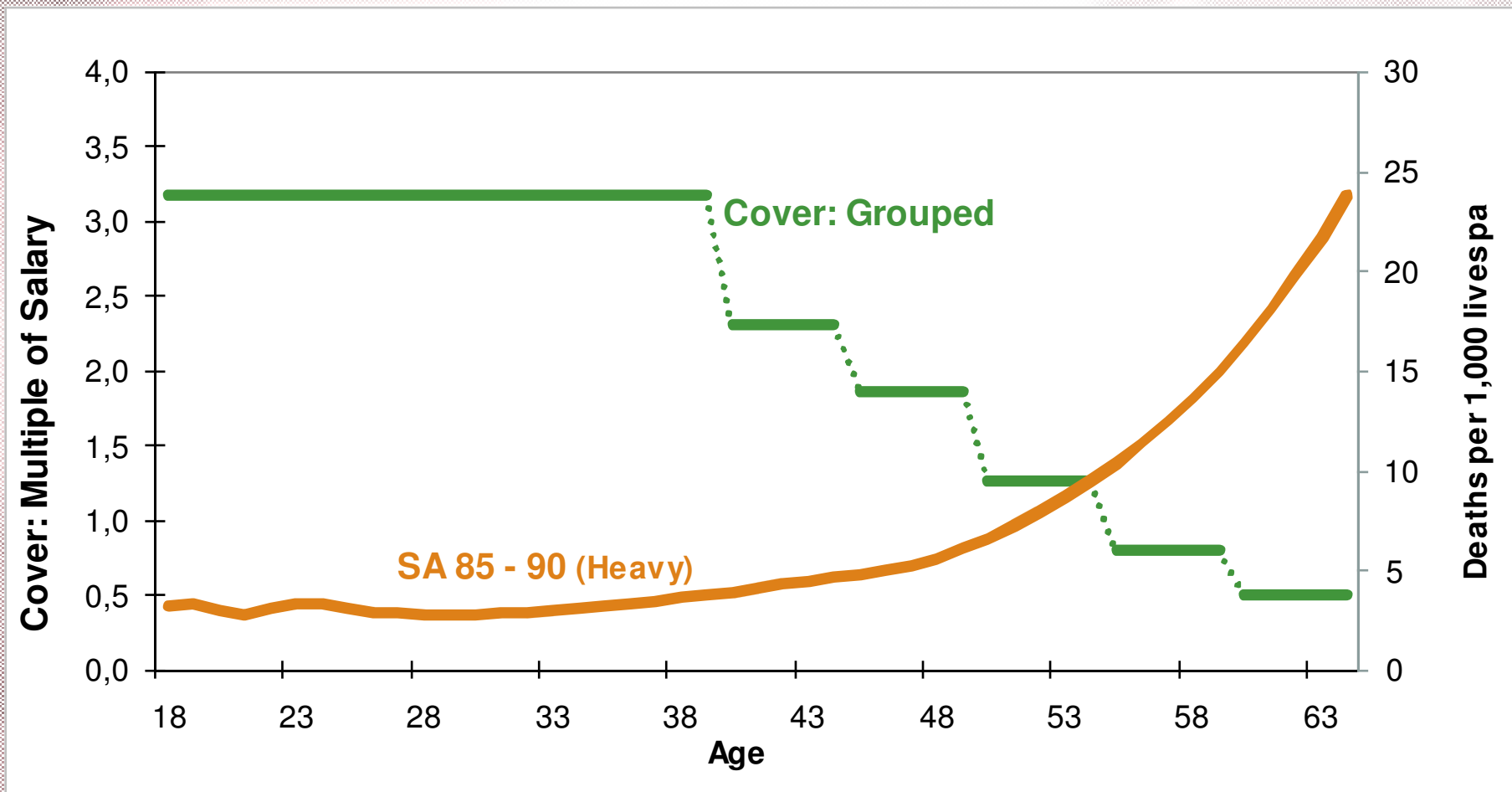


Structuring a DC Scheme

- Consult members and stakeholders
 - Easier to get buy-in from new members
 - Existing members may be resistant to change
- Advice – DC Risk schemes are complex!

