



## **Actuaries in Banking**

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Session P3
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### **Actuaries in Banking**

Past, present and future of actuaries in banking

#### Agenda

- 1. Introduction and background
- 2. Actuaries' skills set relevant to banking practice
- 3. Areas of actuarial practice within banks
- 4. Application of actuarial techniques in banking
- 5. IAA Banking Working Group Survey
- 6. Actuarial Society of South Africa Banking Applications subject for actuaries
- 7. Panel discussion & questions from the audience

Institute of Actuaries of India would like to invite you to participate as a financial partner and exhibitor at 20th Global Conference of Actuaries (GCA) to be held at Renaissance Hotel, Powai, Mumbai, India, on 5th & 6th March, 2019.



## Introduction and background

Actuaries have been involved in banking for more than a decade in jurisdictions such as Australia and South Africa. Other jurisdictions are only starting to develop awareness and capabilities.

Actuaries, as risk management professionals, add significant value in a range of banking areas.

The panel will discuss a range of issues aimed at raising awareness of actuarial practice in banking.

## An actuary's skillset



Quantitative



Communication



**Business Analytics** 



**Economics** 



Risk Management



Professionalism



Stakeholder Management



**Decision Making** 



## Actuaries are making an impact in a range of areas within banks

Product houses	Product R&D	Actuarial and statistical insights drive innovative product construct, new funding and appealing client propositions across retail, corporate and investment banking. Product development required to take into account latest regulatory and reporting changes.	
	Credit risk modelling and scorecard development	Actuarial and statistical techniques applied to better understand, segment and price credit risk on bank books	
	Pricing	Product pricing improved through intelligent use of actuarial techniques to attain and maintain competitive positions in the market across retail and corporate banking	
	Customer analytics and value management	Utilisation of customer data to improve value to both customer and bank, product pathway analysis and incentives as well as intelligent lapse prediction and retention management. Successful CVM drives material upsell and stickiness of clients	
	Trading and pricing derivatives	Actuarial knowledge driving innovative solutions to trading, sales & structuring and derivative offerings	
Group and central	Group Risk Management	Managing operational, market, interest rate, currency, liquidity and business risks. Setting the risk appetite, subsequent risk limits and tolerance levels. This includes the extent to which risk is managed centrally or within business units. Includes elements such as funds transfer pricing that directs business strategy and tactics.	
	Balance sheet mgmt & Provisioning	Regulatory capital calculations, regulatory relationship management and sufficiency and ICAAP.	
	Capital management	Capital management in the context of strategic objectives enables the bank to meet its long term vision, while ensuring regulatory needs met. This includes the capital management policy, capital allocation for the banking group, for risk, per business unit as well as return measures.	
	Reporting	Supporting business management, enabling deeper and dynamic business insights through statistical analysis and dashboard based reporting	
Strategi c	Corporate Development	Strategy development, new business incubation and supporting internal and external M&A exercises	

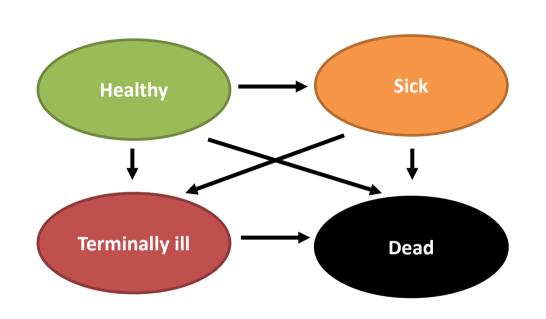
## Actuarial techniques can be applied and add real value in banking

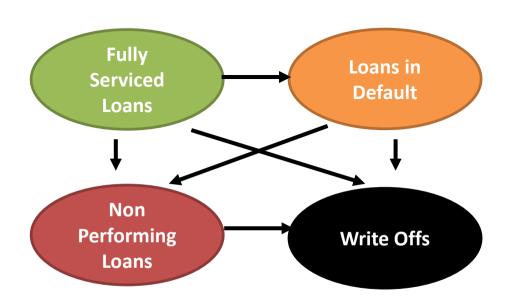
#### **Example: Understanding Credit Risk**

Understanding credit risk is not dissimilar from life assurance, including how to predict transition between states

## **Insurance** Banking

Probability of claim	Probability of Default	
Sum Insured/Assured	Exposure at Default	
Loss Incurred/Sum Insured	Loss Given Default	





# Actuaries have begun to recognize their value in the banking context

IAA Banking Working Group survey 2017/2018



810 respondents

**37** actuarial associations

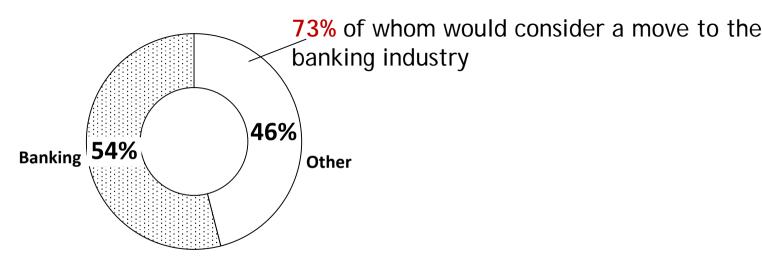
### Key insights

Globally actuaries are gaining interest in banking

56% of respondents would consider qualifying as a banking fellow

75% of respondents asked to be included in future correspondence on actuaries in banking

... even from those already practicing in other areas



### Actuarial Society of South Africa: Banking Applications subject for banking actuaries



A syllabus covering all aspects of retail, corporate and investment banking

Part	Banking Fellowship Subject Structure		
1)	Banking Structure & Banking Marketplace in South Africa		
2)	Bank Risk Management		
3)	Bank Asset & Liability Management		
4)	Bank Strategy & Governance		
5)	Bank Problem Solving		

South Africa now has 20 banking fellows, that have gone through a challenging exam process. More students are opting for this route to qualification

Year	2015	2016	2017	2018	
Pass rate	0%	26%	33%	30%	

### Questions for panel discussion

- 1. What has been your involvement and experience as an actuary involved in Banking to date?
- 2. Following up on the previous question, what have been the main challenges that you see in banking that you believe actuaries are able to address?
- 3. What are the critical skills that actuaries possess that you believe are useful in banking and in which areas?
- 4. What do you see as the main challenges and opportunities that lie ahead for actuaries as they further entrench themselves in Banking?
- 5. What would you recommend to individual actuaries looking to move into banking?
- 6. What is your advice to jurisdictions that have not yet embraced banking as a practice area for actuaries?





**THANK YOU** 

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