



# Free Cover Limits & Underwriting in Group Risk Business

Grete Kritzinger & Nico van der Colff

RGA Reinsurance Company of South Africa Limited



# Agenda

ACTUARIAL SOCIETY

OF SOUTH AFRICA

- 1. Disclaimers
- 2. FCLs & Volatility
- 3. SA market
  - 1. FCL
  - 2. UW
- 4. Conclusion



### **Disclaimers**



- Very little written on FCLs or group UW
- International markets
- SA market
- Our opinions
- Purpose of FCLs and modelling
- Presentation content

Stu's Views

© 2002 Stu All Rights Reserved www.stus.com

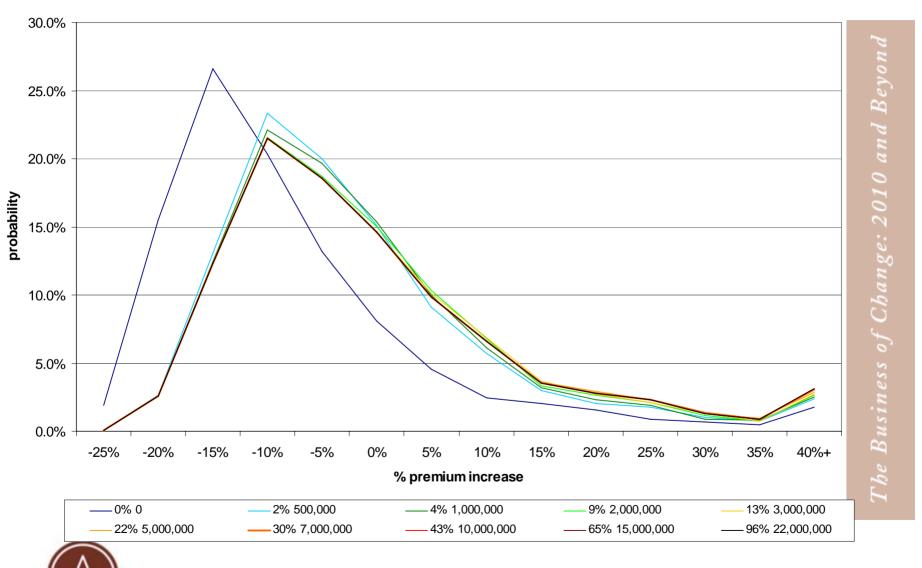


"I see you signing this liability waiver, just in case you act on my advice."