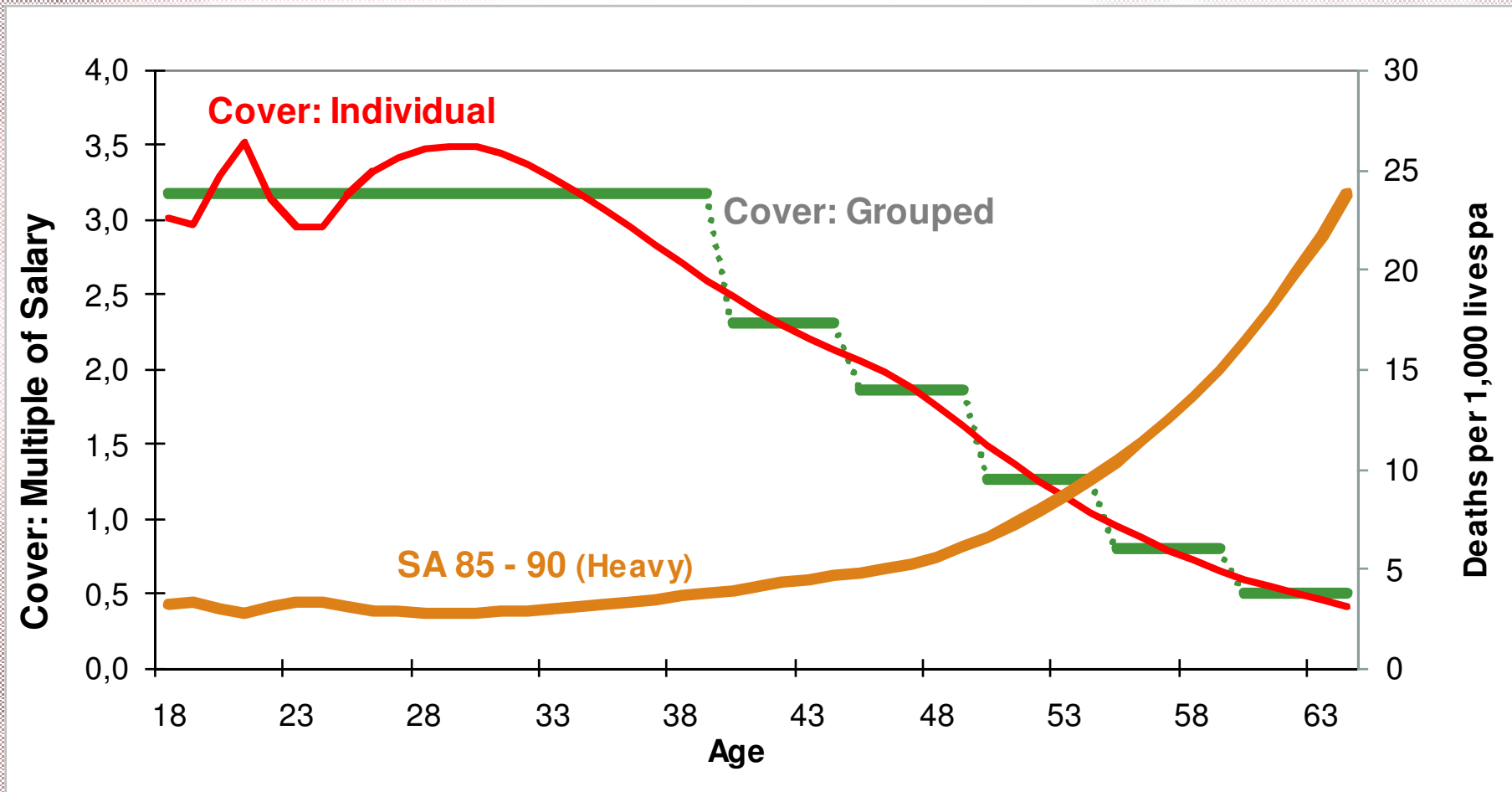
Structuring a DC Scheme

- How many age bands?



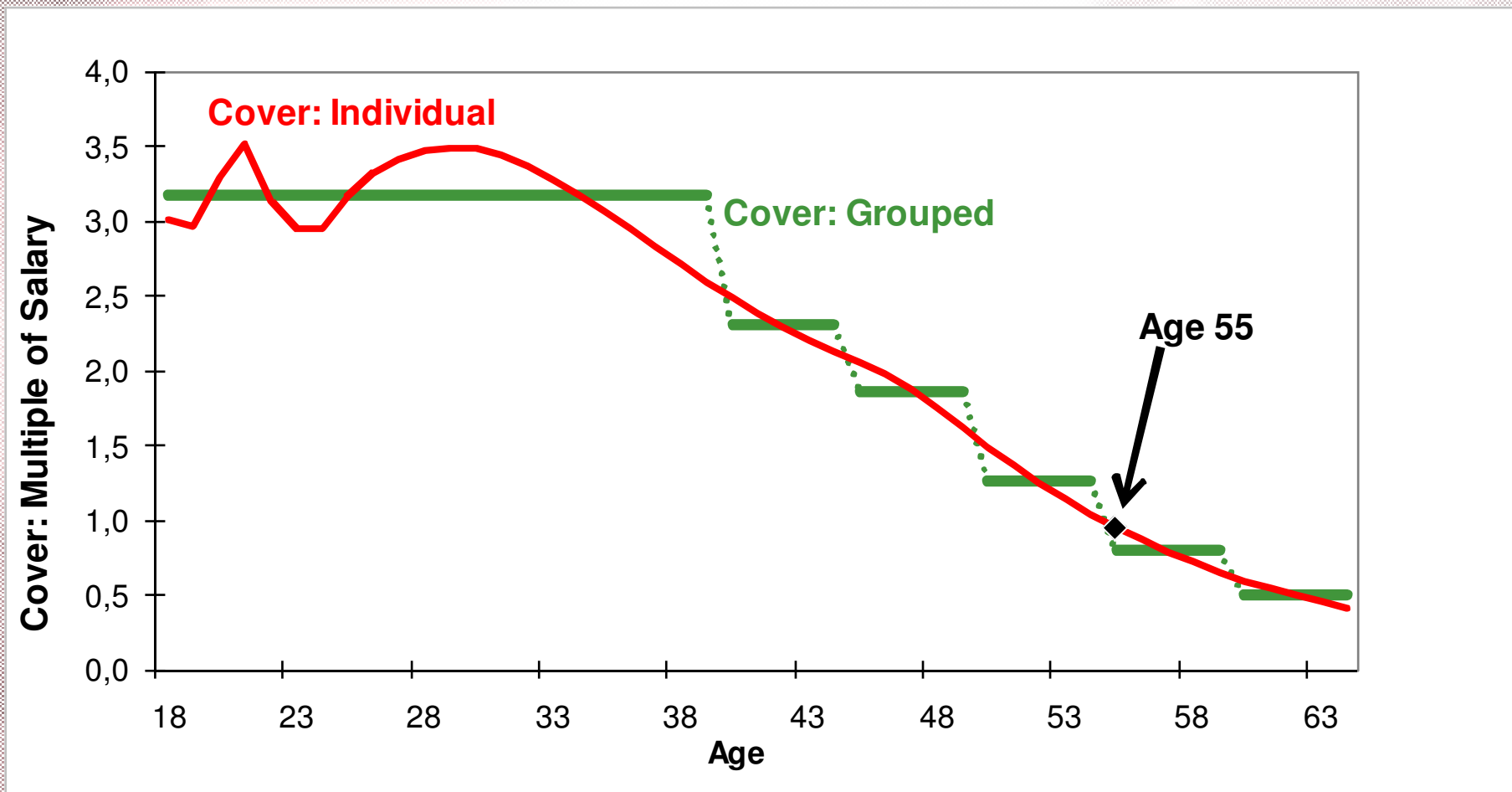
Structuring a DC Scheme

- Individual Age Bands



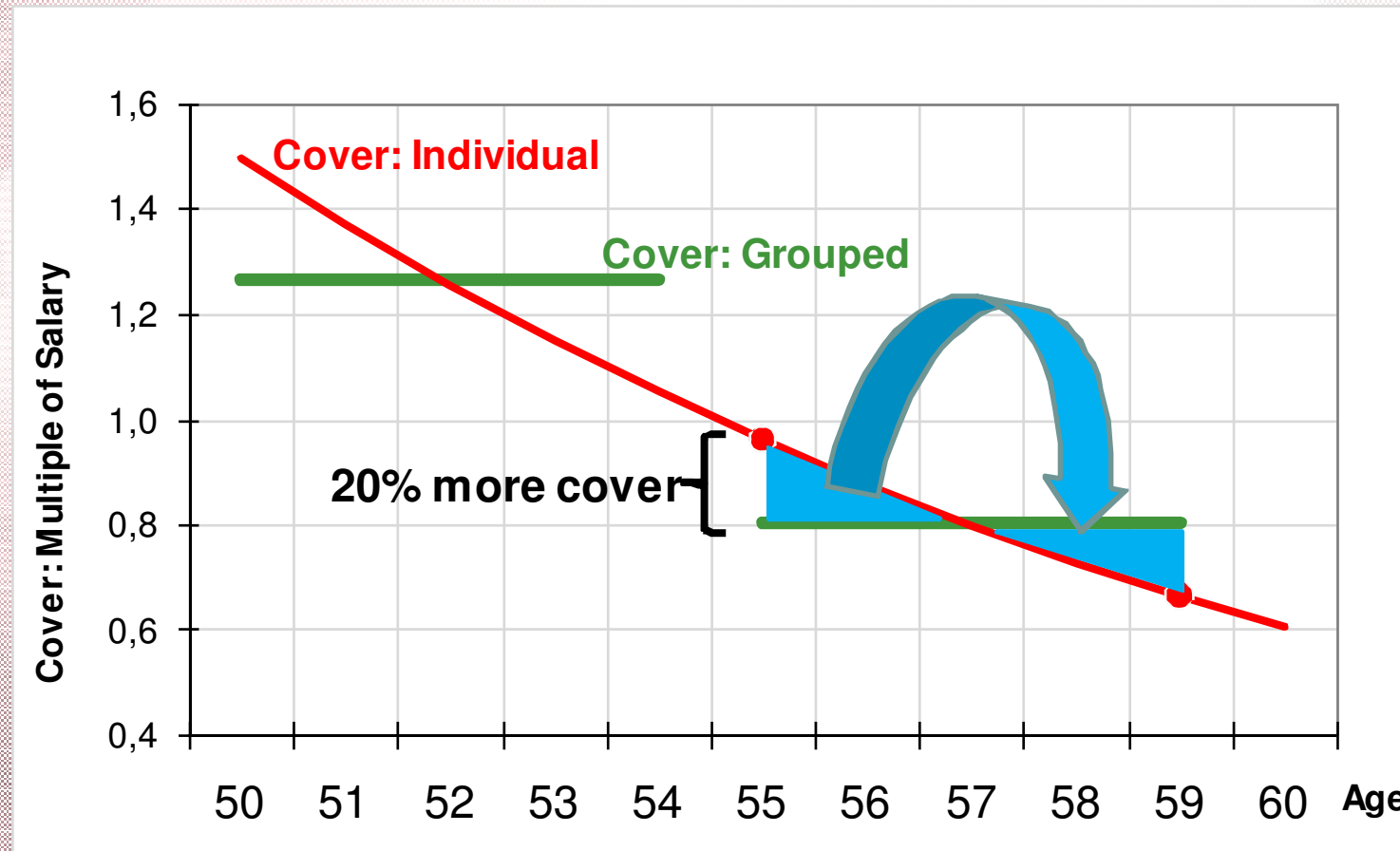
Structuring a DC Scheme

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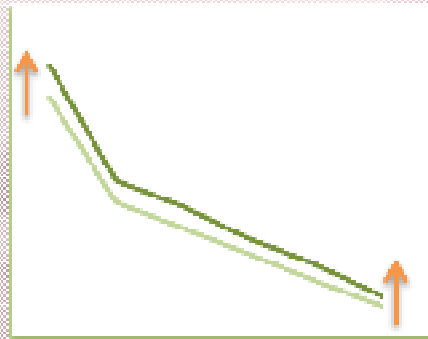
Structuring a DC Scheme