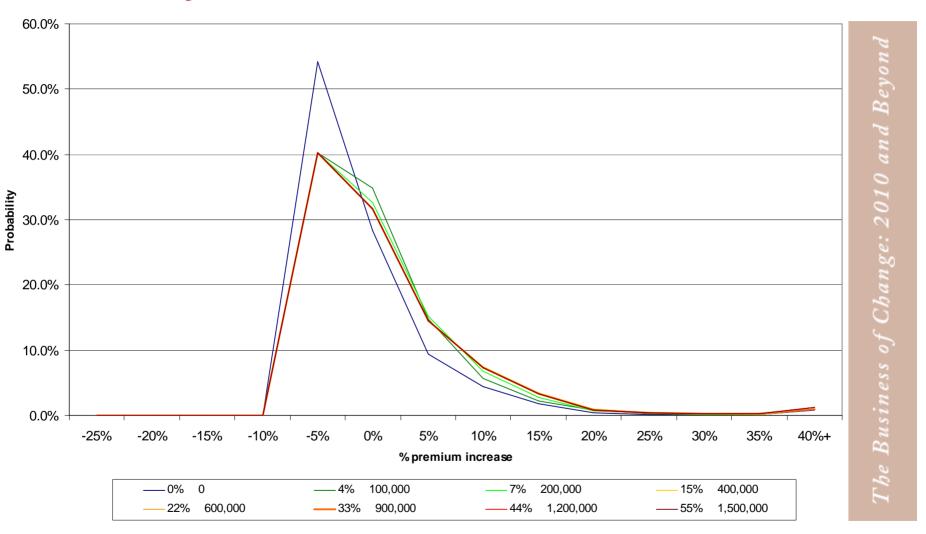
# Volatility – 5000 members





## Volatility – 250 members

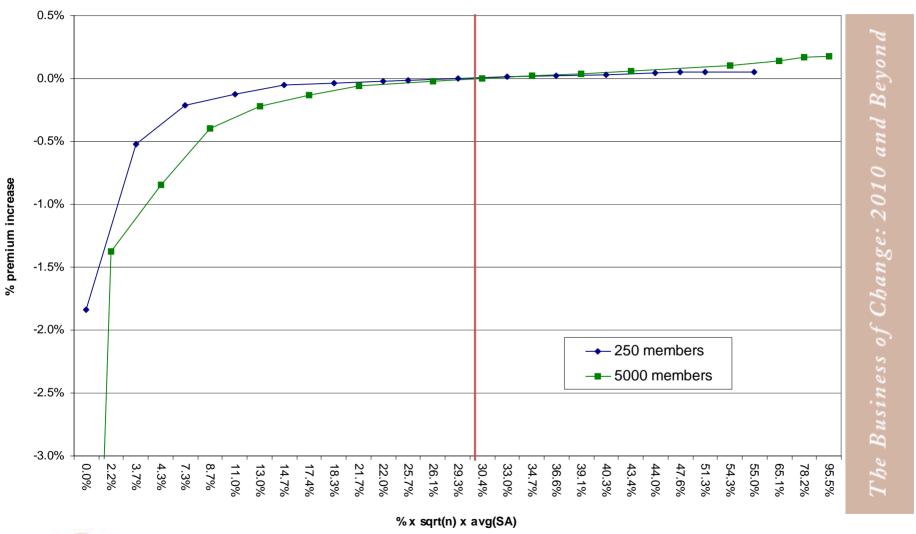






# FCL vs expected premium change



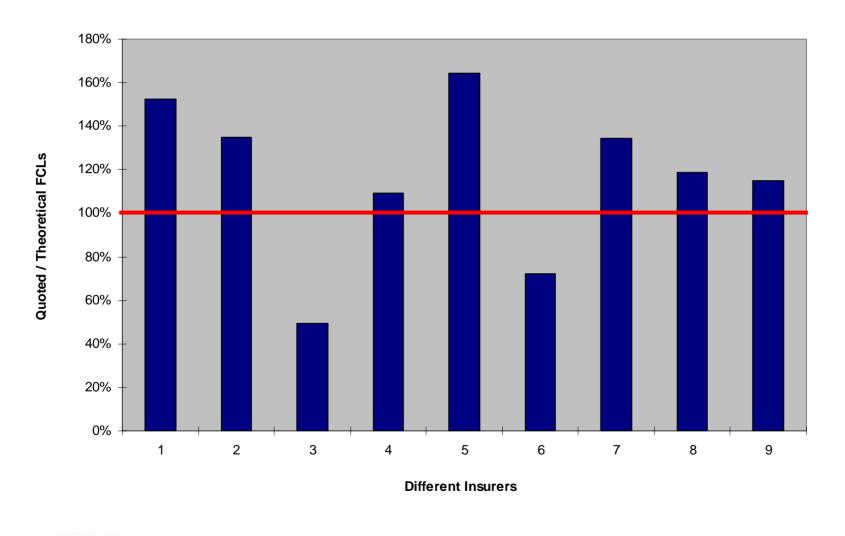




### **Theoretical vs Quoted FCLs**









### **Quoted FCLs in South Africa**



	Min FCL	Max FCL	Ratio	Min # mems uw	Max # mems uw	Min % cover uw	Max % cover uw
Scheme 1	R4.5m	R10.0m	222%	1	23	7%	33%
Scheme 2	R7.5m	R12.0m	160%	3	13	0%	1%
Scheme 3	R6.5m	R10.0m	154%	0	3	0%	0%
Scheme 4	R0.3m	R1.0m	333%	0	5	0%	10%
Scheme 5	R0.4m	R1.2m	300%	0	4	0%	27%
Scheme 6	R1.7m	R2.5m	147%	3	9	3%	15%
Scheme 7	R0.2m	R0.2m	139%	0	6	0%	0%
Scheme 8	R2.0m	R8.5m	425%	0	46	0%	57%
Scheme 9	R8.5m	R12.5m	147%	17	61	3%	7%
Scheme 10	R3.5m	R8.0m	229%	0	29	0%	2%



### **Quoted FCLs in South Africa (continued)**



	Co A	Co B	Co C	Co D	Co E	Co F	Co G	Co H	Co I
Scheme 1	R7.2m	R7.2m	R7.0m	R7.2m	R7.2m	R7.2m	R7.2m	R4.5m	R10.0m
Scheme 2	R7.5m	R7.5m	R10.0m	R7.5m	R7.5m	R7.5m	R7.5m	R8.5m	R12.0m
Scheme 3	R6.5m	R6.5m	R7.0m	R6.5m	R6.5m	R6.5m	R6.5m	R8.5m	R10.0m
Scheme 4	R0.3m	R0.6m	R1.0m	R0.6m	R0.3m	R1.0m	R0.3m	R0.5m	R0.4m
Scheme 5	R0.9m	R0.6m	R1.2m	R0.6m	R0.4m	R0.6m	R0.6m	R0.7m	R0.5m
Scheme 6	R2.4m	R2.0m	R2.0m	R2.5m	R2.0m	R2.5m	R2.0m	R1.7m	R2.0m
Scheme 7	R0.2m	R0.2m	R0.2m						
Scheme 8	R6.6m	R2.0m	R4.0m	R5.5m	R3.5m	R5.5m	R5.5m	R6.5m	R8.5m
Scheme 9	R12.5m	R8.5m	R12.0m						
Scheme 10	R4.9m	R5.5m	R6.0m	R6.0m	R3.5m	R6.0m	R6.0m	R8.0m	R8.0m

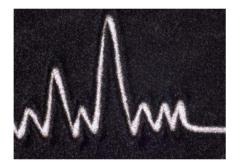


# **Group Underwriting in South Africa**



- Approaches are not consistent
- Underwriting requirements vary significantly





Testing Threshold =

Cost of the Test

Present Value Mortality Savings

X Prevalence X

Attributable Information



### Conclusion



- Further research
  - Understanding and targeting anti-selection better in the group risk market
- Findings
  - Local variation suggests some less than optimal underwriting practices
    - Underwriting matrices and amounts & 20% rule application
  - Stakeholder considerations
    - Trustee involvement
  - Pricing impacts
    - Changing premium when changing FCL & Experience analysis using FCL







# Free Cover Limits & Underwriting in Group Risk Business

Grete Kritzinger & Nico van der Colff

RGA Reinsurance Company of South Africa Limited

Our sincere thanks to staff at the insurers who assisted with survey completion, our vac students who assisted with research and model design, RGA staff who provided internal peer review and Wouter Thom and Eric Welz for their external review.