- Individual Age Bands



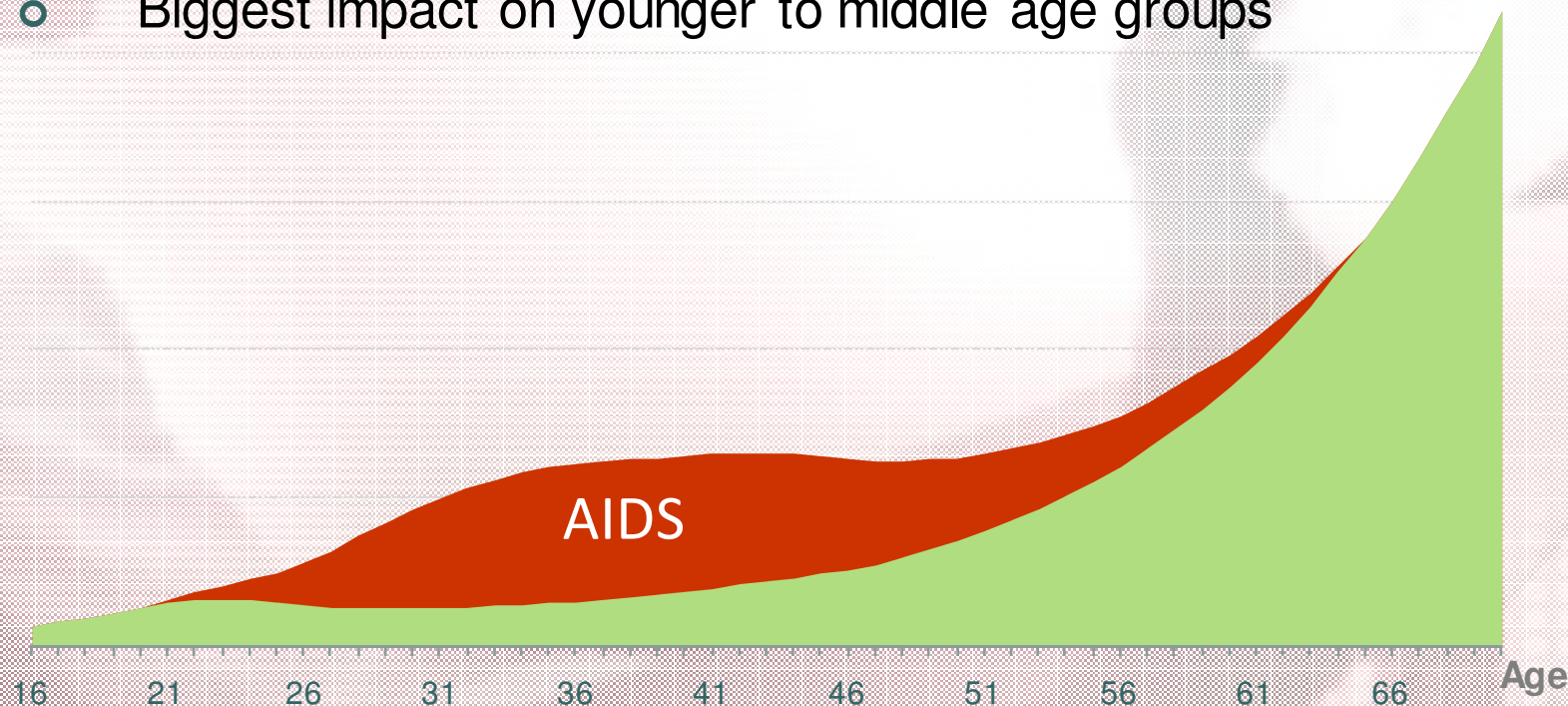
Structuring a DC Scheme

- Age bands
- Need to use a mortality curve to determine relative benefit levels
 - Scheme's mortality curve
 - Published mortality tables
 - Insurer's mortality basis
- Important future step – checking appropriateness of mortality curve

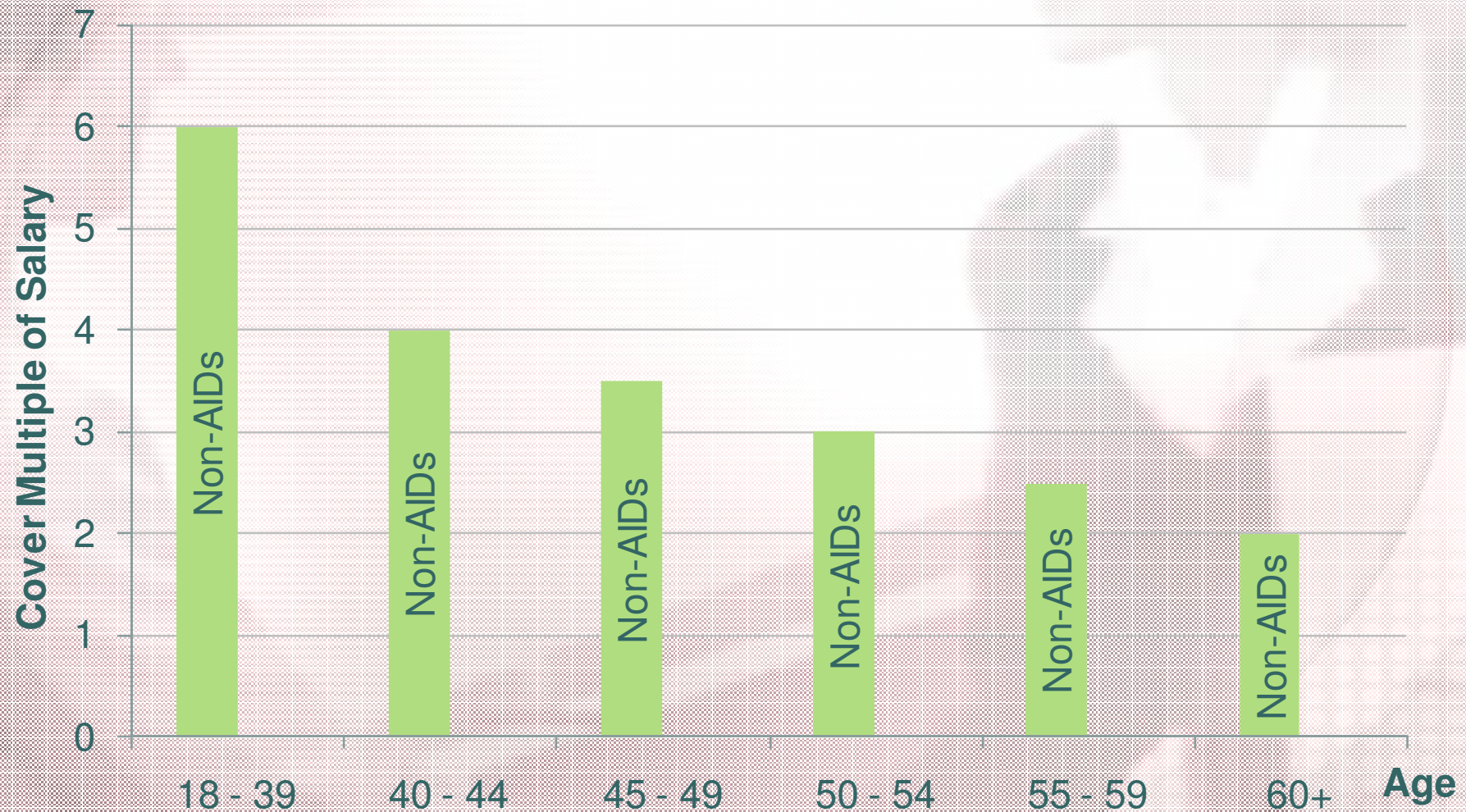


The impact of AIDS

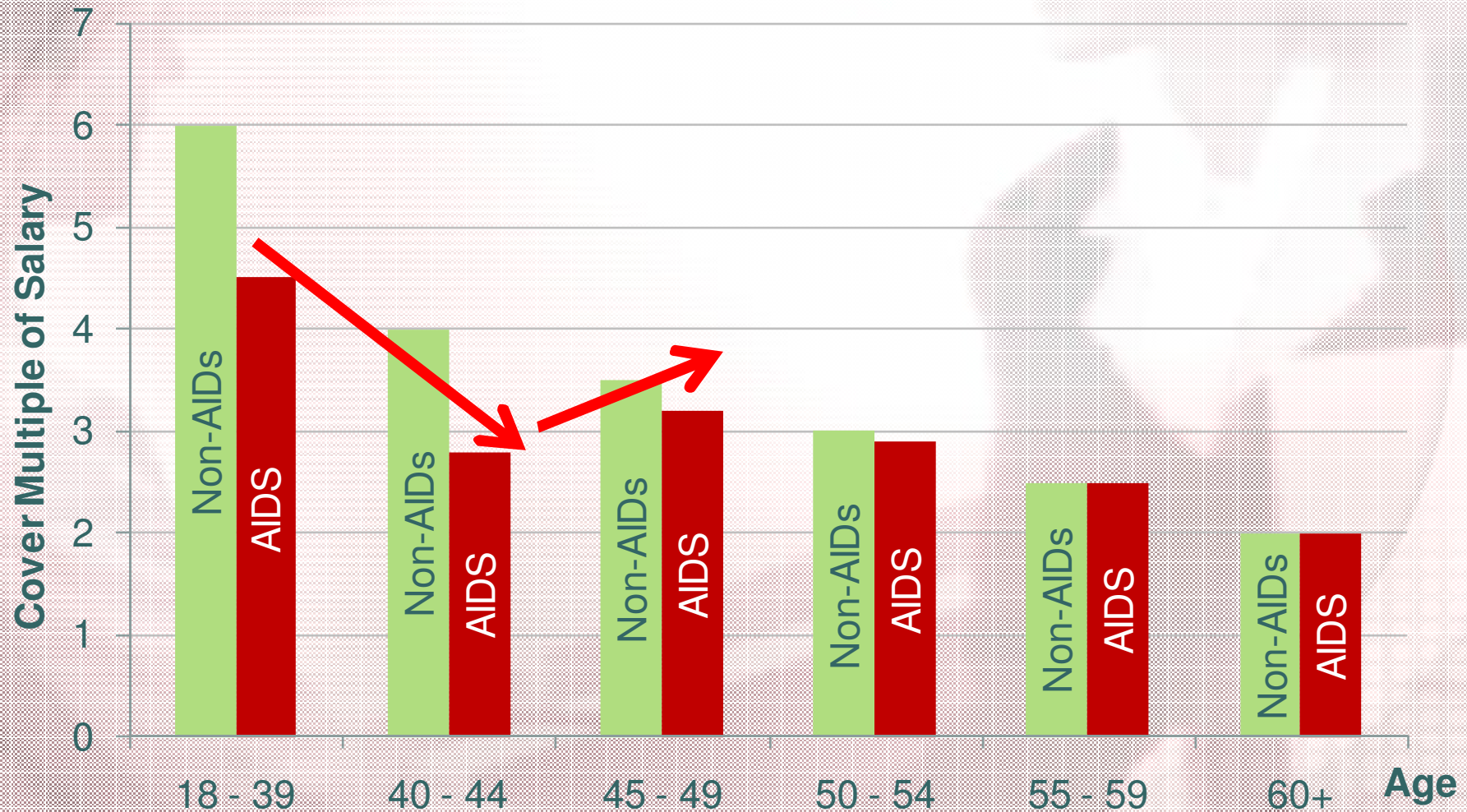
- HIV/AIDS – a major cause of escalating risk costs and hence DC structures
- Biggest impact on younger to middle age groups



The impact of AIDS



The impact of AIDS

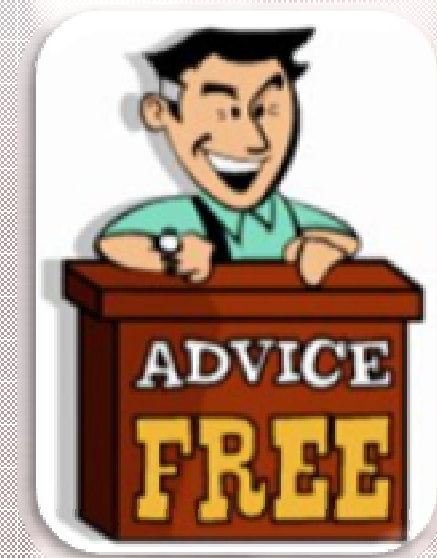
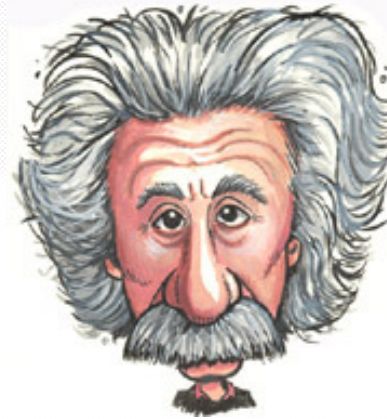


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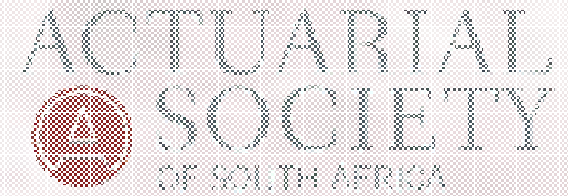
- Communicating decreasing and then increasing cover
- Benefits provided in line with expected mortality reduces cross-subsidy
- Need is not addressed?
 - Older members get more cover than younger members
 - Precisely where AIDS increases cost is where the need is the greatest
- The needs argument can thus be challenged
- Providing decreasing cover in line with increasing age works, but only if **greater cover is allocated to lives that cost less to insure**

Conclusion

- Complex
- **Governance**
- Objective of providing cover? Why?
 - Risk Policy Statement
 - Equity and cross-subsidy
- Need good communication
- Annual Review critical
 - Understand impact of assumptions and curves
- Good advice



Conclusion

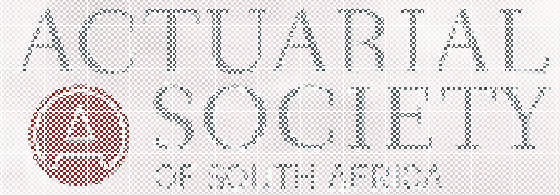


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Thanks

- Eric Welz (RGA Re)
- Nico Van Der Colff (Old Mutual)
- Dean Boshoff (Old Mutual)

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